Content

Day	Content	Nos. of hours
1	Introduction to Spectroscopy	6
2	FT-IR Spectroscopy	6
3	Hands-on Training on FT-IR Spectroscopy	6
4	UV-Vis Spectroscopy	6
5	Hands-on Training on UV-Vis Spectroscopy	6
	Total Hours	**30**

Resource Persons

Mr. Chandrasekhar Duvvapu
Field Service Engineer
Agilent Technologies

Dr. N. Satya Vijaya Kumar
Centre In-Charge, CoExAMMPC

Course Coordinator

Dr. V. Srinivasadesikan
Associate Professor
Department of Chemistry, VFSTR
Mobile: 7406940340
Email: drvsd_sh@vignan.ac.in

Integrated Use of UV-Vis and FT-IR in Pharmaceuticals, Agriculture, and Food Tech

9.12.2023 – 06.01.2024

Venue
Centre of Excellence for Advanced Materials,
Manufacturing, Processing and Characterization

Organized by
Department of Chemistry
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

About VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

About Chemistry Department of VFSTR

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications.

Course Objectives:

The primary objectives of the training is to:

1) Develop a comprehensive understanding of the integrated use of UV-Vis and FT-IR techniques in pharmaceuticals, agriculture, and food technology

2) Provide participants with practical skills to effectively apply UV-Vis and FT-IR methods for analysis and quality control in pharmaceutical, agricultural, and food-related processes

3) Enable participants to critically evaluate and select appropriate UV-Vis and FT-IR approaches to address specific challenges within the pharmaceutical, agricultural, and food technology sectors.

Course Outcome:

Upon completion of the training, the participants will :

1) acquire hands-on proficiency in utilizing integrated UV-Vis and FT-IR techniques, enhancing their ability to perform advanced analyses in pharmaceuticals, agriculture, and food technology

2) be equipped to contribute valuable insights to the pharmaceutical, agricultural, and food tech industries by applying their knowledge of integrated UV-Vis and FT-IR methods for improved quality control and problem-solving.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Content

Day	Content	Nos. of hours
1	Introduction to Spectroscopy	6
2	FT-IR Spectroscopy	6
3	Hands-on Training on FT-IR Spectroscopy	6
4	UV-Vis Spectroscopy	6
5	Hands-on Training on UV-Vis Spectroscopy	6
	Total Hours	**30**

Resource Persons

Mr. Chandrasekhar Duvvapu
Field Service Engineer
Agilent Technologies

Dr. N. Satya Vijaya Kumar
Centre In-Charge, CoExAMMPC

Course Coordinator

Dr. V. Srinivasadesikan
Associate Professor
Department of Chemistry, VFSTR
Mobile: 7406940340
Email: drvsd_sh@vignan.ac.in

Integrated Use of UV-Vis and FT-IR in Pharmaceuticals, Agriculture, and Food Tech

4.11.2023 – 02.12.2023

Venue
Centre of Excellence for Advanced Materials, Manufacturing, Processing and Characterization

Organized by
Department of Chemistry
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

About VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

About Chemistry Department of VFSTR

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications.

Course Objectives:

The primary objectives of the training is to:

1) Develop a comprehensive understanding of the integrated use of UV-Vis and FT-IR techniques in pharmaceuticals, agriculture, and food technology

2) Provide participants with practical skills to effectively apply UV-Vis and FT-IR methods for analysis and quality control in pharmaceutical, agricultural, and food-related processes

3) Enable participants to critically evaluate and select appropriate UV-Vis and FT-IR approaches to address specific challenges within the pharmaceutical, agricultural, and food technology sectors.

Course Outcome:

Upon completion of the training, the participants will :

1) acquire hands-on proficiency in utilizing integrated UV-Vis and FT-IR techniques, enhancing their ability to perform advanced analyses in pharmaceuticals, agriculture, and food technology

2) be equipped to contribute valuable insights to the pharmaceutical, agricultural, and food tech industries by applying their knowledge of integrated UV-Vis and FT-IR methods for improved quality control and problem-solving.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Content

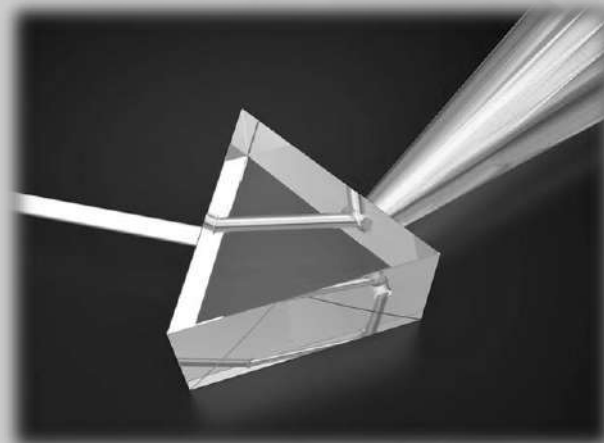| Day	Content	Nos. of hours
1	Introduction to Spectroscopy	6
2	FT-IR Spectroscopy - Applications	6
3	Hands-on Training on FT-IR Spectroscopy	6
4	UV-Vis Spectroscopy - Applications	6
5	Hands-on Training on UV-Vis Spectroscopy	6
	Total Hours	**30**

Resource Persons

Mr. Chandrasekhar Duvvapu
Field Service Engineer
Agilent Technologies

Dr. N. Satya Vijaya Kumar
Centre In-Charge, CoExAMMPC

Course Coordinator

Dr. M. V. K. Srivani
Associate Professor
Department of Chemistry, VFSTR
Mobile: 9985188676
Email: drvksrivani123@gmail.com

The Role of Spectroscopy in Bio-Monitoring

03.02.2024 – 02.03.2024

Venue
Centre of Excellence for Advanced Materials,
Manufacturing, Processing and Characterization

Organized by
Department of Chemistry
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

About VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

About Chemistry Department of VFSTR

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications.

Course Objectives:

The primary objectives of the training is to:

1) Develop a comprehensive understanding of the integrated use of UV-Vis and FT-IR techniques in pharmaceuticals, agriculture, and food technology

2) Provide participants with practical skills to effectively apply UV-Vis and FT-IR methods for analysis and quality control in pharmaceutical, agricultural, and food-related processes

3) Enable participants to critically evaluate and select appropriate UV-Vis and FT-IR approaches to address specific challenges within the pharmaceutical, agricultural, and food technology sectors.

Course Outcome:

Upon completion of the training, the participants will :

1) acquire hands-on proficiency in utilizing integrated UV-Vis and FT-IR techniques, enhancing their ability to perform advanced analyses in pharmaceuticals, agriculture, and food technology

2) be equipped to contribute valuable insights to the pharmaceutical, agricultural, and food tech industries by applying their knowledge of integrated UV-Vis and FT-IR methods for improved quality control and problem-solving.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Content

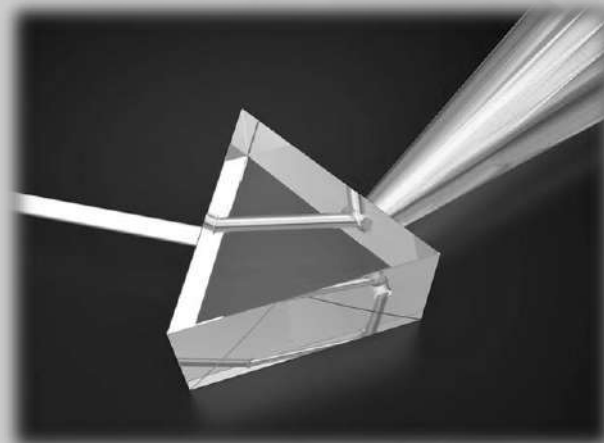| Day	Content	Nos. of hours
1	Introduction to Spectroscopy	6
2	FT-IR Spectroscopy - Applications	6
3	Hands-on Training on FT-IR Spectroscopy	6
4	UV-Vis Spectroscopy - Applications	6
5	Hands-on Training on UV-Vis Spectroscopy	6
	Total Hours	**30**

Resource Persons

Mr. Chandrasekhar Duvvapu
Field Service Engineer
Agilent Technologies

Dr. N. Satya Vijaya Kumar
Centre In-Charge, CoExAMMPC

Course Coordinator

Dr. M. V. K. Srivani
Associate Professor
Department of Chemistry, VFSTR
Mobile: 9985188676
Email: drvksrivani123@gmail.com

The Role of Spectroscopy in Bio-Monitoring

09.03.2024 – 06.04.2024

Venue
Centre of Excellence for Advanced Materials,
Manufacturing, Processing and Characterization

Organized by
Department of Chemistry
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

About VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

About Chemistry Department of VFSTR

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications.

Course Objectives:

The primary objectives of the training is to:

1) Develop a comprehensive understanding of the integrated use of UV-Vis and FT-IR techniques in pharmaceuticals, agriculture, and food technology

2) Provide participants with practical skills to effectively apply UV-Vis and FT-IR methods for analysis and quality control in pharmaceutical, agricultural, and food-related processes

3) Enable participants to critically evaluate and select appropriate UV-Vis and FT-IR approaches to address specific challenges within the pharmaceutical, agricultural, and food technology sectors.

Course Outcome:

Upon completion of the training, the participants will :

1) acquire hands-on proficiency in utilizing integrated UV-Vis and FT-IR techniques, enhancing their ability to perform advanced analyses in pharmaceuticals, agriculture, and food technology

2) be equipped to contribute valuable insights to the pharmaceutical, agricultural, and food tech industries by applying their knowledge of integrated UV-Vis and FT-IR methods for improved quality control and problem-solving.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Content

Day	Content	No. of hours
1	Perspectives on Solid Waste Management	6
2	Plastics: Boon or Bane?	6
3	Plastic Management Procedures	6
4	Plastic Recycling	6
5	Case Studies and Recent Research	6
	Total Hours	**30**

Resource Persons
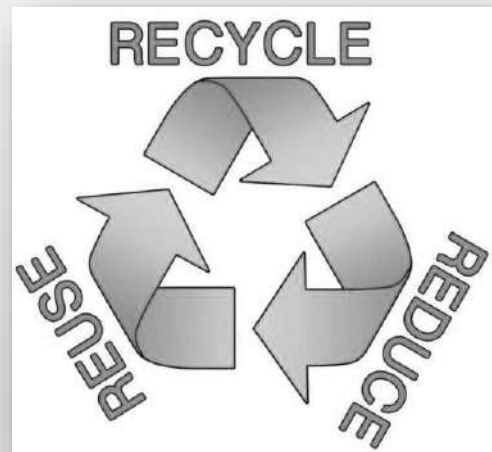
Dr. MVK Sri Vani
Assoc. Prof. Department of Chemistry
(SASH), VFSTR

Dr. Dipa Ray
Reader, Materials and Processes, The University of Edinburgh, UK.

Course Coordinator

Dr. Shubhalakshmi Sengupta
Assistant Professor
Department of Chemistry, VFSTR
Mobile: 9830723520
Email: drsls_sh@vignan.ac.in

A Value Added Course on'
PLASTIC WASTE MANAGEMENT

05.09.23 – 09.09.23

Organized by

Department of Chemistry
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

About VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

About Chemistry Department of VFSTR

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications.

Course Objectives:

The primary objectives of this course is to:

- Create awareness on the important environmental problem of Solid Wastes especially on the management, disposal and recycling of plastic wastes.

- To have an insight into the latest technologies for plastic disposal and management.

- To engage in novel research in plastic recycling and synthesis of bioplastics.

Course Outcome:

Upon completion of the training, the participants will :

- Assess the environmental implications of plastic waste on ecosystems, marine life, and human health.

- Explore and propose innovative solutions and sustainable alternatives to single-use plastics and non-recyclable materials.

- Conduct a lifecycle analysis of plastics, from production to disposal, to understand the full environmental impact and identify points for intervention.
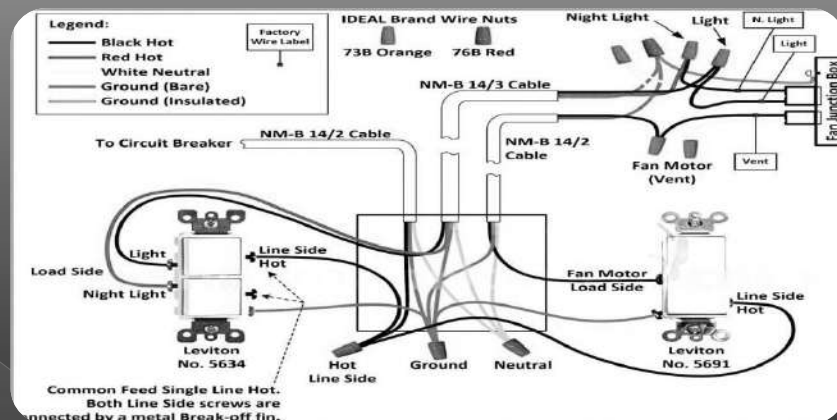
ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

Value Added Course
Electrical Home Foundation
(AY 2023-2024)

Date: 01-11-2023 to 05-11-2023
Organized by
Department of Chemistry
School of Applied Sciences &Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications.

COURSE OBJECTIVES

❖ Read blue prints or technical diagrams of electrical wiring
❖ Select suitable components, devices for controlling and protecting the electrical items.
❖ Install and maintain electrical wiring circuits in a safe manner

COURSE OUTCOME

✓ Complete electrical wiring of 1 BHK and 2 BHK flats.

COURSE COORDINATOR

Dr. Ravi Kumar Kottalanka
VFSTR Deemed to be University, Vadlamudi-522213.
Mobile: 9100685531 Email: drkrk_sh@vignan.ac.in

COURSE CONTENTS

The following topics will be covered

S.No.	Topics	No. of hours
1	Introduction of electricity and basic terms of electricity Causes of electrical shock, what is electrical shock etc.,	10
2	Tools identification and uses, wiring types and wiring joints, electrical wiring accessories etc.,	12
3	Types of house wiring, on time and off time delay circuits, measure the resistance using meager etc.,	12
	Total	34

RESOURCE PERSON

Mr. Verapani Anil kumar - Trainer-APSSDC_tSDI

VENUE

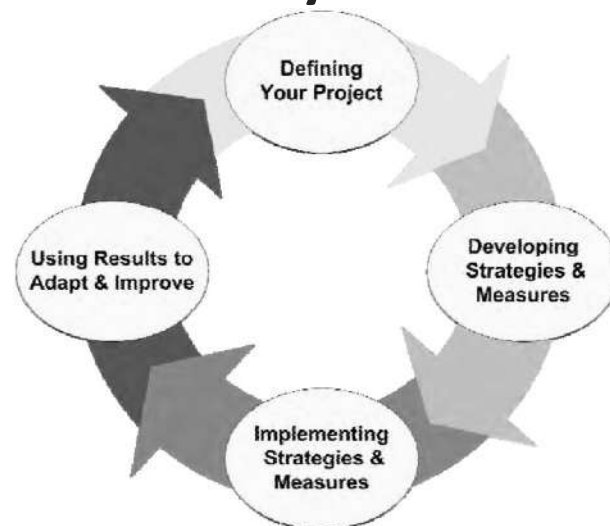APSSDC_tSDI Electrical Home Lab, H-block, VFSTR.

ABOUT VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

Day	Content	Nos. of hours
1	**Community-Led Conservation**: Highlight successful initiatives where local communities actively participate in protecting and managing biodiversity.	6
2	**Education and Awareness**: Promote programs that educate community members about the importance of biodiversity and conservation efforts.	6
3	**Indigenous Knowledge Integration**: Incorporate traditional ecological knowledge into conservation strategies to enhance biodiversity protection.	6
4	**Collaborative Partnerships**: Foster partnerships between communities, NGOs, and government agencies to strengthen conservation efforts..	6
5	**Monitoring and Evaluation**: Implement systems for tracking biodiversity health and the effectiveness of community-led conservation initiatives.	6

Resource Persons

Dr. P. Vijetha
Associate Professor
Department of Civil Engineering,
VFSTR Deemed to University.

Course Coordinator

Dr. Ravi Kumar Kottalanka
Associate Professor
Department of Chemistry, VFSTR
Mobile: 9100685531 Email: drkrk_sh@vignan.ac.in

Course Objectives:

The primary objectives of the training is to:

- **Empower Local Communities:** Enhance community involvement in conservation efforts through training and resources, fostering ownership and stewardship of local biodiversity.
- **Promote Sustainable Practices:** Encourage the adoption of sustainable land-use and resource management practices that benefit both communities and biodiversity.
- **Strengthen Conservation Policies:** Advocate for policies that support community-led conservation initiatives and recognize local knowledge and rights.
- **Enhance Biodiversity Monitoring:** Develop community-based monitoring programs to track biodiversity changes and assess the effectiveness of conservation strategies.

Course Outcome:

Upon completion of the training, the participants will :

- **Strengthened Biodiversity Resilience: Enhanced community engagement leads to improved protection and restoration of local ecosystems, resulting in increased biodiversity and ecosystem health.**
- **Empowered Communities: Active participation in conservation initiatives fosters a sense of ownership, leading to sustainable practices and heightened awareness of biodiversity's importance within local communities.**

ABOUT THE INSTITUITION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
On

Design Verification & Test of Digital VLSI Circuits

21-03-2024 to 23-03-2024

Venue: VLSI Lab, Dept. of ECE

Organized

by

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ABOUT THE DEPARTMENT

The Department of Electronics and Communication Engineering at Vignan was established in 1997 and it is committed to research and development. The Department was accredited by NBA. Vision of the department is to emerge as a centre of academic excellence in electronics and communication engineering that imparts quality technical education, research impetus, professional and ethical values to meet global needs of industry and society. The principal educational objective of our department is to offer state of the art curriculum along with advanced laboratory facilities and conducive research environment to make the students industry ready and equip to carryout higher education towards research and consultancy. Department also offers M.Tech Degree Programs in Embedded systems and VLSI design. Research Scholars are also pursuing their Ph. D research, in many relevant and advanced areas of Electronics and Communication Engineering.

Vignan- Keysight Advanced RF, Microwave and Wireless Communication laboratory- About CoE

VFSTR is one of the pioneering institutes in the capital region of Andhra Pradesh. The ECE Department of VFSTR has very strong academic credentials in this region. Vignan's Keysight CoE established in July 2017; provides a world class infrastructure in the area of RF, Microwave and Wireless Communications.Worth of 11.5 Crores with an investment of 1.7 Crores from VFSTR and the remaining amount sponsored by Keysight Under University Grants Program. To become a Design and Test House in RF, Microwave and Wireless Communications. The CoE to Provide End-To-End RF, Microwave and Wireless Solutions, State of Art equipment in the field of advanced communications systems to the Research scholars, PG and UG students and it Communication System Design Lab,RF system and Circuit Design lab and Antenna Design lab. The need of CoE lab is to analyse Real world System, Circuit and Antenna design, real time Communication System Measurements and real time communication system debugging.

COURSE OBJECTIVES

This is a course in VLSI Design Flow that addresses important concepts, components and circuits used in the VLSI engineering. This course will serve as a basis to move ahead and build upon more advanced concepts in RF engineering and designs.

COURSE OUTCOMES
After successfully completing this class, students will be able to:
1. Design Digital VLSI Design Flow and the basic design principles of combinational and sequential synthesis.
2. Design Verification and VLSI Testing.
3. Sequential Circuit Testing & Scan Chains

COURSE CONTENTS

Topic	Hours
Introduction to Digital VLSI Design flow	05
Combinational and Sequential Synthesis	05
Verification- Temporal Logic, Binary Decision Diagram	05
Training session on cadence tool	05
VLSI Testing- Intro. to Digital Testing	05
Sequential Circuit Testing & Scan Chains	05
Total Hours	30

Resource Person
Mr. Siddhardha Pottepalem
Design Verification Engineer AMD, Hyderabad
Coordinator
Dr. Satyajit Sahoo, Asst Professor, Department of ECE, VFSTR, Vadlamudi.
Mob: +91 8608489769, Mail: drss_ece@vignan.ac.in

ABOUT THE INSTITUITION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

**Value Added Course
On**

RF Concepts, Components and Circuits

03-03-2024 to 06-03-2024
VTF-17-H Block

Organized

by

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ABOUT THE DEPARTMENT

The Department of Electronics and Communication Engineering at Vignan was established in 1997 and it is committed to research and development. The Department was accredited by NBA. Vision of the department is to emerge as a centre of academic excellence in electronics and communication engineering that imparts quality technical education, research impetus, professional and ethical values to meet global needs of industry and society. The principal educational objective of our department is to offer state of the art curriculum along with advanced laboratory facilities and conducive research environment to make the students industry ready and equip to carryout higher education towards research and consultancy. Department also offers M.Tech Degree Programs in Embedded systems and VLSI design. Research Scholars are also pursuing their Ph. D research, in many relevant and advanced areas of Electronics and Communication Engineering.

Vignan- Keysight Advanced RF, Microwave and Wireless Communication laboratory- About CoE

VFSTR is one of the pioneering institutes in the capital region of Andhra Pradesh. The ECE Department of VFSTR has very strong academic credentials in this region. Vignan's Keysight CoE established in July 2017; provides a world class infrastructure in the area of RF, Microwave and Wireless Communications.Worth of 11.5 Crores with an investment of 1.7 Crores from VFSTR and the remaining amount sponsored by Keysight Under University Grants Program. To become a Design and Test House in RF, Microwave and Wireless Communications. The CoE to Provide End-To-End RF, Microwave and Wireless Solutions, State of Art equipment in the field of advanced communications systems to the Research scholars, PG and UG students and it Communication System Design Lab,RF system and Circuit Design lab and Antenna Design lab. The need of CoE lab is to analyse Real world System, Circuit and Antenna design, real time Communication System Measurements and real time communication system debugging.

COURSE OBJECTIVES

This is a beginner course in RF engineering that addresses important concepts, components and circuits used in the RF engineering. This course will serve as a basis to move ahead and build upon more advanced concepts in RF engineering and designs.

COURSE OUTCOMES
After successfully completing this class, students will be able to:
1. Design RF transceiver system and the basic design principles of RF passive and active components.
2. Design RF couplers, filters and amplifiers.
3. Use ADS/HFSS -3D EM tools and analysis techniques to support the design of RF filters and amplifiers.

COURSE CONTENTS

Topic	Hours
Introduction to RF Passive and Active Components	05
Microstrip Transmission Lines	05
Impedance matching	05
Power divider and Hybrid coupler	05
Advanced Filter Design	05
Linear and Low-noise Amplifiers	07
Total Hours	32

Resource Person
Ms.Renuka Wekhande ,Sr.Application Engineer,
Keysight Technologies, Bangalore.
Dr. P.Sambaiah, Associate Professor,
Vignan's Foundation for Science, Technology & Research
(Deemed to be University)
Coordinator
Dr. G.Pradeep, Assistant Professor, Department of ECE, VFSTR, Vadlamudi.
Mob: +91 9553055544, Mail: drpg_ece@vignan.ac.in

ABOUT THE INSTITUITION

H Block - Front Elevation View

Vignan's Foundation for Science, Technology and Research is the flagship Institution of Vignan Group of Educational Institutions and is NAAC 'A$^+$' accredited. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
On

Base-Station Antenna System Design for 5G/6G Communications

18-03-2024 to 21-03-2024
VTF-17-H-Block

Organized
by

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

ABOUT THE DEPARTMENT

The Department of Electronics and Communication Engineering at Vignan was established in 1997 and it is committed to research and development. Vision of the department is to emerge as a centre of academic excellence in electronics and communication engineering that imparts quality technical education, research impetus, professional and ethical values to meet global needs of industry and society. The principal educational objective of our department is to offer state of the art curriculum along with advanced laboratory facilities and conducive research environment to make the students industry ready and equip to carryout higher education towards research and consultancy. Department also offers M.Tech Degree Programs in Embedded systems and VLSI design. Research Scholars are also pursuing their Ph. D research, in many relevant and advanced areas of Electronics and Communication Engineering.

COURSE OBJECTIVES

- Mainly focus on the practical aspects of Base station placement impact on communications- urban propagation and environment loss modeling ,RF Transceiver and antenna designing
- Participants to learn modelling process of RF components and antenna designs
- Acknowledge various simulation tools like HFSS and ADS

COURSE OUTCOMES

- Course serves as foundation knowledge for Base station , RF modelling and antenna design.
- Students will be exposed to learn different simulation tools and they will know how this base station RF components and antennas practically useful for different communication applications

COURSE CONTENTS

Topic	Hours
• Base station placement impact on communications- urban propagation and environment loss modeling	08
• Base station and end user link budget and coverage analysis • Base station network modelling	08
• 5G antenna design considerations • Array Antenna design using ADS/HFSS	08
• Antenna integration with RFIC	08
Total Hours	32

Resource Person

1.Mr.Akash Srivastava , Keysight Technologies, Bangalore

Mr.Pratik Khurana, Application Engineer

keysight Technologies,Bangalore

2. Dr.Y.Ravi Sekhar, Professor, ECE

3. Dr.T.Pitchaiah, Professor, ECE

Coordinator

Dr.M.Pachiyannan, Associate. Prof., Dept. of ECE, VFSTR. Ph:9994316645

ABOUT THE INSTITUITION

H Block - Front Elevation View

Vignan's Foundation for Science, Technology, and Research is the flagship Institution of the Vignan Group of Educational Institutions and is NAAC 'A' accredited. Located in the serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling playgrounds, campus greenery, and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career-building of many students who step into its portals. Through diverse programs and updated curricula by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with rich research, teaching, and industry backgrounds. The sophisticated laboratories and research centers make it one of the most preferred institutions for aspirants in engineering studies.

Value Added Course
On

Advance Electromagnetic Theory & Antennas
26-02-2024 to 28-02-2024

VTF-17,H-Block

Organized

by

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

National Level Accreditation
NAAC A
Accredited

ABOUT THE DEPARTMENT

The Department of Electronics and Communication Engineering at Vignan was established in 1997 and it is committed to research and development. The vision of the department is to emerge as a center of academic excellence in electronics and communication engineering that imparts quality technical education, research impetus, and professional and ethical values to meet the global needs of industry and society. The principal educational objective of our department is to offer state of a state-of-the-art curriculum along with advanced laboratory facilities and a conducive research environment to make the students industry-ready and equipped to carry out higher education towards research and consultancy. The department also offers M. Tech Degree Programs in Embedded Systems and VLSI design. Research Scholars are also pursuing their Ph. D research, in many relevant and advanced areas of Electronics and Communication Engineering.

COURSE OBJECTIVES

- Define the Basic Electrostatic and Magnetostatic Law and Final form Maxwell equations.
- Foundations of Electromagnetic Theory, Understanding the Basics of Transmission Lines, Role of Electromagnetic Theory in The Analysis and Design of Transmission Lines were briefly presented.- Practical Session of Transmission Line.
- Basic Antenna Theory and Dipole antenna design

COURSE OUTCOMES

- Appreciate the early concepts of electrostatic and magnetostatic laws
- Derive the Maxwell's equations in static and dynamic fields
- Describe energy density on electric/magnetic fields and the Poynting theorem, Analyze the EM wave propagation in different mediums
- Formulate the wave propagation through transmission lines and generalize the Smith chart and impedance matching the device.
- Basic Antenna theory and practice

COURSE CONTENTS

Topic	Hours
Introduce the electromagnetic theory, explain what transmission lines are, and highlight the importance of electromagnetic theory in ECE engineering.	08
Foundations of Electromagnetic Theory, Understanding the Basics of Transmission Lines, Role of Electromagnetic Theory in The Analysis and Design of Transmission Lines were briefly presented.- Hands on Session of Transmission Line	08
Basic Antenna Theory and Dipole antenna design ,Hands on session of array antennas, Hands on session of horn antenna+ Dipole Antenna.	08
Presentation, live demo on Radiation Hazard- Antenna Near to People- SAR Calculation	08
Total Hours	32

Resource Person

Ms.Renuka Wekhande, Sr.Application Engineer,

Keysight Technologies, Bangalore

Dr. N.Suman, Associate Professor,

Dr.M.Pachiyannan, Associate Professor,

Vignan's Foundation for Science, Technology & Research

(Deemed to be University)

Coordinator

Mr. M. Sekar, Assistant professor., Dept. of ECE, VFSTR.

Mobile: +91 8143696864,   Mail : ms_ece@vignan.ac.in

ABOUT THE INSTITUTION

H Block - Front Elevation View

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
On
Introduction to Hands-on Python

10th Aug-12th Aug 2023

Venue: H-Block (VSF-18)

Organized
by
Department of Electronics and Communication Engineering

ABOUT THE DEPARTMENT

The Department of Electronics and Communication Engineering at Vignan was established in 1997 and it is committed to research and development. Vision of the department is to emerge as a centre of academic excellence in electronics and communication engineering that imparts quality technical education, research impetus, professional and ethical values to meet global needs of industry and society. The principal educational objective of our department is to offer state of the art curriculum along with advanced laboratory facilities and conducive research environment to make the students industry ready and equip to carryout higher education towards research and consultancy. Department also offers M. Tech Degree Programs in Embedded systems and VLSI design. Research Scholars are also pursuing their Ph. D research, in many relevant and advanced areas of Electronics and Communication Engineering.

COURSE OBJECTIVES

The objective of this course

1. To develop foundational and advanced Python programming skills.
2. To enable hands-on problem-solving using Python for data analysis and practical applications.

COURSE OUTCOMES

1. Write and execute Python programs for diverse use cases.
2. Analyze and visualize data using Python libraries like Numpy, Pandas, and Matplotlib.
3. Implement basic web scraping or machine learning tasks using Python.

COURSE CONTENTS

Topic	Hours
Introduction to Python	04
Data Structures in Python.	04
Functions and Modules	04
File Handling and Exception Handling	04
Object-Oriented Programming.	04
Data Analysis with Python	04
Data Visualization and Exploratory Data Analysis	03
Machine Learning	03
Total hours	**30**

Resource Persons

Dr. N. U Rani

Professor, Dean SEECE,

VF Science Technology and Research

Coordinator

Dr. Sharad Tiwari

Assistant Professor, Department of ECE,

VFSTR, Vadlamudi. Ph: 9553055544, ecefaculty@vignan.ac.in

VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be University)

-Estd. u/s 3 of UGC Act 1956
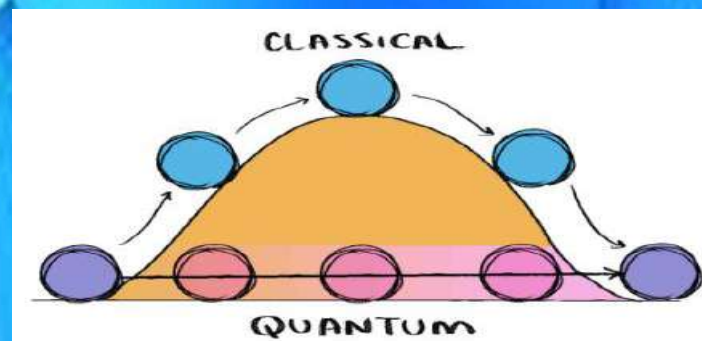
NAAC Accredited A+

VALUE ADDED COURSE
On
Tunnel Field Effect Transistor(TFET):
Modeling & Simulation
11th Jan – 13th Jan 2024
Venue : Cadence lab, VIF -06,H-Block

Organised by
Department of Electronics & Communication Engineering
Vignan's Foundation for Science, Technology and Research
Vadlamudi, Guntur District. Andhra Pradesh India - 522213

ABOUT UNIVERSITY

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career-building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

ABOUT DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

The Department of Electronics &Communication Engineering was established under Vignan's Engineering College in the year 1997 to address the phenomenally growing Electronics Industry in India. It is accredited by the NBA. The department primarily offered Undergraduate (B.Tech) program to fulfill the ever-growing local and global demands in allied Electronics engineering streams viz. Embedded System, Wireless Technology, VLSI Technology etc.,. Various undergraduate and postgraduate degree programs and vocational training programs have been launched since its inception.

COURSE OBJECTIVE:

The objective of this course is to provide in-depth knowledge about TFET device simulation and modeling along with recent technology and devices.

COURSE OUTCOMES :

• Fundamental knowledge of TFET device structure and working.

• Learn to simulate the TFET device for different digital applications.

PROGRAM SCHEDULE

Date	Topic	No. of. Hour's
11.01.2024	Introduction to Quantum mechanics and Basics of tunnelling	5
	The tunnel FET	5
12.01.2024	Drain current modelling of tunnel FET	4
	Modelling the surface potential in TFETs	4
13.01.2024	Introduction to Silvaco TCAD for device simulation	3
	DG-TFET and Nano wire TFET Device simulation using ATLAS	3
	Introduction to Analytical Modelling using Poisson's equation	3
	Plotting the results using MATLAB	3
	TOTAL	30

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

NAAC A+ Accredited

VALUE ADDED COURSE
On
Nano-scale TFET device for label-free detection of biomolecules in VLSI Applications

21st Jan – 23rd Jan 2024
Venue : VFF-06, H-Block

RESOURCE PERSON:
Dr. N.Nagendra Reddy,
Asst. Professor
Dept. of Electronics & Communication Engineering,
VFSTR University,
Vadlamudi, Guntur.

COURSE CO-ORDINATOR:
Dr. Ashutosh Kumar Dikshit
Assistant professor,
Department of Electronics & Communication Engineering,
VFSTR University, Vadlamudi, Guntur.

For Registration: 7702791800

Organised by
Department of Electronics & Communication Engineering
Vignan's Foundation for Science, Technology and Research
Vadlamudi, Guntur District. Andhra Pradesh India - 522213

ABOUT UNIVERSITY

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career-building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

ABOUT DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

The Department of Electronics &Communication Engineering was established under Vignan's Engineering College in the year 1997 to address the phenomenally growing Electronics Industry in India. It is accredited by the NBA. The department primarily offered Undergraduate (B.Tech) program to fulfill the ever-growing local and global demands in allied Electronics engineering streams viz. Embedded System, Wireless Technology, VLSI Technology etc.,. Various undergraduate and postgraduate degree programs and vocational training programs have been launched since its inception.

COURSE OBJECTIVE:

The objective of this course is to provide in-depth knowledge about TFET device simulation and modeling along with recent technology and devices.

COURSE OUTCOMES :

• Fundamental knowledge of TFET device structure and working.

• Learn to simulate the TFET device for different digital applications.

PROGRAM SCHEDULE

Date	Topic	No. of. Hour's
21.01.2024	TFET Device Architecture	5
	Label-Free Detection mechanism	5
22.01.2024	Dielectric modulation	4
	Quantum Effects	4
23.01.2024	Overview of the innovative structure of the TFET device	3
	VLSI nanoscale devices	3
	impact on device performance including tunneling currents	3
	subthreshold characteristics Industry scenarios	3
	TOTAL	30

RESOURCE PERSON:

Dr. N. Nagendra Reddy,
Asst. Professor
Dept. of Electronics & Communication Engineering,
VFSTR University,
Vadlamudi, Guntur.

COURSE CO-ORDINATOR:
DR. SATYAJEET SAHOO
Assistant professor,
Department of Electronics & Communication Engineering,
VFSTR University, Vadlamudi, Guntur.

For Registration: 7702791800

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

NAAC A+ Accredited
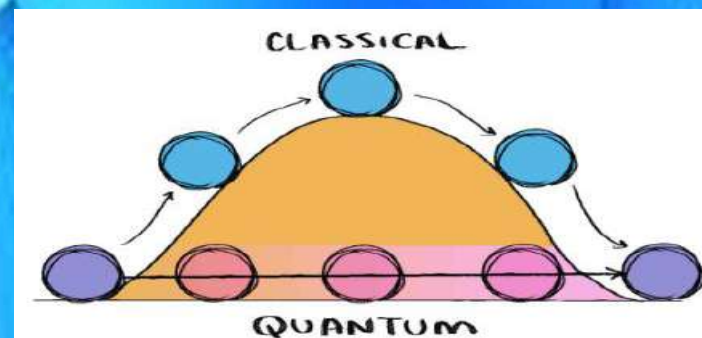
VALUE ADDED COURSE
On
IoT Applications using Machine Learning Tools
26th Oct – 28th Oct 2023
Venue : VFF-06, H-Block

Organised by
Department of Electronics & Communication Engineering
Vignan's Foundation for Science, Technology and Research
Vadlamudi, Guntur District. Andhra Pradesh India - 522213

ABOUT UNIVERSITY

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career-building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

ABOUT DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

The Department of Electronics &Communication Engineering was established under Vignan's Engineering College in the year 1997 to address the phenomenally growing Electronics Industry in India. It is accredited by the NBA. The department primarily offered Undergraduate (B.Tech) program to fulfill the ever-growing local and global demands in allied Electronics engineering streams viz. Embedded System, Wireless Technology, VLSI Technology etc.,. Various undergraduate and postgraduate degree programs and vocational training programs have been launched since its inception.

COURSE OBJECTIVE:

The objective of this course is to provide in-depth knowledge about TFET device simulation and modeling along with recent technology and devices.

COURSE OUTCOMES :

• Fundamental knowledge of TFET device structure and working.

• Learn to simulate the TFET device for different digital applications.

PROGRAM SCHEDULE

Date	Topic	No. of. Hour's
21.01.2024	TFET Device Architecture	5
	Label-Free Detection mechanism	5
22.01.2024	Dielectric modulation	4
	Quantum Effects	4
23.01.2024	Overview of the innovative structure of the TFET device	3
	VLSI nanoscale devices	3
	impact on device performance including tunneling currents	3
	subthreshold characteristics Industry scenarios	3
	TOTAL	30

Content

Day	Content	No. of hours
1	Water: The Elixir of life	6
2	Water Resources	6
3	Water Pollution	6
4	Water Conservation Practices	6
5	Case Studies and Recent Research	6
	Total Hours	**30**

Resource Persons

Dr. Shubhalakshmi Sengupta
Assoc. Prof. Department of Chemistry (SASH), VFSTR

Dr. S. Sridhar
Chief Scientist, CSIR-IICT, Hyderabad.

Course Coordinator

Dr. Ravi Kumar Kottalanka
Department of Chemistry (SASH), VFSTR
Mobile: 9100685531
Email: drkrk_sh@vignan.ac.in

Value-added Course on

Water Conservation Strategies

04.11.23 – 02.12.23

Organized by

Department of Chemistry School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

About VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

About Chemistry Department of VFSTR

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications.

Course Objectives:

The primary objectives of this course is to:

- Create awareness on conservation of water resources and prevent water pollution.
- To have an insight into the latest water conservation strategies and technologies.
- To engage in novel research in waste water remediation, reuse of water and water conservation.

Course Outcome:

Upon completion of the training, the participants will :

- Assess the environmental implications of water pollution on ecosystems, marine life, and human health.
- Explore and propose innovative solutions and sustainable alternatives for water conservation.
- Conduct outreach and awareness initiatives' for water conservation practices.

Venue
**Biofortification Lab,
U-block, Third floor, ATF-02
VFSTR**

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

Value Added Course

Foundation Basics of Electronics

(AY 2023-2024)

Date: 06-11-2023 to 10-11-2023

Organized by

Department of Chemistry
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

About the Department

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications.

COURSE OBJECTIVES

❖ To gain basics and fundamentals on Electronics

❖ Troubleshooting of home appliances.

COURSE OUTCOME

❖ Confident on technical skills and cable to repair electronics home appliances like Oven , Mixer grinder and Washing machine.

COURSE COORDINATOR

Dr. Ravi Kumar Kottalanka
VFSTR Deemed to be University, Vadlamudi-522213.
Mobile: 9100685531 & Email: drkrk_sh@vignan.ac.in

COURSE CONTENT

The following topics will be covered.

S.No.	Topics	No. of Hours
1	Welding introduction, safety precautions and history.	5
2	Introduction to oxy fuel hand gas cutting setup and connections etc.,	5
3	Different types of joints along with various positions in SMAW etc.,	5
4	Different types of joints along with various positions in GMAW etc.,	5
5	Practice single v butt joint root run and final run with SMAW in 1 G position and build up with GMAW	5
6	Explain the work piece edge preparation and hands on practice	5
	Total	32

RESOURCE PERSON

Mr. Kondapati Koteswara Rao
Trainer-APSSDC_tSDI

VENUE

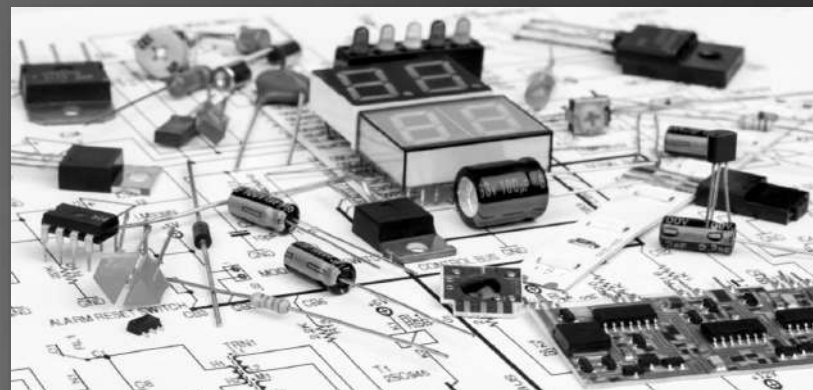**APSSDC_tSDI Electronics home Lab, H-block, VFSTR.**

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

Value Added Course
FOUNDATION LEVEL TRAINING ON OFFICE AND ICT ELECTRONICS

(AY 2023-2024)

Date: 11-11-2023 to 15-11-2023

Organized by

Department of Chemistry

School of Applied Sciences & Humanities

ABOUT THE DEPARTMENT

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications

COURSE OBJECTIVE

❖ **Troubleshooting of office equipment, protective devices and necessary tools for wiring of different applications.**

COURSE OUTCOME

❖ **Install and repair of CC cameras, Install and repair of CPU and laptop.**

COURSE COORDINATOR

Dr. Ravi Kumar Kottalanka

VFSTR Deemed to be University, Vadlamudi-522213.

Mobile: +9100685531 & Email: drkrk_sh@vignan.ac.in

COURSE CONTENT

S.No.	Topics	No. of Hours
1	Basic components identification and testing practical's	8
2	Series and parallel connections, Transformer connections, Switch connections, Relay connections.	8
3	Half-wave, full wave and bridge rectifiers connections with and without filters circuits connections, design and construction of SMPS	8
4	Stimulation practical's (Earthing, Fuse, MCB)	8
5	Mini projects- water dispenser system, irrigation system, vehicle security system, street light on/off systems.	6
	Total Hours	38

RESOURCE PERSON

Y .Bhavya- Trainer-APSSDC_tSDI, Electronics office Laboratory

VENUE

APSSDC_tSDI, Electronics office Laboratory, H-Block

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

REFRIGERATION AND AIR CONDITIONING - FOUNDATION

(AY 2023-2024)

Date: 16-11-2023 to 20-11-2023

Organized by

Department of Chemistry

School of Applied Science and Humanities

VIGNAN'S

(Deemed to be University)

ABOUT THE DEPARTMENT

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications.

COURSE OBJECTIVES

❖ Familiarize the components of the refrigeration system.
❖ Understand the principles of refrigeration and air conditioning

COURSE OUTCOMES

❖ **Vacuolization of air condition system**
❖ **Installation of A/C system.**

COURSE COORDINATOR

Dr. Ravi Kumar Kottalanka

VFSTR (Deemed to be University), Vadlamudi-522213.

Mobile: +91-9100685531 & Email: drkrk_sh@vignan.ac.in

COURSE CONTENT

The following topics will be covered.

S.No.	Topics	No. of Hours
1	Introduction to refrigeration and air conditioning, vapor compression refrigerators etc.,	6
2	Practical's identification of all components, functions with specification in a vapor compression refrigerator systems.	7
3	Service and cleaned air cooled condenser and filters in refrigerating systems etc.,	7
4	Braze a copper tube swaged joint etc.,	6
5	Check and test relay, olp and winding of compressors in refrigerators etc.,	6
	Total Hours	**32**

RESOURCE PERSON

Mr. S. Srikanth

Trainer- APSSDC_tSDI

VENUE

APSSDC_tSDI R & AC Lab, H-block, VFSTR.

Chief Patrons

Dr. L. Rathaiah
Chairman

Mr. L. Srikrishnadevarayalu
Vice Chairman

Patrons

Prof. P. Nagabhushan
Vice-Chancellor

Commodore. Dr. M.S. Raghunathan
Registrar

Co-Patrons

Dr. M.S.S.Rukmini
Dean, Student Affairs

Prof. N. Srinivasu
Dean, School of Applied Sciences
and Humanities

For Registration, Contact:
Chief Coordinator8
292371432, drss_sh@vignan.ac.in

Resource Person
Prof. Rajni Singh
IIT (ISM) Dhanbad, Jharkhand

Coordinators

Dr. A. Sharada
HoD, Dept. of EOFL

Dr. Shah Al Mamun Sarkar
Chief Co-ordinator

Last date for the Registration:
30th August, 2023

Vadlamudi, Guntur Dist. 522 213. A.P, India.

Value added Course
A COURSE IN CONVERSATIONAL ENGLISH
for I B.Tech

1st to 30th September, 2023

Venue: VBTF- 07, A-Block

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

NAAC A+
Accredited

nirf 75
RANK

Organized by :
DEPARTMENT OF ENGLISH AND OTHER INDIAN & FOREIGN LANGUAGES
SCHOOL OF APPLIED SCIENCES AND HUMANITIES

About Vignan's University

Vignan's Foundation for Science, Technology and Research University (VFSTRU), the flagship institution of the group, offers quality academic programmes with innovative leadership development opportunities for its students. The University strives to make the experience of each student a transformative one. It is NAAC accredited with an 'A+' grade. Located in a serene suburb of Guntur at Vadlamudi, the university is surrounded by lush greenery and offers a stimulating ambience for higher intellectual pursuits. With well-designed infrastructure and learning facilities Vignan's University offers B. Tech, B. Pharmacy, BBA, BA.LLB., BCA, M. Tech, MBA, MCA and Doctoral Programmes.

About the Department

The Department of English and Other Indian and Foreign Languages (EOFL) functions under the aegis of the School of Applied Sciences & Humanities at VFSTR.

- The Department offers MA English and Ph.D. programmes and is supported by 27 faculty members, who strive to strengthen the liberal education of students on campus.

- Towards this, a large basket of courses is on offer for the professional and holistic development of students (especially of STEM disciplines), like English Proficiency Course, Courses on Technical English, Business English, English for Legal Purpose etc.

- The Department also provides opportunities for specialised and interdisciplinary research in Language, Literature, Translation Studies and Cultural Studies.

- Currently, 36 scholars are pursuing their Ph.D. in different areas of ELT, Literature and Translation Studies.

Course Description:

This course is designed for beginners who want to learn basic conversational English skills. Students will learn how to communicate effectively in everyday situations, such as introducing themselves, asking for directions, and engaging in simple conversations.

Aim :

The aim of this course is to enhance students' ability to communicate effectively in English through improved conversation skills. The course will focus on practical language usage, active listening, and cultural nuances of conversational English.

Objectives:

- Develop fluency and accuracy in English through regular practice and guided activities.
- Use appropriate vocabulary and expressions in a variety of everyday contexts.
- Improve listening skills to understand native and non-native speakers of English.
- Engage confidently in discussions, debates, and everyday conversations.
- Recognize and appropriately use conversational strategies such as asking questions, giving feedback, and expressing opinions.

Outcomes:

By the end of the program, the students will be able to:

- Enhanced ability to hold everyday conversations fluently.
- Improved pronunciation and listening skills.
- Expanded vocabulary for daily interactions.
- Greater confidence in speaking English socially.
- Improved understanding of cultural nuances in communication.

Topics to be Covered in the Programme

S. No	Name of the Topic	No. of Hours
1	Introduction to Conversational English	1
2	Greetings and Introductions	1
3	Understanding Formal vs. Informal Language	1
4	Common Phrases in Daily Use	1
5	Pronunciation Practice and Listening Skills	1
6	Making Requests and Offers	1
7	Describing People and Places	1
8	Asking Questions Effectively	1
9	Giving Directions and Instructions	1
10	Role-plays for Everyday Situations	1
11	Engaging in Telephonic Conversations	1
12	Narrating Personal Experiences	1
13	Expressing Opinions	1
14	Agreeing and Disagreeing	1
15	Social Conversations (Invitations, Apologies)	1
16	Group Discussions	1
17	Debates and Expressing Contradictory Views	1
18	Handling Criticism and Feedback	1
19	Persuasion in Conversations	1
20	Cultural Differences in Conversation	1
21	Problem-Solving in Dialogues	1
22	Conversational Etiquette Practice	1
23	Conflict Resolution through Conversation	1
24	Mock Presentations and Discussions	1
25	Review of Key Concepts and Practice Sessions	1
26	Group Activities and Assessments	1
27	Individual Speaking Practice	1
28	Final Presentations	1
29	Feedback Session	1
30	Course Review and Certificate Distribution	1
	Total	**30**

Chief Patrons

Dr. L. Rathaiah
Chairman

Mr. L. Srikrishnadevarayalu
Vice Chairman

Patrons

Prof. P. Nagabhushan
Vice-Chancellor
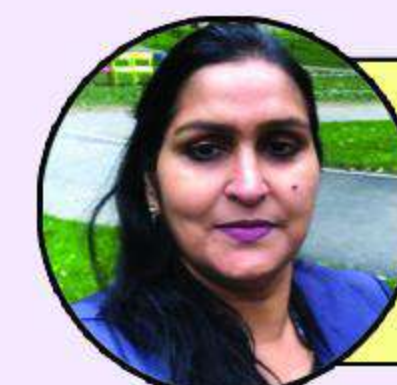
Commodore. Dr. M.S. Raghunathan
Registrar

Co-Patrons

Dr. M.S.S.Rukmini
Dean, Student Affairs

Prof. N. Srinivasu
Dean, School of Applied Sciences
and Humanities

For Registration, Contact:
Chief Coordinator8
292371432, drss_sh@vignan.ac.in

Resource Person
Prof. K. Venkata Reddy
EFL University, Hyderabad.

Coordinators

Dr. A. Sharada
HoD, Dept. of EOFL

Dr. Shah Al Mamun Sarkar
Chief Co-ordinator

Last date for the Registration:
30th July, 2023

Vadlamudi, Guntur Dist. 522 213. A.P, India.

Value added Course
PUBLIC SPEAKING AND PRESENTATION SKILLS
for I B.Tech

1st to 31st August, 2023

Venue: VBSF- 04, A-Block

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

NAAC A+
Accredited

nirf 75
RANK

Organized by :
DEPARTMENT OF ENGLISH AND OTHER INDIAN & FOREIGN LANGUAGES
SCHOOL OF APPLIED SCIENCES AND HUMANITIES

About Vignan's University

Vignan's Foundation for Science, Technology and Research University (VFSTRU), the flagship institution of the group, offers quality academic programmes with innovative leadership development opportunities for its students. The University strives to make the experience of each student a transformative one. It is NAAC accredited with an 'A⁺' grade. Located in a serene suburb of Guntur at Vadlamudi, the university is surrounded by lush greenery and offers a stimulating ambience for higher intellectual pursuits. With well-designed infrastructure and learning facilities Vignan's University offers B. Tech, B. Pharmacy, BBA, BA.LLB., BCA, M. Tech, MBA, MCA and Doctoral Programmes.

About the Department

The Department of English and Other Indian and Foreign Languages (EOFL) functions under the aegis of the School of Applied Sciences & Humanities at VFSTR.

■ The Department offers MA English and Ph.D. programmes and is supported by 27 faculty members, who strive to strengthen the liberal education of students on campus.

■ Towards this, a large basket of courses is on offer for the professional and holistic development of students (especially of STEM disciplines), like English Proficiency Course, Courses on Technical English, Business English, English for Legal Purpose etc.

■ The Department also provides opportunities for specialised and interdisciplinary research in Language, Literature, Translation Studies and Cultural Studies.

■ Currently, 36 scholars are pursuing their Ph.D. in different areas of ELT, Literature and Translation Studies.

Course Description:

This is a comprehensive 6-week course where participants will get the opportunity to develop the foundational skills necessary to become confident and effective public speakers. Through a combination of theoretical knowledge and practical sessions, they will learn how to prepare and deliver engaging presentations, persuade audiences, and manage their nerves.

Aim :

This course aims to enable students to communicate effectively and confidently in public speaking situations, developing their ability to prepare and deliver well-structured presentations, engage and persuade audiences, and manage nerves and build confidence.

Objectives:

● Understand the essentials of effective public speaking and presentations.
● Master the ability to engage audiences and deliver impactful presentations.
● Develop skills to organize speeches, manage anxiety, and utilize body language.
● Implement visual aids and storytelling to enhance presentations.
● Gain confidence in handling questions, impromptu speeches, and audience feedback.

Outcomes:

By the end of the program, the students will be able to:

● Improved clarity and confidence in communication.
● Effective audience engagement techniques.
● Clear and logical presentation structure.
● Strategies to manage public speaking anxiety.
● Skillful use of visual aids and technology.

Topics to be Covered in the Programme

S. No	Name of the Topic	No. of Hours
1	Introduction to Public Speaking	1
2	Elements of Public Speaking	1
3	Types of Speeches	1
4	Identifying Your Audience	1
5	Overcoming Fear	1
6	Building Confidence	1
7	Active Listening and Effective Communication	1
8	Researching Topics	1
9	Gathering Content	1
10	Structuring a Speech	1
11	Crafting Introductions	1
12	Crafting Conclusions	1
13	Persuasive Techniques	1
14	Storytelling in Speeches	1
15	Voice Modulation	1
16	Pausing and Pacing	1
17	Body Language Basics	1
18	Advanced Body Language	1
19	Using Visual Aids	1
20	Movement on Stage	1
21	Practice Workshop	1
22	Handling Interruptions	1
23	Impromptu Speaking	1
24	Managing Q&A Sessions	1
25	Storytelling for Engagement	1
26	Practice Workshop	1
27	Preparing for Professional Presentations	1
28	Presenting at Corporate Meetings	1
29	Public Speaking in Seminars	1
30	Final Presentations	1
	Total	30

Chief Patrons

Dr. L. Rathaiah
Chairman

Mr. L. Srikrishnadevarayalu
Vice Chairman

Patrons

Prof. P. Nagabhushan
Vice-Chancellor

Commodore. Dr. M.S. Raghunathan
Registrar

Co-Patrons

Dr. M.S.S.Rukmini
Dean, Student Affairs

Prof. N. Srinivasu
Dean, School of Applied Sciences
and Humanities

For Registration, Contact:
Chief Coordinator6
289070071, drrc_eng@vignan.ac.in

Resource Person
Dr. Jithin Devassy
Christ Univesrity, Bangalore

Coordinators

Dr. A. Sharada
HoD, Dept. of EOFL

Dr. Reema Chakrabarti
Chief Co-ordinator

Last date for the Registration:
30th August, 2023

Vadlamudi, Guntur Dist. 522 213. A.P, India.

Value added Course
FUNCTIONAL ENGLISH
for I B.Tech

1st to 30th Setember, 2023

Venue: VBSF- 04, A-Block

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

NAAC A+
Accredited

nirf 75
RANK

Organized by :

DEPARTMENT OF ENGLISH AND OTHER INDIAN & FOREIGN LANGUAGES
SCHOOL OF APPLIED SCIENCES AND HUMANITIES

About Vignan's University

Vignan's Foundation for Science, Technology and Research University (VFSTRU), the flagship institution of the group, offers quality academic programmes with innovative leadership development opportunities for its students. The University strives to make the experience of each student a transformative one. It is NAAC accredited with an 'A+' grade. Located in a serene suburb of Guntur at Vadlamudi, the university is surrounded by lush greenery and offers a stimulating ambience for higher intellectual pursuits. With well-designed infrastructure and learning facilities Vignan's University offers B. Tech, B. Pharmacy, BBA, BA.LLB., BCA, M. Tech, MBA, MCA and Doctoral Programmes.

About the Department

The Department of English and Other Indian and Foreign Languages (EOFL) functions under the aegis of the School of Applied Sciences & Humanities at VFSTR.

- The Department offers MA English and Ph.D. programmes and is supported by 27 faculty members, who strive to strengthen the liberal education of students on campus.

- Towards this, a large basket of courses is on offer for the professional and holistic development of students (especially of STEM disciplines), like English Proficiency Course, Courses on Technical English, Business English, English for Legal Purpose etc.

- The Department also provides opportunities for specialised and interdisciplinary research in Language, Literature, Translation Studies and Cultural Studies.

- Currently, 36 scholars are pursuing their Ph.D. in different areas of ELT, Literature and Translation Studies.

Course Description:

This course aims to enhance students' ability to use English effectively in real-life situations. Emphasis will be placed on developing practical communication skills, including speaking, listening, reading, and writing, as well as understanding and using English in various social and professional contexts.

Aim :

The aim of this course is to develop communicational skills by leveraging their existing language knowledge. The course is designed to ease the transition from the native language to English, providing learners with the tools needed to communicate fluently and accurately in English..

Objectives:

- To communicate clearly and confidently in both spoken and written English.

- To understand and use appropriate language for different social and professional situations.

- To develop effective listening skills for better comprehension and interaction.

- To improve reading skills for extracting and interpreting information.

- To write clear, coherent, and purposeful texts

.

Outcomes:

By the end of the program, the students will be able to:
- Improved ability to use English in practical, real-life situations.
- Enhanced reading, writing, speaking, and listening skills for everyday tasks.
- Increased proficiency in communicating effectively in both social and professional contexts.
- Greater confidence in using English to solve problems and express ideas clearly.
- Strengthened understanding of functional grammar and vocabulary for practical use.

Topics to be Covered in the Programme

S. No	Name of the Topic	No. of Hours
1	Course overview and objectives	1
2	Importance of functional English in daily life and professional settings	1
3	Assessment of current language skills	1
4	Greetings and introductions	1
5	Polite requests and responses	1
6	Making and responding to invitations	1
7	Role-playing everyday scenarios	1
8	Techniques for active listening	1
9	Understanding different accents and speech patterns	1
10	Listening to and summarizing short audio clips	1
11	Effective pronunciation and intonation	1
12	Structuring sentences for clarity	1
13	Participating in discussions and conversations	1
14	Public speaking basics	1
15	Public speaking basics	1
16	Writing clear and concise emails	1
17	Crafting professional and informal letters	1
18	Creating structured reports and summaries	1
19	Language used in job interviews and workplace communication	1
20	Writing CVs and cover letters	1
21	Understanding workplace etiquette and jargon	1
22	Using idiomatic expressions and slang appropriately	1
23	Understanding and participating in social conversations	1
24	Navigating cultural nuances and practices	1
25	Weekly quizzes and practice exercises	1
26	Weekly quizzes and practice exercises	1
27	Oral presentations and role-playing activities	1
28	Oral presentations and role-playing activities	1
29	Written assignments (emails, reports, etc.)	1
30	Final project or presentation	1
	Total	30

Chief Patrons

Dr. L. Rathaiah
Chairman

Mr. L. Srikrishnadevarayalu
Vice Chairman

Patrons

Prof. P. Nagabhushan
Vice-Chancellor

Commodore. Dr. M.S. Raghunathan
Registrar

Co-Patrons

Dr. M.S.S.Rukmini
Dean, Student Affairs

Prof. N. Srinivasu
Dean, School of Applied Sciences
and Humanities

For Registration, Contact:
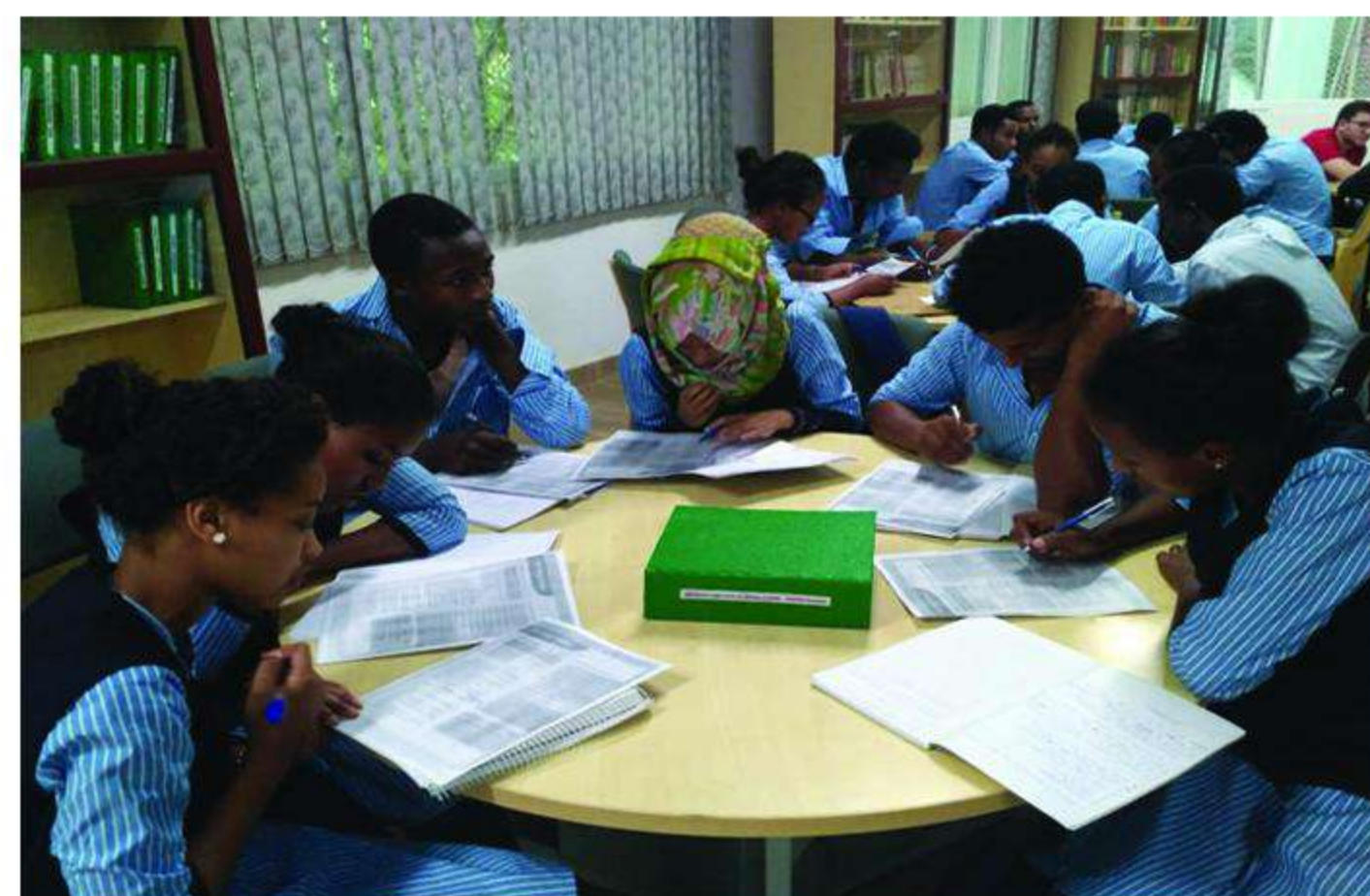Chief Coordinator6
289070071, drrc_eng@vignan.ac.in

Resource Person
Dr. N. Susheel kumar
University of Delhi, Delhi

Coordinators

Dr. A. Sharada
HoD, Dept. of EOFL

Dr. Reema Chakrabarti
Chief Co-ordinator

Last date for the Registration:
30th August, 2023

Vadlamudi, Guntur Dist. 522 213. A.P, India.

Value added Course
INTRODUCTION TO LANGUAGE AND LITERATURE
for I B.Tech
1st to 30th September, 2023

Venue: VBSF- 03, A-Block

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

NAAC A+
Accredited

nirf 75 RANK

Organized by :
DEPARTMENT OF ENGLISH AND OTHER INDIAN & FOREIGN LANGUAGES
SCHOOL OF APPLIED SCIENCES AND HUMANITIES

About Vignan's University

Vignan's Foundation for Science, Technology and Research University (VFSTRU), the flagship institution of the group, offers quality academic programmes with innovative leadership development opportunities for its students. The University strives to make the experience of each student a transformative one. It is NAAC accredited with an 'A+' grade. Located in a serene suburb of Guntur at Vadlamudi, the university is surrounded by lush greenery and offers a stimulating ambience for higher intellectual pursuits. With well-designed infrastructure and learning facilities Vignan's University offers B. Tech, B. Pharmacy, BBA, BA.LLB., BCA, M. Tech, MBA, MCA and Doctoral Programmes.

About the Department

The Department of English and Other Indian and Foreign Languages (EOFL) functions under the aegis of the School of Applied Sciences & Humanities at VFSTR.

- The Department offers MA English and Ph.D. programmes and is supported by 27 faculty members, who strive to strengthen the liberal education of students on campus.

- Towards this, a large basket of courses is on offer for the professional and holistic development of students (especially of STEM disciplines), like English Proficiency Course, Courses on Technical English, Business English, English for Legal Purpose etc.

- The Department also provides opportunities for specialised and interdisciplinary research in Language, Literature, Translation Studies and Cultural Studies.

- Currently, 36 scholars are pursuing their Ph.D. in different areas of ELT, Literature and Translation Studies.

Course Description:

This course explores the relationship between language and literature, focusing on how linguistic elements shape literary forms and meanings. Students will analyze various literary genres and texts while also examining the language techniques used by authors. The course will develop both literary analysis skills and a deeper understanding of language usage in literary contexts.

Aim :

The aim of an Introduction to Language and Literature course is to provide students with a foundational understanding of how language functions within literary texts, fostering critical thinking, analytical skills, and an appreciation of diverse literary forms and cultural contexts. It seeks to enhance students' ability to interpret, discuss, and write about literature effectively, deepening their engagement with both language and literary traditions.

Objectives:

- To analyse literary texts through the lens of language and stylistic elements.
- To understand and identify different literary genres and their conventions.
- To enhance their ability to interpret and critique literary works.
- To develop effective writing skills for literary analysis.
- To explore the historical and cultural contexts of literary texts.

.

Outcomes:

By the end of the program, the students will be able to:

- Enhanced understanding of the relationship between language and literary expression.
- Ability to analyze and interpret various literary genres and texts.
- Improved critical thinking and analytical skills through the study of literature.
- Greater appreciation of the cultural, historical, and social contexts of literary works.
- Developed skills in discussing and writing about literature with clarity and insight.

Topics to be Covered in the Programme

S. No	Name of the Topic	No. of Hours
1	Overview of the course and objectives	1
2	The relationship between language and literary expression	1
3	Introduction to literary analysis and critical reading	1
4	Exploration of different literary genres: poetry, prose, drama	1
5	Key characteristics and conventions of each genre	1
6	Reading and discussing examples from each genre	1
7	Reading and discussing examples from each genre	1
8	Analysis of stylistic devices: imagery, metaphor, simile, symbolism	1
9	Understanding tone, mood, and voice in literary texts	1
10	Examining how language shapes meaning in literature	1
11	Study of narrative techniques: first-person, third-person, unreliable narrators	1
12	Analysis of narrative structure and its impact on storytelling	1
13	Reading and discussing texts with various narrative perspectives	1
14	Exploring methods of character development: direct and indirect characterization	1
15	Analyzing dialogue and its role in revealing character and advancing plot	1
16	Case studies of character and dialogue from selected texts	1
17	Identifying and analyzing recurring themes and motifs in literature	1
18	Reading and discussing texts with prominent themes	1
19	In-depth exploration of poetic forms and structures	1
20	Analysis of meter, rhyme, and free verse	1
21	Reading and interpreting poems by various poets	1
22	Reading and interpreting poems by various poets	1
23	Introduction to major literary theories: formalism, structuralism, poststructuralist	1
24	Introduction to major literary theories: formalism, structuralism, post structuralism	1
25	Introduction to major literary theories: formalism, structuralism, post structuralism	1
26	Application of literary theories to texts studied in the course	1
27	Application of literary theories to texts studied in the course	1
28	Application of literary theories to texts studied in the course	1
29	Developing a critical approach to literary analysis	1
30	Feedback Session	1
	Total	**30**

Resource Person
Dr. Vinayakumari
Professor of English,
Amity University, Noida.

Chief Patrons
Dr. L. Rathaiah
Chairman
Mr. L. Srikrishnadevarayalu
Vice Chairman

Patrons
Prof. P. Nagabhushan
Vice-Chancellor
Commodore. Dr. M.S. Raghunathan
Registrar

Co-Patrons
Dr. M.S.S.Rukmini
Dean, Student Affairs
Prof. N. Srinivasu
Dean, School of Applied Sciences
and Humanities

For Registration, Contact:
Chief Coordinator9
701325819, drsj_sh@vignan.ac.in

Coordinators

Dr. A. Sharada
HoD, Dept. of EOFL

Dr. Sravana Jyothi
Chief Co-ordinator

Last date for the Registration:
30th July, 2023

Vadlamudi, Guntur Dist. 522 213. A.P, India.

Value added Course
**ENHANCING
ENGLISH LANGUAGE VOCABULARY
THROUGH LITERATURE**
for I B.Tech
1st to 31st August, 2023

Venue: VBSF- 04, A-Block

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be **UNIVERSITY**)
-Estd. u/s 3 of UGC Act 1956

NAAC A+ Accredited
nirf 75 RANK

Organized by :
DEPARTMENT OF ENGLISH AND OTHER INDIAN & FOREIGN LANGUAGES
SCHOOL OF APPLIED SCIENCES AND HUMANITIES

About Vignan's University

Vignan's Foundation for Science, Technology and Research University (VFSTRU), the flagship institution of the group, offers quality academic programmes with innovative leadership development opportunities for its students. The University strives to make the experience of each student a transformative one. It is NAAC accredited with an 'A+' grade. Located in a serene suburb of Guntur at Vadlamudi, the university is surrounded by lush greenery and offers a stimulating ambience for higher intellectual pursuits. With well-designed infrastructure and learning facilities Vignan's University offers B. Tech, B. Pharmacy, BBA, BA.LLB., BCA, M. Tech, MBA, MCA and Doctoral Programmes.

About the Department

The Department of English and Other Indian and Foreign Languages (EOFL) functions under the aegis of the School of Applied Sciences & Humanities at VFSTR.

- The Department offers MA English and Ph.D. programmes and is supported by 27 faculty members, who strive to strengthen the liberal education of students on campus.

- Towards this, a large basket of courses is on offer for the professional and holistic development of students (especially of STEM disciplines), like English Proficiency Course, Courses on Technical English, Business English, English for Legal Purpose etc.

- The Department also provides opportunities for specialised and interdisciplinary research in Language, Literature, Translation Studies and Cultural Studies.

- Currently, 36 scholars are pursuing their Ph.D. in different areas of ELT, Literature and Translation Studies.

Course Description:

This course is designed for advanced English learners of B.Tech. classes who seek to expand their vocabulary through the study of various literary genres and works. By exploring diverse literary styles and periods, students will deepen their understanding of advanced vocabulary, its usage in context, and its application in both academic and creative writing.

Aim :

The aim of this course is to enrich students' English vocabulary through in-depth exploration of literature, focusing on how different genres and authors use language creatively and effectively to enhance their language usage.

Objectives:

- Analyse vocabulary usage in various literary genres and historical contexts.

- Contextualize and apply advanced vocabulary from literary texts in their own writing.

- Appreciate the role of literary devices and figurative language in vocabulary development.

- Develop a deeper understanding of the evolution of vocabulary across different literary periods.

- Create and use vocabulary lists based on literary studies for practical and academic purposes.

Outcomes:

By the end of the program, the students will be able to:

- Expanded vocabulary through exposure to diverse literary genres.
- Improved ability to apply advanced vocabulary in written and spoken English.
- Enhanced understanding of literary techniques and their impact on vocabulary.
- Increased proficiency in analysing and critiquing literary texts.
- Greater confidence in using enriched vocabulary in various contexts.

Topics to be Covered in the Programme

S. No	Name of the Topic	No. of Hours
1	Introduction to Literary Vocabulary	1
2	The Role of Context in Vocabulary Acquisition	1
3	Classic Literature: Exploring Shakespearean Vocabulary	1
4	Romantic Literature: Expanding Vocabulary with Words of Emotion	1
5	Victorian Literature: Complex Vocabulary and Social Themes	1
6	Modernist Vocabulary: Exploring Innovation and Experimentation	1
7	Postmodern Literature: Playing with Language	1
8	American Literature: Expanding Vocabulary through Diverse Voices	1
9	Science Fiction and Fantasy: Inventive Vocabulary	1
10	Poetry: The Art of Compact Expression	1
11	Drama: Dialogue and Dramatic Vocabulary	1
12	Historical Fiction: Vocabulary of the Past	1
13	Non-Fiction: Expanding Vocabulary through Essays and Biographies	1
14	Literary Devices: Enhancing Vocabulary through Figurative Language	1
15	Genre Study: Vocabulary in Mystery and Thriller	1
16	Realism and Naturalism: Vocabulary for Depicting Reality	1
17	Travel Literature: Vocabulary of Exploration and Culture	1
18	Literary Criticism: Vocabulary for Analysing Texts	1
19	Children's Literature: Vocabulary in Stories for Young Readers	1
20	Contemporary Literature: Modern Vocabulary and Trends	1
21	Revisiting Classic Texts: Vocabulary and Its Evolution	1
22	Creating Vocabulary Lists: From Literature to Practical Use	1
23	Writing with Enhanced Vocabulary: Application in Creative Writing	1
24	Vocabulary in Dialogue: Developing Natural Speech Patterns	1
25	Comparative Analysis: Vocabulary Across Cultures	1
26	Teaching Vocabulary through Literature: Strategies for Educators	1
27	Literature Review: Summarizing and Critiquing Literary Vocabulary	1
28	Applying Literary Vocabulary in Academic Writing	1
29	Review and Synthesis: Integrating Vocabulary into Everyday Use	1
30	Final Presentations and Course Wrap-Up	1
	Total	**30**

Chief Patrons

Dr. L. Rathaiah
Chairman

Mr. L. Srikrishnadevarayalu
Vice Chairman

Patrons

Prof. P. Nagabhushan
Vice-Chancellor

Commodore. Dr. M.S. Raghunathan
Registrar

Co-Patrons

Dr. M.S.S.Rukmini
Dean, Student Affairs

Prof. N. Srinivasu
Dean, School of Applied Sciences
and Humanities

For Registration, Contact:
Chief Coordinator9
701325819, drsj_sh@vignan.ac.in

Vadlamudi, Guntur Dist. 522 213. A.P, India.

Resource Person
Dr. Kavita Singh
Assistant Professor,
Anna University, Chennai.

Coordinators

Dr. A. Sharada
HoD, Dept. of EOFL

Dr. Sravana Jyothi
Chief Co-ordinator

Last date for the Registration:
31st October, 2023

Value added Course
ORAL AND WRITTEN COMMUNICATION IN ENGLISH
for I B.Tech

1st to 30th November, 2023

Verbosity   Poor sentence structure

Confusing language   Information overload

Venue: VBSF- 04, A-Block

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

NAAC A+ Accredited
nirf 75 RANK

Organized by :
DEPARTMENT OF ENGLISH AND OTHER INDIAN & FOREIGN LANGUAGES
SCHOOL OF APPLIED SCIENCES AND HUMANITIES

About Vignan's University

Vignan's Foundation for Science, Technology and Research University (VFSTRU), the flagship institution of the group, offers quality academic programmes with innovative leadership development opportunities for its students. The University strives to make the experience of each student a transformative one. It is NAAC accredited with an 'A+' grade. Located in a serene suburb of Guntur at Vadlamudi, the university is surrounded by lush greenery and offers a stimulating ambience for higher intellectual pursuits. With well-designed infrastructure and learning facilities Vignan's University offers B. Tech, B. Pharmacy, BBA, BA.LLB., BCA, M. Tech, MBA, MCA and Doctoral Programmes.

About the Department

The Department of English and Other Indian and Foreign Languages (EOFL) functions under the aegis of the School of Applied Sciences & Humanities at VFSTR.

- The Department offers MA English and Ph.D. programmes and is supported by 27 faculty members, who strive to strengthen the liberal education of students on campus.

- Towards this, a large basket of courses is on offer for the professional and holistic development of students (especially of STEM disciplines), like English Proficiency Course, Courses on Technical English, Business English, English for Legal Purpose etc.

- The Department also provides opportunities for specialised and interdisciplinary research in Language, Literature, Translation Studies and Cultural Studies.

- Currently, 36 scholars are pursuing their Ph.D. in different areas of ELT, Literature and Translation Studies.

Course Description:

This course is designed to enhance both oral and written communication in English. It covers fundamental and advanced techniques for effective communication, including public speaking, professional writing, and persuasive argumentation. Students will develop their abilities to convey ideas clearly and confidently in various contexts, from everyday interactions to formal presentations and written documents.

Aim :

The aim of this course is to develop students' proficiency in both oral and written communication, emphasizing clarity, effectiveness, and adaptability in various communication scenarios.

Objectives:

- Demonstrate effective oral communication skills, including public speaking and active listening.
- Develop and use a rich vocabulary for both oral and written communication.
- Construct and deliver well-organized oral presentations and written documents.
- Apply grammar, syntax, and style principles to improve written communication.
- Tailor communication strategies for different audiences and purposes.

Outcomes:

By the end of the program, the students will be able to:

- Enhanced skills in oral presentations and public speaking.
- Improved written communication, including professional and academic writing.
- Greater ability to use persuasive techniques in both speaking and writing.
- Increased proficiency in editing, proofreading, and avoiding plagiarism.
- Enhanced ability to adapt communication styles to diverse contexts and audiences.

Topics to be Covered in the Programme

S. No	Name of the Topic	No. of Hours
1	Introduction to Effective Communication	1
2	Fundamentals of Oral Communication	1
3	Active Listening Skills	1
4	Building Vocabulary for Oral Communication	1
5	Structuring Oral Presentations	1
6	Public Speaking Skills	1
7	Effective Use of Visual Aids	1
8	Persuasive Speaking Techniques	1
9	Interview Skills: Oral Communication in Job Contexts	1
10	Understanding and Using Non-Verbal Communication	1
11	Fundamentals of Written Communication	1
12	Grammar and Syntax in Writing	1
13	Developing a Strong Writing Style	1
14	Crafting Effective Emails and Professional Correspondence	1
15	Writing Reports and Proposals	1
16	Academic Writing: Structuring Essays and Research Papers	1
17	Creative Writing: Enhancing Imaginative Expression	1
18	Editing and Proofreading	1
19	Writing for social media and Digital Platforms	1
20	Persuasive and Argumentative Writing	1
21	Cross-Cultural Communication in Writing	1
22	Effective Use of Rhetorical Devices	1
23	Writing and Delivering Speeches	1
24	Conducting and Presenting Research	1
25	Writing for Specific Purposes: Technical and Scientific Communication	1
26	Developing Argumentation Skills in Writing	1
27	Understanding and Avoiding Plagiarism	1
28	Tailoring Communication for Different Audiences	1
29	Review and Integration: Combining Oral and Written Skills	1
30	Final Presentations and Course Wrap-Up	1
	Total	**30**

Chief Patrons

Dr. L. Rathaiah
Chairman

Mr. L. Srikrishnadevarayalu
Vice Chairman

Patrons

Prof. P. Nagabhushan
Vice-Chancellor

Commodore. Dr. M.S. Raghunathan
Registrar

Co-Patrons

Dr. M.S.S.Rukmini
Dean, Student Affairs

Prof. N. Srinivasu
Dean, School of Applied Sciences
and Humanities

For Registration, Contact:
Chief Coordinator9
985279954, nageswararaogude18@gmail.com

Resource Person
Prof. Mojibur Rahman
IIT(ISM) DHANBAD, Jharkhand

Coordinators

Dr. A. Sharada
HoD, Dept. of English

Dr. G. Nageswara Rao
Chief Co-ordinator

Last date for the Registration:
30th July, 2023

Vadlamudi, Guntur Dist. 522 213. A.P., India.

Value added Course
Basic Communicative English
for I B.Tech

1st to 31st August, 2023

Venue: VBTF- 03, A-Block

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

NAAC A+
Accredited

nirf 75
RANK

Organized by :
**DEPARTMENT OF ENGLISH AND OTHER INDIAN & FOREIGN LANGUAGES
SCHOOL OF APPLIED SCIENCES AND HUMANITIES**

About Vignan's University

Vignan's Foundation for Science, Technology and Research University (VFSTRU), the flagship institution of the group, offers quality academic programmes with innovative leadership development opportunities for its students. The University strives to make the experience of each student a transformative one. It is NAAC accredited with an 'A+' grade. Located in a serene suburb of Guntur at Vadlamudi, the university is surrounded by lush greenery and offers a stimulating ambience for higher intellectual pursuits. With well-designed infrastructure and learning facilities Vignan's University offers B. Tech, B. Pharmacy, BBA, BA.LLB., BCA, M. Tech, MBA, MCA and Doctoral Programmes.

About the Department

The Department of English and Other Indian and Foreign Languages (EOFL) functions under the aegis of the School of Applied Sciences & Humanities at VFSTR.

- The Department offers MA English and Ph.D. programmes and is supported by 27 faculty members, who strive to strengthen the liberal education of students on campus.

- Towards this, a large basket of courses is on offer for the professional and holistic development of students (especially of STEM disciplines), like English Proficiency Course, Courses on Technical English, Business English, English for Legal Purpose etc.

- The Department also provides opportunities for specialised and interdisciplinary research in Language, Literature, Translation Studies and Cultural Studies.

- Currently, 36 scholars are pursuing their Ph.D. in different areas of ELT, Literature and Translation Studies.

Course Description:

This course is tailored for learners who primarily speak vernacular languages and seek to improve their proficiency in English. It focuses on helping learners transition smoothly from their native language to English, emphasizing practical communication skills. With an interactive approach, the course addresses common challenges vernacular speakers face, such as pronunciation, sentence structure, and vocabulary.

Aim :

The aim of this course is to enable vernacular speakers to develop essential English communication skills by leveraging their existing language knowledge. The course is designed to ease the transition from the native language to English, providing learners with the tools needed to communicate fluently and accurately in English..

Objectives:

- Understand key differences between English and their vernacular language, especially in grammar and pronunciation.

- Develop listening and speaking skills for daily and professional conversations.

- Enhance vocabulary, focusing on everyday English as well as job-specific language.

- Write clear and concise sentences, paragraphs, and emails in English.

- Build confidence in using English in social, academic, and professional settings. eedback.

Outcomes:

By the end of the program, the students will be able to:

- Enhanced ability to communicate effectively in English while maintaining clarity.
- Improved listening skills for better comprehension of native English speakers.
- Increased confidence in using English in everyday and professional scenarios.
- Expanded vocabulary and improved use of basic English grammar.
- Greater fluency in transitioning between vernacular and English languages.

Topics to be Covered in the Programme

S. No	Name of the Topic	No. of Hours
1	Introduction to English Sounds and Alphabet	1
2	Understanding basic sentence formation.	1
3	Common Greetings and Polite Phrases	1
4	Everyday Vocabulary: Objects and Actions	1
5	Practice listening to basic conversational English.	1
6	Introduction to Verb Tenses: Present Simple	1
7	Asking and Answering Simple Questions	1
8	Talking About Time, Days, and Weather	1
9	Describing People and Things	1
10	Role-Playing Conversations (Shopping, Travel)	1
11	Listening to Short Stories and Answering Questions	1
12	Pronunciation Practice: Common Sounds and Word Stress	1
13	Engaging in Short Conversations	1
14	Giving and Following Simple Instructions	1
15	Group Speaking Activity: Discussing Daily Life	1
16	Writing Simple Sentences and Questions	1
17	Reading Short Texts and Stories	1
18	Writing Short Messages or Emails	1
19	Understanding Signs and Notices	1
20	Writing a Short Paragraph or Story	1
21	Expressing Likes, Dislikes, and Preferences	1
22	Talking About Future Plans	1
23	Expressing Feelings and Emotions	1
24	Writing Formal and Informal Letters	1
25	Group Conversations: Hobbies, Work, and Interests	1
26	Listening and Comprehending Longer Dialogues	1
27	Fluency Practice: Improving Spoken English	1
28	Vocabulary and Grammar Review	1
29	Writing Practice: Creating a Short Essay or Story	1
30	Final Assessment and Feedback	1
	Total	**30**

Chief Patrons

Dr. L. Rathaiah
Chairman

Mr. L. Srikrishnadevarayalu
Vice Chairman

Patrons

Prof. P. Nagabhushan
Vice-Chancellor

Commodore. Dr. M.S. Raghunathan
Registrar

Co-Patrons

Dr. M.S.S.Rukmini
Dean, Student Affairs

Prof. N. Srinivasu
Dean, School of Applied Sciences and Humanities

For Registration, Contact:
Chief Coordinator9
492716146, drsk_eng@vignan.ac.in

Resource Person
Prof. Ujjwal Jana
University of Delhi, Delhi

Coordinators

Dr. A. Sharada
HoD, Dept. of EOFL

Dr. Srinivasarao Kasarla
Chief Co-ordinator

Last date for the Registration:
30th August, 2023

Vadlamudi, Guntur Dist. 522 213. A.P, India.

Value added Course
ENGLISH LANGUAGE INSTRUCTION FOR VERNACULAR SPEAKERS
for I B.Tech

1st to 30th Setember, 2023

Venue: VBSF- 05, A-Block

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

NAAC A+
Accredited

nirf 75 RANK

Organized by :
DEPARTMENT OF ENGLISH AND OTHER INDIAN & FOREIGN LANGUAGES
SCHOOL OF APPLIED SCIENCES AND HUMANITIES

About Vignan's University

Vignan's Foundation for Science, Technology and Research University (VFSTRU), the flagship institution of the group, offers quality academic programmes with innovative leadership development opportunities for its students. The University strives to make the experience of each student a transformative one. It is NAAC accredited with an 'A⁺' grade. Located in a serene suburb of Guntur at Vadlamudi, the university is surrounded by lush greenery and offers a stimulating ambience for higher intellectual pursuits. With well-designed infrastructure and learning facilities Vignan's University offers B. Tech, B. Pharmacy, BBA, BA.LLB., BCA, M. Tech, MBA, MCA and Doctoral Programmes.

About the Department

The Department of English and Other Indian and Foreign Languages (EOFL) functions under the aegis of the School of Applied Sciences & Humanities at VFSTR.

The Department offers MA English and Ph.D. programmes and is supported by 27 faculty members, who strive to strengthen the liberal education of students on campus.

Towards this, a large basket of courses is on offer for the professional and holistic development of students (especially of STEM disciplines), like English Proficiency Course, Courses on Technical English, Business English, English for Legal Purpose etc.

The Department also provides opportunities for specialised and interdisciplinary research in Language, Literature, Translation Studies and Cultural Studies.

Currently, 36 scholars are pursuing their Ph.D. in different areas of ELT, Literature and Translation Studies.

Course Description:

This course provides an introduction to the fundamentals of the English language, focusing on key skills in reading, writing, speaking, and listening. Designed for beginners, it offers practical instruction and exercises to develop basic English communication skills. The course emphasizes vocabulary building, sentence structure, and conversational techniques essential for daily communication.

Learners will engage in interactive lessons, group activities, and assessments, ensuring a comprehensive understanding of basic English. By the end of this course, students will be able to comprehend and use simple English in common real-life situations.

Aim :

The aim of this course is to equip learners with the foundational knowledge and skills necessary to communicate effectively in English at a basic level. The course intends to build confidence in using English in both verbal and written forms, fostering a solid foundation for further language study

Objectives:

- Develop foundational English speaking and listening skills for everyday interactions.
- Build basic vocabulary and sentence structures for effective communication.
- Improve pronunciation and clarity in spoken English.
- Enhance the ability to understand and respond to simple conversations.
- Gain confidence in using English in social and professional settings.

Outcomes:

By the end of the program, the students will be able to:

- Improved ability to communicate clearly in everyday conversations.
- Enhanced listening skills for better understanding of spoken English.
- Increased confidence in speaking English in social and professional settings.
- Development of a basic English vocabulary and sentence structures.
- Improved pronunciation and fluency in spoken English

Topics to be Covered in the Programme

S. No	Name of the Topic	No. of Hours
1	Overview of greetings, self-introduction, and common polite phrases.	1
2	Sentence Formation Basics	1
3	Essential Vocabulary for Daily Life	1
4	Common Greetings and Social Expressions	1
5	Listening and Speaking: Short Dialogues	1
6	Practice forming questions and giving responses.	1
7	Talking About Personal Information.	1
8	Using numbers in conversations, discussing the time and dates.	1
9	Introduction to adjectives and their use in descriptions.	1
10	Practice Conversations: Daily Routines	1
11	Listening to Conversations and Key Phrases	1
12	Pronunciation Practice: Common Sounds in English	1
13	Engaging in Simple Conversations	1
14	Giving and Following Instructions	1
15	Group Activity: Role-Playing	1
16	Writing Simple Sentences	1
17	Reading Comprehension: Short Texts	1
18	Writing Notes and Messages	1
19	Paragraph Writing: Describing Events	1
20	Reading for Understanding: Everyday Signs and Instructions	1
21	Discussing Likes, Dislikes, and Preferences	1
22	Talking About Future Plans	1
23	Expressing Emotions and Feelings	1
24	Writing a Simple Story or Event	1
25	Conversation Practice: Discussing Hobbies and Interests	1
26	Listening to Longer Dialogues	1
27	Speaking Practice: Improving Fluency	1
28	Reviewing Key Vocabulary and Grammar	1
29	Writing Practice: Creating a Short Essay or Letter	1
30	Final Assessment and Feedback	1
	Total	30

Chief Patrons

Dr. L. Rathaiah
Chairman

Mr. L. Srikrishnadevarayalu
Vice Chairman

Patrons

Prof. P. Nagabhushan
Vice-Chancellor

Commodore. Dr. M.S. Raghunathan
Registrar

Co-Patrons

Dr. M.S.S.Rukmini
Dean, Student Affairs

Prof. N. Srinivasu
Dean, School of Applied Sciences
and Humanities

Coordinators

Dr. A. Sharada
HoD, Dept. of English

Dr. G. Nageswara Rao
Chief Co-ordinator

For Registration, Contact:
Chief Coordinator9
985279954, nageswararaogude18@gmail.com

Vadlamudi, Guntur Dist. 522 213. A.P., India.

Value added Course
A COURSE ON MAKING EFFECTIVE PRESENTATIONS WITH PPT
for I B.Tech

3rd to 31st October, 2023

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

NAAC A+
Accredited

Organized by :
DEPARTMENT OF ENGLISH
SCHOOL OF APPLIED SCIENCES AND HUMANITIES

About Vignan's University

Vignan's Foundation for Science, Technology and Research University (VFSTRU), the flagship institution of the group, offers quality academic programmes with innovative leadership development opportunities for its students. The University strives to make the experience of each student a transformative one. It is NAAC accredited with an 'A+' grade. Located in a serene suburb of Guntur at Vadlamudi, the university is surrounded by lush greenery and offers a stimulating ambience for higher intellectual pursuits. With well-designed infrastructure and learning facilities Vignan's University offers B. Tech, B. Pharmacy, BBA, BA.LLB., BCA, M. Tech, MBA, MCA and Doctoral Programmes.

About the Department

The Department of English functions under the aegis of the School of Applied Sciences & Humanities at VFSTR. The Department offers MA English and Ph.D. programmes and is supported by 27 faculty members, who strive to strengthen the liberal education of students on campus. Towards this, a large basket of courses is on offer for the professional and holistic development of students (especially of STEM disciplines), like English Proficiency Course, Courses on Technical English, Business English, English for Legal Purpose etc. The Department also provides opportunities for specialised and inter-disciplinary research in Language, Literature, Translation Studies and Cultural Studies. Currently, 36 scholars are pursuing their Ph.D. in different areas of ELT, Literature and Translation Studies.

Course Description:

The course is about learning to design and deliver engaging and effective presentations with maximum impact to achieve the desired and realistic outcomes through use of various soft skills. This course also helps the learners to focus on how to use the data visualization tools e.g. tables, charts, graphs in Power Point Presentations effectively to allow the audience understand the intention or message of the Presenter.

Aim :

The overall objective of offering this value added course to the I B Tech students is to polish their oral presentation skills and make them effective presenters.

Objectives:

- To help learners develop vocabulary to speak appropriately based on the context and situation.
- To build learner confidence in oral and interpersonal communication by acquainting them with the basics of pronunciation and functional English.
- To enable learners in giving effective presentations using digital and non-digital presentation tools.
- To employ different strategies and skills to manage effective presentations.

Outcomes:

By the end of the program, the students will be able to:
- create and manipulate simple slide shows with outlines and notes
- plan and prepare better presentations
- create slide presentations that include text, graphics, animation and transitions
- use design layouts and templates for presentations
- become more confident when presenting

Topics to be Covered in the Programme

Sl. No.	Name of the Topic	No. of hours
1	Introduction to Effective Presentations with PPT	1
2	Preparation Before Presentation – Key Elements	1
3	Pattern of Presentations	1
4	Types of Delivery in Oral Presentations	1
5	Basic Guidelines for Designing the Presentation	1
6	Common Indicators of Non-Verbal Communication	1
7	Features and Types of Non-Verbal Communication	1
8	What makes a good presentation?	1
9	Explore the Interface	1
10	Creating Effective Power Point	1
11	Before the Design	1
12	Principle Elements of PPT	1
13	Birds Practice Presentation	1
14	Open Blank Presentation	1
15	Diagrams and Framework, Charts	1
16	Language Skills	1
17	Smart Art	1
18	Preparing for the presentation	1
19	Enhancing Teaching and Learning with Power Point	1
20	Multimodal Learning	1
21	Engaging Students with Power Point	1
22	Positive Features of Power point	1
23	Major Areas of Verbal Presentation	1
24	Creativity in Presentations and Speeches	1
25	Potential Drawbacks of Power Point	1
26	Design to mitigate the impact of technical disasters	1
27	Designing Effective Power Point Presentations	1
28	Mind Mapping Your Presentations	1
29	Controlling Nervousness and Stage Fright	1
30	Presentation flaws and failures	1
	Total	**30**

Chief Patrons

Dr. L. Rathaiah
Chairman

Mr. L. Srikrishnadevarayalu
Vice Chairman

Patrons

Prof. P. Nagabhushan
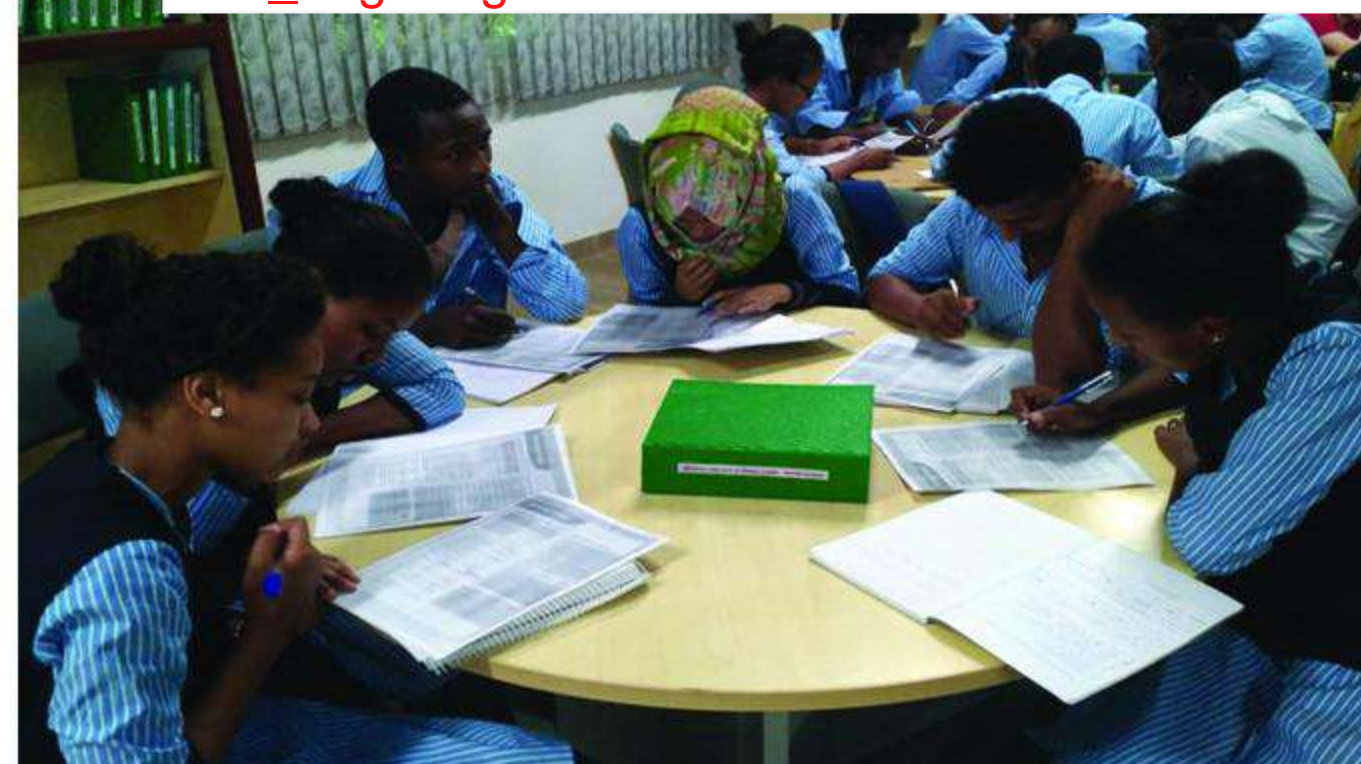Vice-Chancellor

Commodore. Dr. M.S. Raghunathan
Registrar

Co-Patrons

Dr. M.S.S.Rukmini
Dean, Student Affairs

Prof. N. Srinivasu
Dean, School of Applied Sciences
and Humanities

For Registrations, Contact: Chief Coordinator

Dr. Srinivasa Rao Kasarla. 9492716146,
drsk_eng@vignan.ac.in

Vadlamudi, Guntur Dist. 522 213. A.P, India.

Resource Person
Dr. C.L.L. Jayaprada
Professor, Dept. of English,
Andhra University, Visakhapatnam.

Coordinators

Dr. A. Sharada
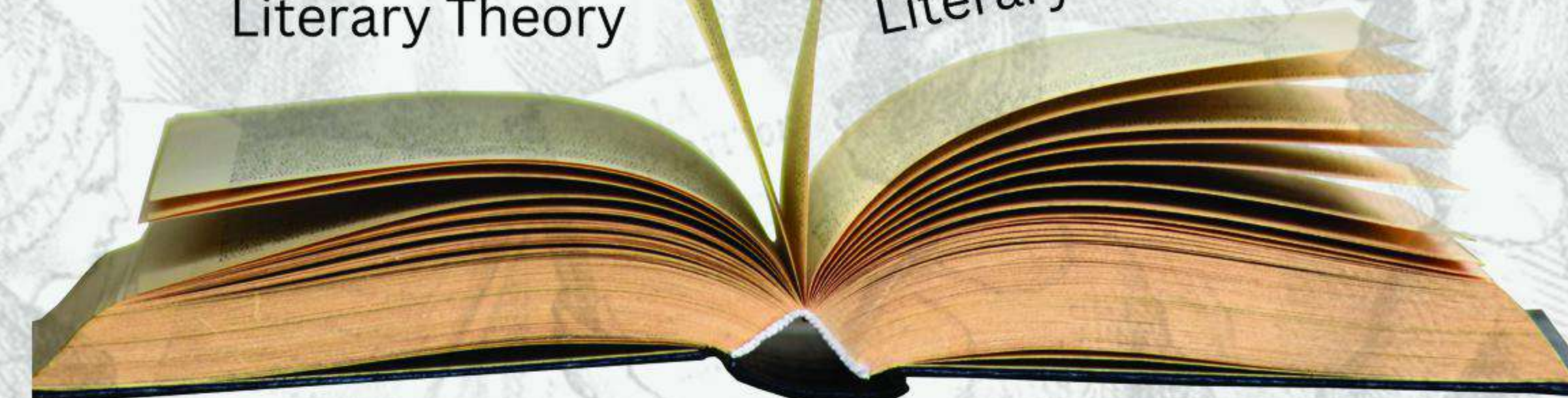HoD, Dept. of EOFL

Dr. Srinivasarao Kasarla
Chief Co-ordinator

Last date for the Registration:
30th October, 2023

Value added Course
LITERARY THEORY
AND LITERARY CRITICISM
for M.A English Students
1st to 30th November, 2023

and

Literary Theory   Literary criticism

Venue: VBSF- 03, A-Block

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be **UNIVERSITY**)
-Estd. u/s 3 of UGC Act 1956

NAAC A+
Accredited

nirf 75
RANK

Organized by :
DEPARTMENT OF ENGLISH AND OTHER INDIAN & FOREIGN LANGUAGES
SCHOOL OF APPLIED SCIENCES AND HUMANITIES

About Vignan's University

Vignan's Foundation for Science, Technology and Research University (VFSTRU), the flagship institution of the group, offers quality academic programmes with innovative leadership development opportunities for its students. The University strives to make the experience of each student a transformative one. It is NAAC accredited with an 'A⁺' grade. Located in a serene suburb of Guntur at Vadlamudi, the university is surrounded by lush greenery and offers a stimulating ambience for higher intellectual pursuits. With well-designed infrastructure and learning facilities Vignan's University offers B. Tech, B. Pharmacy, BBA, BA.LLB., BCA, M. Tech, MBA, MCA and Doctoral Programmes.

About the Department

The Department of English and Other Indian and Foreign Languages (EOFL) functions under the aegis of the School of Applied Sciences & Humanities at VFSTR.

- The Department offers MA English and Ph.D. programmes and is supported by 27 faculty members, who strive to strengthen the liberal education of students on campus.

- Towards this, a large basket of courses is on offer for the professional and holistic development of students (especially of STEM disciplines), like English Proficiency Course, Courses on Technical English, Business English, English for Legal Purpose etc.

- The Department also provides opportunities for specialised and interdisciplinary research in Language, Literature, Translation Studies and Cultural Studies.

- Currently, 36 scholars are pursuing their Ph.D. in different areas of ELT, Literature and Translation Studies.

Course Description:

This one-month certificate course offers MA English students a thorough exploration of literary theory, tracing its evolution from Aristotle to contemporary frameworks. It covers seminal ideas and modern approaches, including film studies, gender studies, and ecocriticism, through lectures, readings, and discussions to enhance understanding and application of critical perspectives.

Aim :

This intensive one-month course offers a comprehensive exploration of literary theory from classical to contemporary times, covering major theoretical frameworks and critical approaches. It aims to develop students' analytical skills, foster critical thinking, and enhance scholarly writing by applying diverse theoretical perspectives to literary texts and modern trends.

Objectives:

- Develop a solid understanding of key literary theories and their historical development.

- Equip students with the tools to critically analyze and interpret literary texts through various theoretical lenses.

- Foster the ability to apply literary criticism methods to evaluate literature effectively.

- Encourage critical thinking and the articulation of complex ideas about texts and their meanings.

- Enhance students' capacity to engage with and discuss diverse perspectives within literary discourse.

Outcomes:

By the end of the program, the students will be able to:

- Ability to critically analyze and interpret literary texts using a variety of theoretical frameworks.
- Enhanced understanding of key literary theories and their application to literature.
- Improved skills in constructing well-reasoned and insightful critiques of literary works.
- Greater ability to articulate complex literary ideas in both written and verbal form.
- Broadened perspective on how literature reflects cultural, social, and philosophical contexts.

Topics to be Covered in the Programme

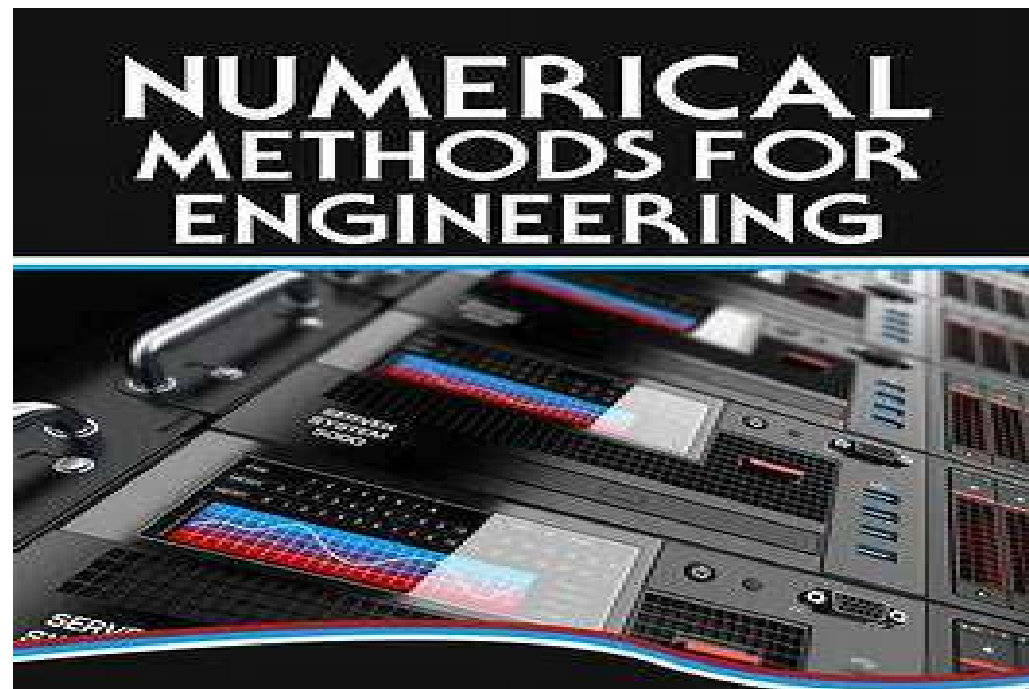| S.No	Name of the Topic	No. of Hours
1	Classical/ Neo Classical Theory I	1
2	Greek and Roman models with an emphasis on classical qualities	1
3	Plato, Aristotle, Horace, Longinus	1
4	Theories of Drama, Poetry and Style	1
5	Classical/ Neo Classical Theory II	1
6	Early Modern-Enlightenment (Philip Sidney, Dryden, Pope, Samuel Johnson, Locke, Addison, Hume)	1
7	Romanticism I	1
8	Early Nineteenth Century Romanticism	1
9	French and German Romanticism	1
10	Schiller, Stael	1
11	Kant and Hegel	1
12	Kant Critique of Judgement	1
13	Romanticism II	1
14	English and American Romanticism	1
15	Wordsworth, Coleridge, Emerson, Poe	1
16	Poetic Diction, Fancy and Imagination	1
17	Preface to Lyrical Ballads (1800) Biographia Literaria (1817)	1
18	William Hazlitt "On Poetry in General"	1
19	Harold Bloom, ed., Romanticism and Consciousness (1970)	1
20	Late Nineteenth Century	1
21	Realism and Naturalism	1
22	Marxism Marx, Engels	1
23	Lukacs, The novel and socialist realism, Ideology	1
24	Althusser/ Gramsci - Power/Control; Rule/Hegemony Eagleton Frankfurt School; Adorno, W. Benjamin.	1
25	Twentieth Century Criticism Formalism and New Criticism	1
26	Structuralism Jean Piaget on " Structure" Saussure, Barthes	1
27	Archetypal Criticism Bodkin, Archetypal Patterns in Poetry	1
28	Psychoanalysis Freud, Jung, Lacan	1
29	Post Structuralism Derrida, Foucault, Lacan, Baudrillard, Kristeva, Barthes	1
30	Post Colonialism Fanon, Said, Spivak, Bhabha, Achebe, Ngugi, Bill Ashcroft	1

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Numerical Methods for Engineering
09th – 13th October 2023
Venue: VBT-08

Organized by
Department of
MATHEMATICS AND STATISTICS

ABOUT THE DEPARTMENT

The Department of Mathematics and Statistics stands out for its innovative approach to teaching and learning. It offers a range of programs including B.Sc., B.Sc. + M.Sc. (Data Science) dual degrees, Ph.D. in Mathematics, Ph.D. in Statistics, and Post-Doctoral Fellowships. The department caters to diverse needs across disciplines such as Engineering, Business Administration, Computer Applications, and Agricultural Sciences, while also providing preparatory courses for future engineers. Established in 2009, it introduced a B.Sc. program in 2017 and a B.Sc. + M.Sc. (Data Science) dual degree in 2022, aligning with NEP 2020. The department boasts a highly qualified faculty with doctorates from prestigious institutions, including IITs and NITs, and over 20 research scholars. In addition to teaching, the faculty is deeply involved in research, offering Ph.D. programs and post-doctoral positions, reflecting the department's commitment to advancing knowledge and practice in the field.

COURSE OBJECTIVES

- To introduce numerical methods for solving engineering problems, including error analysis, interpolation, and numerical solutions to equations.
- To equip students with the ability to implement numerical algorithms using computational tools such as MATLAB, Python, or C++.
- To provide practical applications of numerical methods in various engineering fields, including fluid dynamics, structural analysis, and heat transfer.

COURSE OUTCOMES

- ➢ Gain a thorough understanding of numerical methods and their applications in solving engineering problems.
- ➢ Develop proficiency in implementing numerical algorithms using programming languages and tools like MATLAB or Python.
- ➢ Apply numerical methods to solve real-world engineering challenges, optimizing accuracy and efficiency.

COURSE CONTENTS

DATE	TOPIC	NUMBER OF HOURS
09-10-2023	Introduction to Numerical Methods and Error Analysis	6
10-10-2023	Numerical Solutions of Linear and Nonlinear Equations	6
11-10-2023	Numerical Differentiation and Integration	6
12-10-2023	Numerical Solutions of Ordinary and Partial Differential Equations	6
13-10-2023	Applications of Numerical Methods in Engineering	6
TOTAL		30

Last date of registration: 07-10-2023

RESOURCE PERSONS

Dr. N. Anbazhagan,
Professor and Head,
Alagappa University, Tamil Nadu.
Dr.S. Rana,
Assistant Professor,
Department of Mathematics and Statistics,
VFSTR, Guntur

.

COORDINATOR

Dr.S. Vinoth
Assistant Professor,
Department of Mathematics and Statistics,
VFSTR, Guntur

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Algorithms for Optimization
06th – 10th November 2023
Venue: VBS-03

Organized by
Department of
MATHEMATICS AND STATISTICS

ABOUT THE DEPARTMENT

The Department of Mathematics and Statistics stands out for its innovative approach to teaching and learning. It offers a range of programs including B.Sc., B.Sc. + M.Sc. (Data Science) dual degrees, Ph.D. in Mathematics, Ph.D. in Statistics, and Post-Doctoral Fellowships. The department caters to diverse needs across disciplines such as Engineering, Business Administration, Computer Applications, and Agricultural Sciences, while also providing preparatory courses for future engineers. Established in 2009, it introduced a B.Sc. program in 2017 and a B.Sc. + M.Sc. (Data Science) dual degree in 2022, aligning with NEP 2020. The department boasts a highly qualified faculty with doctorates from prestigious institutions, including IITs and NITs, and over 20 research scholars. In addition to teaching, the faculty is deeply involved in research, offering Ph.D. programs and post-doctoral positions, reflecting the department's commitment to advancing knowledge and practice in the field.

. COURSE OBJECTIVES

- Understand the fundamental concepts of optimization and its role in engineering, computer science, and real-world problem-solving.
- Apply various optimization algorithms, including gradient-based methods, linear programming, and evolutionary algorithms, to practical problems.
- Evaluate and analyze the efficiency of different optimization techniques in solving complex engineering and computational challenges.

COURSE OUTCOMES

- Gain a comprehensive understanding of optimization algorithms and their applications in engineering and computational tasks.
- Develop the ability to implement and analyze optimization algorithms using tools like MATLAB, Python, or specialized optimization libraries.
- Apply optimization techniques to solve real-world problems, enhancing the efficiency of systems in fields like machine learning, robotics, and operations research.

COURSE CONTENTS

DATE	TOPIC	NUMBER OF HOURS
06-11-2023	Introduction to Optimization and Problem Formulation	6
07-11-2023	Gradient-Based Optimization Methods	6
08-11-2023	Linear and Nonlinear Programming	6
09-11-2023	Evolutionary Algorithms and Metaheuristics	6
10-11-2023	Applications of Optimization in Engineering and Computer Science	6
TOTAL		30

Last date of registration: 04-11-2023

RESOURCE PERSONS

Dr. K. SATISHKUMAR
Assistant Professor,
Department of Statistics, Central University of Rajasthan.
Dr.S. Hanumantha Rao,
Department of Mathematics and Statistics,
VFSTR, Guntur.

.

COORDINATOR

Dr.S. Vinoth
Assistant Professor,
Department of Mathematics and Statistics,
VFSTR, Guntur.
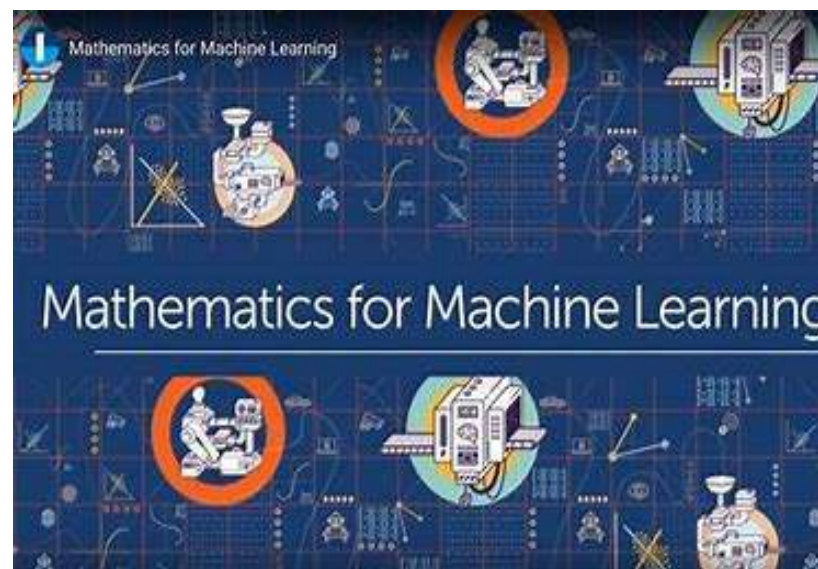
.

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Mathematics for Machine Learning

20th – 24th November 2023
Venue: VBS-03

Organized by

Department of
Mathematics and Statistics

ABOUT THE DEPARTMENT

The Department of Mathematics and Statistics stands out for its innovative approach to teaching and learning. It offers a range of programs including B.Sc., B.Sc. + M.Sc. (Data Science) dual degrees, Ph.D. in Mathematics, Ph.D. in Statistics, and Post-Doctoral Fellowships. The department caters to diverse needs across disciplines such as Engineering, Business Administration, Computer Applications, and Agricultural Sciences, while also providing preparatory courses for future engineers. Established in 2009, it introduced a B.Sc. program in 2017 and a B.Sc. + M.Sc. (Data Science) dual degree in 2022, aligning with NEP 2020. The department boasts a highly qualified faculty with doctorates from prestigious institutions, including IITs and NITs, and over 20 research scholars. In addition to teaching, the faculty is deeply involved in research, offering Ph.D. programs and post-doctoral positions, reflecting the department's commitment to advancing knowledge and practice in the field.

COURSE OBJECTIVES

- Develop a solid understanding of the mathematical foundations essential for machine learning, including linear algebra, calculus, and probability.
- Equip learners with the skills to apply mathematical concepts to model building, optimization, and data analysis in machine learning contexts.
- Enhance problem-solving abilities through mathematical techniques and algorithms that are critical for developing and improving machine learning models.

COURSE OUTCOMES

- Demonstrate proficiency in key mathematical concepts and techniques used in machine learning, such as matrix operations, differentiation, and statistical inference.
- Apply mathematical methods to formulate and solve problems related to machine learning algorithms and models.
- Analyze and interpret the results of mathematical operations and their impact on the performance of machine learning models.

COURSE CONTENTS

DATE	TOPIC	NUMBER OF HOURS
20-11-2023	Linear Algebra: Vectors, matrices, eigenvalues, and eigenvectors.	6
21-11-2023	Calculus: Differentiation, integration, and optimization techniques.	6
22-11-2023	Probability and Statistics: Probability distributions, statistical inference, and hypothesis testing.	6
23-11-2023	Optimization: Gradient descent, convex optimization, and regularization techniques.	6
24-11-2023	Applications: Implementation of mathematical concepts in machine learning algorithms such as regression, classification, and clustering.	6
	TOTAL	30

Last date of registration: 18-11-2023

RESOURCE PERSONS

Dr P. Sam Johnson
Professor,
NIT, Surathkal.

Dr.S. Parthiban,
Associate Professor,
VFSTR, Guntur.

COORDINATOR

Dr.S. Vinoth

Assistant Professor, Department of Mathematics and Statistics, VFSTR, Guntur.

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Computational Mathematics
02nd – 06th January 2024
Venue: VBF-03

Organized by

Department of
MATHEMATICS AND STATISTICS

ABOUT THE DEPARTMENT

The Department of Mathematics and Statistics stands out for its innovative approach to teaching and learning. It offers a range of programs including B.Sc., B.Sc. + M.Sc. (Data Science) dual degrees, Ph.D. in Mathematics, Ph.D. in Statistics, and Post-Doctoral Fellowships. The department caters to diverse needs across disciplines such as Engineering, Business Administration, Computer Applications, and Agricultural Sciences, while also providing preparatory courses for future engineers. Established in 2009, it introduced a B.Sc. program in 2017 and a B.Sc. + M.Sc. (Data Science) dual degree in 2022, aligning with NEP 2020. The department boasts a highly qualified faculty with doctorates from prestigious institutions, including IITs and NITs, and over 20 research scholars. In addition to teaching, the faculty is deeply involved in research, offering Ph.D. programs and post-doctoral positions, reflecting the department's commitment to advancing knowledge and practice in the field.

COURSE OBJECTIVES

❖ Understand the fundamental concepts and techniques of computational mathematics, including numerical methods, algorithms, and computational modelling.
❖ Apply computational techniques to solve complex problems in engineering, science, and data analysis using appropriate software tools.
❖ Evaluate the performance and accuracy of different computational methods and algorithms in practical scenarios to ensure optimal solutions.

COURSE OUTCOMES

➢ Demonstrate a solid grasp of computational mathematics principles and their applications in real-world contexts.
➢ Utilize numerical methods and algorithms effectively with tools such as MATLAB or Python to address engineering and scientific challenges.
➢ Analyze and refine computational methods to enhance accuracy and performance for diverse problem-solving scenarios.

COURSE CONTENTS

DATE	TOPIC	NUMBER OF HOURS
02-01-2024	Introduction to Computational Mathematics and Numerical Analysis	6
03-01-2024	Algorithms for Solving Linear and Nonlinear Systems	6
04-01-2024	Numerical Methods for Differential Equations	6
05-01-2024	Computational Techniques for Optimization	6
06-01-2024	Applications of Computational Mathematics in Engineering and Science	6
TOTAL		30

Last date of registration: 31-12-2023

RESOURCE PERSONS

Dr Chandru M
Assistant Professor,
VIT, Vellore.
Dr. N. Seshagiri Rao,
Professor, Department of Mathematics and Statistics,
VFSTR, Guntur

COORDINATOR

Dr.S. Vinoth
Assistant Professor,
Department of Mathematics and Statistics,
VFSTR, Guntur.
.

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Fuzzy Systems
08th – 12th January 2024
Venue: VBFFT-04

Organized by
Department of
MATHEMATICS AND STATISTICS

ABOUT THE DEPARTMENT

The Department of Mathematics and Statistics stands out for its innovative approach to teaching and learning. It offers a range of programs including B.Sc., B.Sc. + M.Sc. (Data Science) dual degrees, Ph.D. in Mathematics, Ph.D. in Statistics, and Post-Doctoral Fellowships. The department caters to diverse needs across disciplines such as Engineering, Business Administration, Computer Applications, and Agricultural Sciences, while also providing preparatory courses for future engineers. Established in 2009, it introduced a B.Sc. program in 2017 and a B.Sc. + M.Sc. (Data Science) dual degree in 2022, aligning with NEP 2020. The department boasts a highly qualified faculty with doctorates from prestigious institutions, including IITs and NITs, and over 20 research scholars. In addition to teaching, the faculty is deeply involved in research, offering Ph.D. programs and post-doctoral positions, reflecting the department's commitment to advancing knowledge and practice in the field
..

COURSE OBJECTIVES

- ❖ Understand the fundamental concepts of fuzzy logic and fuzzy systems, including fuzzy sets, membership functions, and fuzzy inference systems.
- ❖ Apply fuzzy logic techniques to model and solve complex problems where uncertainty or imprecision is present, using tools such as MATLAB or Python.
- ❖ Evaluate the performance of fuzzy systems and their effectiveness in real-world applications across various domains.

COURSE OUTCOMES

- ▪ Demonstrate a thorough understanding of fuzzy logic principles and their applications in modelling and decision-making.
- ▪ Develop and implement fuzzy systems to address problems involving uncertainty and imprecision.
- ▪ Assess and optimize the performance of fuzzy systems in practical scenarios to improve their effectiveness and reliability.

COURSE CONTENTS

DATE	TOPIC	NUMBER OF HOURS
08-01-2024	Introduction to Fuzzy Logic and Fuzzy Sets	6
09-01-2024	Membership Functions and Fuzzy Rules	6
10-01-2024	Fuzzy Inference Systems and Fuzzy Logic Controllers	6
11-01-2024	Fuzzy Logic Applications in Engineering and Control Systems	6
12-01-2024	Advanced Topics in Fuzzy Systems and Hybrid Approaches	6
	TOTAL	30

Last date of registration: 07-01-2024

RESOURCE PERSONS

Prof. Mehran Mazandarani
Shenzhen University, China.

Dr.S. Parthiban
Associate Professor,
Department of Mathematics and Statistics
VFSTR, Guntur.

COORDINATOR

Dr.S. Vinoth
Assistant Professor,
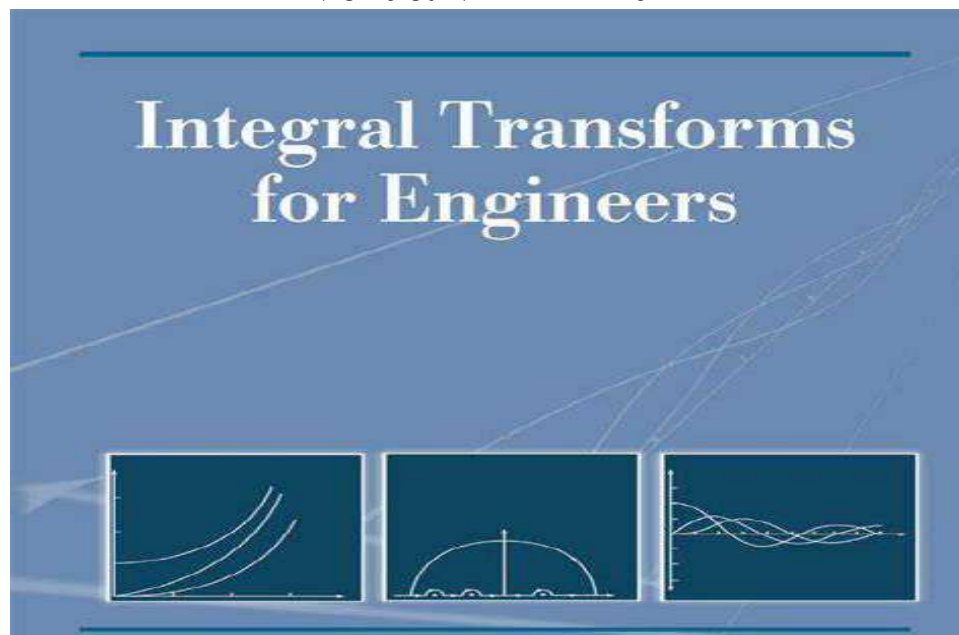Department of Mathematics and Statistics,
VFSTR, Guntur.

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Integral Transforms for Engineers
11th – 15th March 2024
Venue: VBFFTF-02

Organized by

Department of
COMPUTER SCIENCE AND
ENGINEERING

ABOUT THE DEPARTMENT

The Department of Mathematics and Statistics stands out for its innovative approach to teaching and learning. It offers a range of programs including B.Sc., B.Sc. + M.Sc. (Data Science) dual degrees, Ph.D. in Mathematics, Ph.D. in Statistics, and Post-Doctoral Fellowships. The department caters to diverse needs across disciplines such as Engineering, Business Administration, Computer Applications, and Agricultural Sciences, while also providing preparatory courses for future engineers. Established in 2009, it introduced a B.Sc. program in 2017 and a B.Sc. + M.Sc. (Data Science) dual degree in 2022, aligning with NEP 2020. The department boasts a highly qualified faculty with doctorates from prestigious institutions, including IITs and NITs, and over 20 research scholars. In addition to teaching, the faculty is deeply involved in research, offering Ph.D. programs and post-doctoral positions, reflecting the department's commitment to advancing knowledge and practice in the fields.

COURSE OBJECTIVE

This course aims to understand the fundamental principles of integral transforms, including the Laplace and Fourier transforms, and their engineering applications. Students will apply these transforms to solve differential equations and analyze signals and systems. Emphasis is placed on evaluating the effectiveness and accuracy of integral transforms in practical engineering scenarios, preparing students to utilize these techniques effectively in various engineering problems. To examine modern tools and technologies used in the development of accessible and inclusive user interfaces. By the end of the course, students will be able to build and deploy AI-driven solutions.

COURSE OUTCOMES

Students will demonstrate a thorough understanding of integral transforms and their roles in addressing engineering challenges. They will implement integral transform techniques to solve complex differential equations and analyze systems. The course will enable students to assess the impact and precision of these transforms, optimizing their problem-solving approaches in practical applications.

COURSE CONTENTS

DATE	TOPIC	NUMBER OF HOURS
11-03-2024	Introduction to Integral Transforms and Basic Properties	6
12-03-2024	Laplace Transform: Theory and Applications	6
13-03-2024	Fourier Transform: Theory and Applications	6
14-03-2024	Applications of Integral Transforms in Differential Equations	6
15-03-2024	Advanced Topics: Signal Processing and Control Systems	6
TOTAL		30

Last date of registration: 10-03-2024

RESOURCE PERSONS

Dr. CT. RAMASAMY
Associate Professor,
Government Arts And Science College,
Pudukkottai, Tamilnadu.

Dr.P.L.N. Varma,
Professor & Head, department of mathematics and statistics
VFSTR,Guntur

COORDINATOR

Dr.S. Vinoth
Assistant Professor,
Department of Mathematics and Statistics,
VFSTR, Guntur.

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Data Science and Big Data Analysis
18th – 22nd March 2024
Venue: VBF-05

Organized by
Department of
COMPUTER SCIENCE AND ENGINEERING

ABOUT THE DEPARTMENT

The Department of Mathematics and Statistics stands out for its innovative approach to teaching and learning. It offers a range of programs including B.Sc., B.Sc. + M.Sc. (Data Science) dual degrees, Ph.D. in Mathematics, Ph.D. in Statistics, and Post-Doctoral Fellowships. The department caters to diverse needs across disciplines such as Engineering, Business Administration, Computer Applications, and Agricultural Sciences, while also providing preparatory courses for future engineers. Established in 2009, it introduced a B.Sc. program in 2017 and a B.Sc. + M.Sc. (Data Science) dual degree in 2022, aligning with NEP 2020. The department boasts a highly qualified faculty with doctorates from prestigious institutions, including IITs and NITs, and over 20 research scholars. In addition to teaching, the faculty is deeply involved in research, offering Ph.D. programs and post-doctoral positions, reflecting the department's commitment to advancing knowledge and practice in the field.

COURSE OBJECTIVE

➢ To provide foundational knowledge in data science concepts, including data collection, processing, and visualization.
➢ To equip students with skills to analyze and interpret large datasets using big data technologies.
➢ To introduce machine learning techniques and their applications in data-driven decision-making.

COURSE OUTCOMES

o Analyze and process large datasets using appropriate data science methodologies and big data frameworks.
o Apply machine learning algorithms to extract insights and make predictions from structured and unstructured data.
o Use big data tools to handle, store, and process vast amounts of data efficiently.

COURSE CONTENTS

The following topics will be covered:

Topic	Date	Hours
Introduction to Data Science and Big Data	18-03-2024	6
Data Collection, Preprocessing, and Visualization	19-03-2024	6
Big Data Tools and Technologies	20-03-2024	6
Machine Learning and Data Analytics	21-03-2024	6
Data Storage and Distributed Computing	22-03-2024	6

Last date of registration: 16-03-2024

RESOURCE PERSONS

Dr. E. D. Boobalan,
Project Coordinator cum Data Scientist,
Chennai, Tamil Nadu.
Dr.P. Kalpana,
Associate Professor,
Department of Mathematics and Statistics
VFSTR, Guntur

COORDINATOR

Dr.S. Vinoth
Assistant Professor,
Department of Mathematics and Statistics,
VFSTR, Guntur.

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Mathematical Modeling with Differential Equations
1st – 5th April 2024
Venue: VBT-06

Organized by

Department of
MATHEMATICS AND STATISTICS

ABOUT THE DEPARTMENT

The Department of Mathematics and Statistics stands out for its innovative approach to teaching and learning. It offers a range of programs including B.Sc., B.Sc. + M.Sc. (Data Science) dual degrees, Ph.D. in Mathematics, Ph.D. in Statistics, and Post-Doctoral Fellowships. The department caters to diverse needs across disciplines such as Engineering, Business Administration, Computer Applications, and Agricultural Sciences, while also providing preparatory courses for future engineers. Established in 2009, it introduced a B.Sc. program in 2017 and a B.Sc. + M.Sc. (Data Science) dual degree in 2022, aligning with NEP 2020. The department boasts a highly qualified faculty with doctorates from prestigious institutions, including IITs and NITs, and over 20 research scholars. In addition to teaching, the faculty is deeply involved in research, offering Ph.D. programs and post-doctoral positions, reflecting the department's commitment to advancing knowledge and practice in the field.

COURSE OBJECTIVES

This course aims to understand the principles of mathematical modeling using differential equations, including their formulation and solution techniques. Students will apply various types of differential equations to model real-world phenomena in fields such as engineering, physics, and biology. Emphasis will be placed on evaluating the accuracy and effectiveness of models in representing dynamic systems, preparing students to use these techniques in practical scenarios.

COURSE OUTCOMES

Students will demonstrate a solid grasp of differential equations and their application in mathematical modeling. They will formulate mathematical models from physical problems and solve them using appropriate techniques. The course will enable students to analyze the behavior of dynamic systems represented by differential equations and assess the implications of their models in real-world contexts. Furthermore, students will be able to communicate their findings effectively, utilizing graphical and numerical methods to present their results and support their conclusions.

COURSE CONTENTS

Topic	Date	Hours
Introduction to Mathematical Modeling and Differential Equations	01-04-2024	6
First-Order Differential Equations: Solutions and Applications	02-04-2024	6
Higher-Order Differential Equations: Theory and Applications	03-04-2024	6
Systems of Differential Equations: Modeling and Solutions	04-04-2024	6
Applications of Differential Equations in Engineering and Science	05-04-2024	6

Last date of registration: 28-03-2024

RESOURCE PERSONS

Dr. Madhumangal Pal
Professor and Head, Dept. of Applied Mathematics with Oceanology and Computer Programming, Vidyasagar University, West Bengal.

Dr. P. Sudam Sekhar
Associate Professor, Department of Mathematics and Statistics
VFSTR, Guntur

COORDINATOR

Dr.S. Vinoth
Assistant Professor,
Department of Mathematics and Statistics,
VFSTR, Guntur.

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Algebraic Structures in Natural Language
22nd – 26th April 2024
Venue: VBT-04

Organized by
Department of
MATHEMATICS AND STATISTICS

ABOUT THE DEPARTMENT

The Department of Mathematics and Statistics stands out for its innovative approach to teaching and learning. It offers a range of programs including B.Sc., B.Sc. + M.Sc. (Data Science) dual degrees, Ph.D. in Mathematics, Ph.D. in Statistics, and Post-Doctoral Fellowships. The department caters to diverse needs across disciplines such as Engineering, Business Administration, Computer Applications, and Agricultural Sciences, while also providing preparatory courses for future engineers. Established in 2009, it introduced a B.Sc. program in 2017 and a B.Sc. + M.Sc. (Data Science) dual degree in 2022, aligning with NEP 2020. The department boasts a highly qualified faculty with doctorates from prestigious institutions, including IITs and NITs, and over 20 research scholars. In addition to teaching, the faculty is deeply involved in research, offering Ph.D. programs and post-doctoral positions, reflecting the department's commitment to advancing knowledge and practice in the field..

COURSE OBJECTIVES

- Grasp the fundamental concepts of algebraic structures, including groups, rings, and fields, along with their properties.
- Utilize these algebraic concepts to tackle problems in various mathematical contexts, such as number theory and cryptography.
- Assess the significance of algebraic structures in both theoretical and practical mathematics, emphasizing their relevance in real-world applications.

COURSE OUTCOMES

- Exhibit a comprehensive understanding of key algebraic structures and their properties.
- Resolve problems using concepts from group theory, ring theory, and field theory in mathematical contexts.
- Examine the applications of algebraic structures in areas like coding theory, cryptography, and other mathematical fields.

COURSE CONTENTS

Topic	Date	Hours
Introduction to Advanced Robotics	22-04-2024	6
Motion Planning and Path Optimization	23-04-2024	6
Human-Robot Interaction and Collaboration	24-04-2024	6
Machine Learning in Robotics	25-04-2024	6
Ethics and Safety in Robotics and Automation	26-04-2024	6

Last date of registration: 21-04-2024

RESOURCE PERSONS

Dr. Britto Antony Xavier,
Professor, Department of Mathematics,
Sacred Heart College, Tamil Nadu
Dr. U. V. Manoj Kumar,
Assistant Professor
VFSTR, Guntur.

COORDINATOR

Dr.S. Vinoth
Assistant Professor,
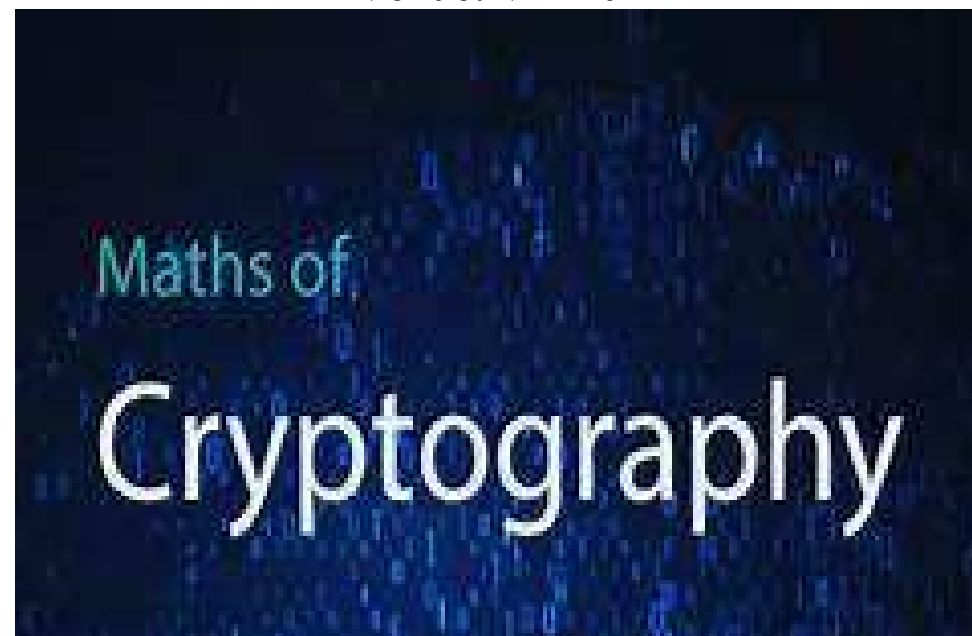Department of Mathematics and Statistics,
VFSTR, Guntur.

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course on Maths of Cryptography

5th-9th Feb, 2024
Venue: VBT-01

Organized by

Department of MATHEMATICS AND STATISTICS

ABOUT THE DEPARTMENT

The Department of Mathematics and Statistics stands out for its innovative approach to teaching and learning. It offers a range of programs including B.Sc., B.Sc. + M.Sc. (Data Science) dual degrees, Ph.D. in Mathematics, Ph.D. in Statistics, and Post-Doctoral Fellowships. The department caters to diverse needs across disciplines such as Engineering, Business Administration, Computer Applications, and Agricultural Sciences, while also providing preparatory courses for future engineers. Established in 2009, it introduced a B.Sc. program in 2017 and a B.Sc. + M.Sc. (Data Science) dual degree in 2022, aligning with NEP 2020. The department boasts a highly qualified faculty with doctorates from prestigious institutions, including IITs and NITs, and over 20 research scholars. In addition to teaching, the faculty is deeply involved in research, offering Ph.D. programs and post-doctoral positions, reflecting the department's commitment to advancing knowledge and practice in the field.

COURSE OBJECTIVES

- **Understand the Mathematical Foundations of Cryptography**: Introduce the mathematical concepts, such as number theory and linear algebra, that form the basis of modern cryptographic algorithms.
- **Explore Cryptographic Algorithms and Their Security**: Study classical and modern cryptographic techniques, including encryption, decryption, and cryptanalysis, focusing on their security and mathematical principles.
- **Apply Cryptographic Methods in Real-World Scenarios**: Equip students with the ability to apply cryptographic methods to secure communication and data protection systems, highlighting practical applications in cybersecurity. Fields, including fluid dynamics, structural analysis, and heat transfer.

COURSE OUTCOMES

- Demonstrate Understanding of Cryptographic Mathematics: Students will be able to explain the mathematical principles (modular arithmetic, prime numbers, matrix operations) used in cryptography.
- Solve Cryptographic Problems: Students will develop the ability to encrypt, decrypt, and analyze simple cryptographic schemes.

COURSE CONTENTS

DATE	TOPIC	NUMBER OF HOURS
05-02-2024	Number Theory for Cryptography	6
06-02-2024	Classical Cryptographic Systems:	6
07-02-2024	Public-Key Cryptography:	6
08-02-2024	Elliptic Curve Cryptography (ECC):	6
09-02-2024	Hash Functions and Digital Signatures:	6
TOTAL		30

Last date of registration: 07-10-2023

RESOURCE PERSONS

Dr. Jeyabalan R,
Assistant Professor,
Alagappa University, Tamil Nadu.
Dr.S.H. Manjula,
Associate Professor,
Department of Mathematics and Statistics, VFSTR, Guntur

COORDINATOR

Dr.S. Vinoth   Assistant Professor,
Ph: +91 - 9787520780, Email Id: drsv_sh@vignan.ac.in
Department of Mathematics and Statistics,VFSTR, Guntur

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course on Game Theory Strategy

22nd-26th April 2024
Venue: VBT-01

Organized by
Department of MATHEMATICS AND STATISTICS

ABOUT THE DEPARTMENT

The Department of Mathematics and Statistics stands out for its innovative approach to teaching and learning. It offers a range of programs including B.Sc., B.Sc. + M.Sc. (Data Science) dual degrees, Ph.D. in Mathematics, Ph.D. in Statistics, and Post-Doctoral Fellowships. The department caters to diverse needs across disciplines such as Engineering, Business Administration, Computer Applications, and Agricultural Sciences, while also providing preparatory courses for future engineers. Established in 2009, it introduced a B.Sc. program in 2017 and a B.Sc. + M.Sc. (Data Science) dual degree in 2022, aligning with NEP 2020. The department boasts a highly qualified faculty with doctorates from prestigious institutions, including IITs and NITs, and over 20 research scholars. In addition to teaching, the faculty is deeply involved in research, offering Ph.D. programs and post-doctoral positions, reflecting the department's commitment to advancing knowledge and practice in the field.

COURSE OBJECTIVES

- Equip students with in-depth knowledge of advanced graph theory concepts such as dynamic graphs, graph decompositions, and random graphs to solve complex real-world problems.
- Enable students to apply graph theory algorithms in fields like computer science, network design, machine learning, and optimization, emphasizing algorithm efficiency and complexity.
- Encourage students to explore recent developments in graph theory and apply them in innovative areas like social network analysis, computational biology, and large-scale network modeling.

COURSE OUTCOMES

- Apply graph theory techniques to solve real-world problems in network design, machine learning, and optimization.
- Conduct research or provide industry solutions using advanced graph theory in areas like social networks and computational biology.

COURSE CONTENTS

DATE	TOPIC	NUMBER OF HOURS
22-04-2024	Introduction to Game Theory	6
23-04-2024	Nash Equilibrium	6
24-04-2024	Dominant Strategies and Mixed Strategies	6
25-04-2024	Extensive Form Games and Backward Induction	6
26-04-2024	Applications of Game Theory	6
TOTAL		30

Last date of registration: 03-02-2024

RESOURCE PERSONS

Mr.S.Balasundar,
Assistant Professor,
Alagappa Chettiar College of Engineering & Technology,
Tamil Nadu.
Dr. Debnarayan Khatua,
Assistant Professor,
Department of Mathematics and Statistics,
VFSTR, Guntur
.

COORDINATOR

Dr.S. Vinoth   Assistant Professor,
Ph: +91 - 9787520780, Email Id: drsv_sh@vignan.ac.in
Department of Mathematics and Statistics,VFSTR, Guntur

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.
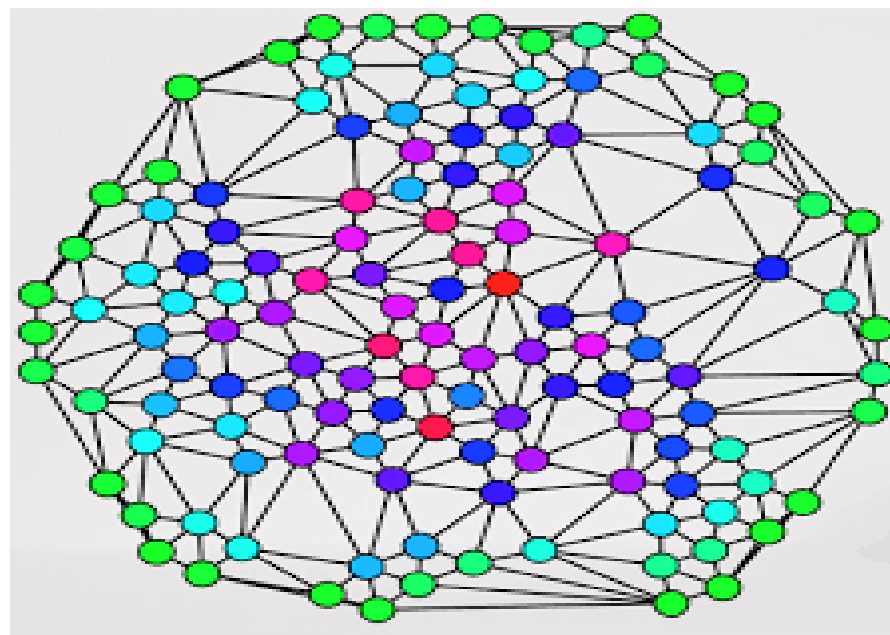
Value Added Course
on
Advanced Topics in Graph Theory

11th - 15th March 2024

Venue: VBT - 06

Organized by
Department of
Mathematics and Statistics

ABOUT THE DEPARTMENT

The Department of Mathematics and Statistics stands out for its innovative approach to teaching and learning. It offers a range of programs including B.Sc., B.Sc. + M.Sc. (Data Science) dual degrees, Ph.D. in Mathematics, Ph.D. in Statistics, and Post-Doctoral Fellowships. The department caters to diverse needs across disciplines such as Engineering, Business Administration, Computer Applications, and Agricultural Sciences, while also providing preparatory courses for future engineers. Established in 2009, it introduced a B.Sc. program in 2017 and a B.Sc. + M.Sc. (Data Science) dual degree in 2022, aligning with NEP 2020. The department boasts a highly qualified faculty with doctorates from prestigious institutions, including IITs and NITs, and over 20 research scholars. In addition to teaching, the faculty is deeply involved in research, offering Ph.D. programs and post-doctoral positions, reflecting the department's commitment to advancing knowledge and practice in the field.

COURSE OBJECTIVES

- Equip students with in-depth knowledge of advanced graph theory concepts such as dynamic graphs, graph decompositions, and random graphs to solve complex real-world problems.
- Enable students to apply graph theory algorithms in fields like computer science, network design, machine learning, and optimization, emphasizing algorithm efficiency and complexity.
- Encourage students to explore recent developments in graph theory and apply them in innovative areas like social network analysis, computational biology, and large-scale network modeling.

COURSE OUTCOMES

- Apply graph theory techniques to solve real-world problems in network design, machine learning, and optimization.
- Conduct research or provide industry solutions using advanced graph theory in areas like social networks and computational biology.

COURSE CONTENTS

DATE	TOPIC	NUMBER OF HOURS
11-03-2024	Dynamic graph algorithms for evolving networks.	6
12-03-2024	Graph decomposition techniques like tree width and their applications	6
13-03-2024	Spectral graph theory and its use in network analysis	6
14-03-2024	Random graph models and their real-world applications.	6
15-03-2024	Advanced optimization algorithms for large-scale graph problems.	6
	TOTAL	30

Last date of registration: 03-02-2024

RESOURCE PERSONS

Dr. S. V. Bharanedhar
Assistant Professor,
Central University of Tamil Nadu.
Dr. G. Srinivasa Rao,
Associate Professor,
Department of Mathematics and Statistics.
VFSTR, Vadlamudi
.

COORDINATOR

Dr.S. Vinoth   Assistant Professor,
Ph: +91 - 9787520780, Email Id: drsv_sh@vignan.ac.in
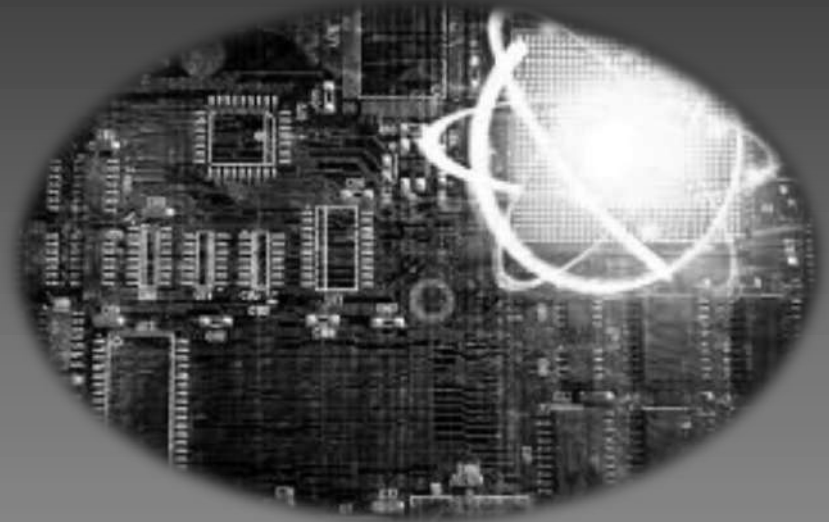Department of Mathematics and Statistics,VFSTR, Guntur

ABOUT VFSTR

Quantum Computing Fundamentals

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

21-10-2023 to 18-11-2023
(Saturdays)

Organized by
Department of Physics
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

The Department of physics at VFSTR has faculty derived from institutes of national importance like IIT, NIT and prominent state universities. The department places emphasis on multidisciplinary research in the areas of energy harvesting materials and thin films, and to support the research activity, the department has one research center on thin films and a solid-state physics for the synthesis of materials. The department caters to the needs of core engineering departments by offering physics courses, including open electives and minor courses, for engineering students. The department also offers a Ph.D. program in physics.

COURSE CONTENTS

The following topics will be covered:

S. No.	Topics	No of hours
1	Introduction to Quantum Computing	6
2	Quantum Mechanics Basics	6
3	Quantum Gates and Circuits	6
4	Quantum Algorithms	6
5	Quantum Computing Platforms and Future Prospects	6

COURSE OBJECTIVES

❖ Understand the basic principles of quantum mechanics and how they apply to quantum computing.

❖ Learn to design and analyse quantum circuits and algorithms for problem-solving.

COURSE OUTCOME

❖ Ability to differentiate between classical and quantum computing concepts.

❖ Capability to implement basic quantum algorithms like Shor's and Grover's on quantum platforms.

RESOURCE PERSON
Dr. Senthil Kumar E
Assoc. Prof, Dept. of. Physics,
SRM university

VENUE

VBF04, A-Block, VFSTR

COURSE **COORDINATOR**

Dr. M. Ramanjaneyulu
Associate Professor
Department of Physics, VFSTR
Mobile: 8144880410
Email: drmr_sh@vignan.ac.in

ABOUT VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

Quantum Physics and Information Technology

02-03-2024 to 30-03-2024

(Saturday's)

Organized by
Department of Physics
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

The Department of physics at VFSTR has faculty derived from institutes of national importance like IIT, NIT and prominent state universities. The department places emphasis on multidisciplinary research in the areas of energy harvesting materials and thin films, and to support the research activity, the department has one research center on thin films and a solid-state physics for the synthesis of materials. The department caters to the needs of core engineering departments by offering physics courses, including open electives and minor courses, for engineering students. The department also offers a Ph.D. program in physics.

COURSE CONTENTS

The following topics will be covered:

S.No.	Topics	No of hours
1	Foundations of Quantum Physics	6
2	Quantum Information Theory	6
3	Quantum Communication Systems	6
4	Quantum Computing and Algorithms	6
5	Applications of Quantum Technology in IT	6
	Total	**30**

COURSE OBJECTIVES

❖ Understand the fundamental principles of quantum physics and their application in information technology

❖ Explore quantum computing, cryptography, and communication systems in the context of IT

COURSE OUTCOME

❖ Capability to identify and apply quantum technologies in IT fields like cybersecurity and data processing.

RESOURCE PERSON

Dr. Ganesh Kotagiri

Asst. Prof, Dept. of. Physics, VIT AP

VENUE

VBF03, A-Block, VFSTR

COURSE COORDINATOR

Dr. Ch. Tirupataiah

Associate Professor
Department of Physics, VFSTR
Mobile: 9441175374
Email: cht_sh@vignan.ac.in

ABOUT VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

Embedded Systems and Physics of Sensors

02-03-2024 to 30-03-2024
(Saturdays)

Organized by
Department of Physics
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

The Department of physics at VFSTR has faculty derived from institutes of national importance like IIT, NIT and prominent state universities. The department places emphasis on multidisciplinary research in the areas of energy harvesting materials and thin films, and to support the research activity, the department has one research center on thin films and a solid-state physics for the synthesis of materials. The department caters to the needs of core engineering departments by offering physics courses, including open electives and minor courses, for engineering students. The department also offers a Ph.D. program in physics.

COURSE CONTENTS

The following topics will be covered:

S.No.	Topics	No of hours
1	Introduction to Embedded Systems	6
2	Sensors and Actuators: Fundamentals and Types	6
3	Physics Behind Sensor Operation	6
4	Interfacing Sensors with Embedded Systems	6
5	Applications of Embedded Systems and Sensors	6
	Total	30

COURSE OBJECTIVES

❖ To understand the architecture and functioning of embedded systems, along with the physical principles behind various types of sensors.

❖ To explore the integration of sensors with embedded systems for real-time data processing in practical applications.

COURSE OUTCOME

❖ Ability to design and implement embedded systems with sensor interfaces for data acquisition and processing.

❖ Capability to apply embedded sensor technology in real-world applications like IoT, healthcare, and industrial automation.

RESOURCE PERSON

Dr. Kosuri Yellareswararao

Asst. Prof, Dept. of. Physics, VIT AP

VENUE

VBF 04, A block

COURSE COORDINATOR

Dr. Ch. Tirupataiah

Associate Professor

Department of Physics, VFSTR
Mobile: 9441175374
Email: cht_sh@vignan.ac.in

ABOUT VFSTR

Introduction to IoT (Internet of Things) with Sensor Physics
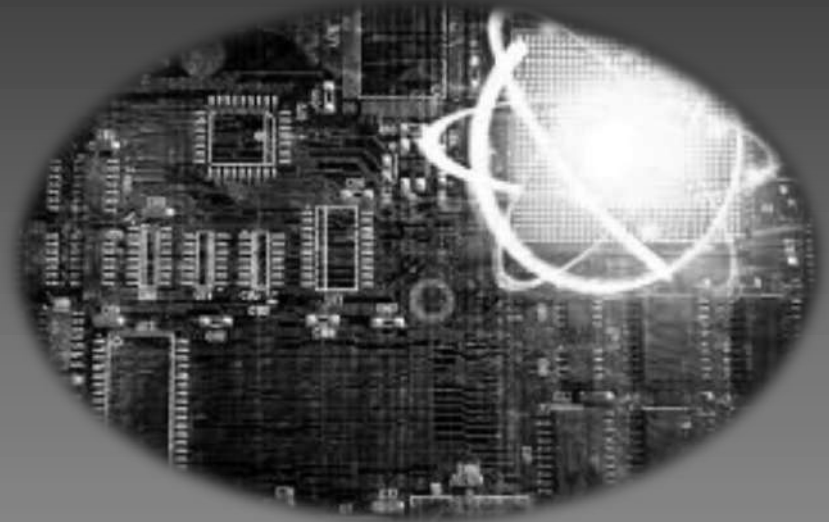

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

08-07-2023 to 05-08-2023
(Monday's)

Organized by
Department of Physics
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

The Department of physics at VFSTR has faculty derived from institutes of national importance like IIT, NIT and prominent state universities. The department places emphasis on multidisciplinary research in the areas of energy harvesting materials and thin films, and to support the research activity, the department has one research center on thin films and a solid-state physics for the synthesis of materials. The department caters to the needs of core engineering departments by offering physics courses, including open electives and minor courses, for engineering students. The department also offers a Ph.D. program in physics.

COURSE CONTENTS

The following topics will be covered:

S. No.	Topics	No of hours
1	Fundamentals of IoT	6
2	Sensor Physics and IoT Devices	6
3	IoT Communication Protocols	6
4	IoT Platforms and Cloud Integration	6
5	Data Analytics and Business Applications in IoT	6

COURSE OBJECTIVES

1. Understand the basic architecture of IoT systems and the physics behind sensor operation.

2. Explore the role of IoT in various business applications and industries.

COURSE OUTCOME

1. Ability to design and implement IoT systems using appropriate sensors and communication protocols.

2. Capability to analyse and apply IoT solutions in areas like smart cities, healthcare, and manufacturing.

RESOURCE PERSON

Dr. Manmadha Rao B
Assist. Prof, Dept. of. Physics, VIT AP

VENUE

VBF03, A-Block, VFSTR

COURSE COORDINATOR

Dr. M L N Madhu mohan
Associate Professor
Department of Physics, VFSTR
Mobile: 9344125524
Email: mln.madhu@gmail.com

Content

Day	Content	Nos. of hours
1	Introduction to Photonics	6
2	Optical Fibers and Communication	6
3	Lasers and Their Applications	6
4	Optoelectronic Devices	6
5	Emerging Technologies in Photonics	6

Resource Persons

Dr. N Ashok
Assistant Professor, VIT AP

Dr. B. Nageswara Rao
Assistant Professor, VFSTR

Course Coordinator

Dr. M Ramanjaneyulu
Associate Professor
Department of Physics, VFSTR
Mobile: 8144880410
Email: ramuiitmadras@gmail.com

Photonics and Optoelectronics

12.08.2023 – 09.09.2023
(Saturday's)

Venue
VBS02, A-block, VFSTR

Organized by
Department of Physics
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

About VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

About Department of Physics

The Department of physics at VFSTR has faculty derived from institutes of national importance like IIT, NIT and prominent state universities. The department places emphasis on multidisciplinary research in the areas of energy harvesting materials and thin films, and to support the research activity, the department has one research center on thin films and a solid-state physics for the synthesis of materials. The department caters to the needs of core engineering departments by offering physics courses, including open electives and minor courses, for engineering students. The department also offers a Ph.D. program in physics.

Course Objectives:

The primary objectives of the training is to:

- ❖ Understand the fundamental principles of photonics and optoelectronic devices.

- ❖ Explore the applications of optical technologies in communication, imaging, and computing.

Course Outcome:

Upon completion of the training, the participants will :

- ❖ Ability to explain the operation of lasers, optical fibers, and photodetectors.

- ❖ Capability to apply photonic and optoelectronic technologies in fields like telecommunications and imaging systems.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Content

Day	Content	Nos. of hours
1	**Fundamentals of Electromagnetic Theory**	6
2	**Electromagnetic Waves and Signal Propagation**	6
3	**Antennas and Wireless Communication**	6
4	**Networking Fundamentals and Protocols**	6
5	**Applications of Electromagnetism in Modern Networking**	6

Resource Persons

Dr. N Ashok
Assistant Professor, VIT AP

Dr. B. Nageswara Rao
Assistant Professor, VFSTR

Course Coordinator

Dr. M. Ramanjaneyulu
Associate Professor
Department of Physics, VFSTR
Mobile: 8144880410
Email: ramuiitmadras@gmail.com

Electromagnetism and Networking

12.08.2023 – 09.09.2023
(Saturday's)

Venue
VBS03, A-block, VFSTR

Organized by
Department of Physics
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

About VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

About Department of Physics

The Department of physics at VFSTR has faculty derived from institutes of national importance like IIT, NIT and prominent state universities. The department places emphasis on multidisciplinary research in the areas of energy harvesting materials and thin films, and to support the research activity, the department has one research center on thin films and a solid-state physics for the synthesis of materials. The department caters to the needs of core engineering departments by offering physics courses, including open electives and minor courses, for engineering students. The department also offers a Ph.D. program in physics.

Course Objectives:

1.To understand the fundamental principles of electromagnetism and its role in signal propagation and communication technologies.

2.To explore the integration of electromagnetic concepts with networking technologies, including wireless communication and network security.

Course Outcome:

Upon completion of the training, the participants will :

❖ Ability to apply electromagnetic principles to design and optimize wireless communication systems.

❖ Understanding of how electromagnetic interference affects networking and the ability to implement techniques to mitigate it, ensuring secure and efficient communication networks.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Content

Day	Content	Nos. of hours
1	**Introduction to Nanotechnology and Nanoscale Materials**	6
2	**Quantum Mechanics in Nanomaterials**	6
3	**Synthesis and Fabrication of Nanomaterials**	6
4	**Characterization Techniques for Nanomaterials**	6
5	**Nanotechnology in Energy, Electronics, and Medicine**	6

Resource Persons

Dr. Kosuri Yellareswararao
Assistant Professor,
VIT AP

Course Coordinator

Dr. M Ramanjaneyulu
Associate Professor
Department of Physics, VFSTR
Mobile: 8144880410
Email: ramuiitmadras@gmail.com

Nanotechnology and Materials Physics

16.09.2023 – 14.10.2023
(Saturday's)

Venue
VBF02, A-block, VFSTR

Organized by
Department of Physics
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

About VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

About Department of Physics

The Department of physics at VFSTR has faculty derived from institutes of national importance like IIT, NIT and prominent state universities. The department places emphasis on multidisciplinary research in the areas of energy harvesting materials and thin films, and to support the research activity, the department has one research center on thin films and a solid-state physics for the synthesis of materials. The department caters to the needs of core engineering departments by offering physics courses, including open electives and minor courses, for engineering students. The department also offers a Ph.D. program in physics.

Course Objectives:

The primary objectives of the training is to:

- ❖ To provide students with a strong foundation in the physics of materials at the nanoscale, focusing on quantum mechanical effects.
- ❖ To explore the synthesis, characterization, and practical applications of nanomaterials in industries like electronics, energy, and healthcare.

Course Outcome:

Upon completion of the training, the participants will :

- ❖ Students gained the ability to understand and explain the quantum mechanical principles that affect material behavior at the nanoscale.

- ❖ They developed skills in nanomaterial synthesis, characterization, and their application in industries like energy storage, nanoelectronics, and healthcare, preparing them for future research or industrial roles.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Content

Day	Content	Nos. of hours
1	**Introduction to Renewable Energy Sources**	6
2	**Solar Energy and Photovoltaic Systems**	6
3	**Wind Energy and Aerodynamics**	6
4	**Hydropower and Fluid Dynamics**	6
5	**Energy Conversion and Storage Technologies**	6

Resource Persons

Dr. Ganesh Kotagiri
Assistant Professor, VIT AP

Course Coordinator

Dr. M Ramanjaneyulu
Associate Professor
Department of Physics, VFSTR
Mobile: 8144880410
Emai: ramuiitmadras@gmail.com

Renewable Energy and Physics

16.09.2023 – 14.10.2023
(Saturday's)

Venue
VBF04, A-block, VFSTR

Organized by
Department of Physics
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

About VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

About Department of Physics

The Department of physics at VFSTR has faculty derived from institutes of national importance like IIT, NIT and prominent state universities. The department places emphasis on multidisciplinary research in the areas of energy harvesting materials and thin films, and to support the research activity, the department has one research center on thin films and a solid-state physics for the synthesis of materials. The department caters to the needs of core engineering departments by offering physics courses, including open electives and minor courses, for engineering students. The department also offers a Ph.D. program in physics.

Course Objectives:

The primary objectives of the training is to:

❖ Understand the fundamental principles of photonics and optoelectronic devices.

❖ Explore the applications of optical technologies in communication, imaging, and computing.

Course Outcome:

Upon completion of the training, the participants will :

❖ Ability to explain the operation of lasers, optical fibers, and photodetectors.

❖ Capability to apply photonic and optoelectronic technologies in fields like telecommunications and imaging systems.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Content

Day	Content	Nos. of hours
1	Introduction to Robotics and Mechatronics	6
2	Kinematics and Dynamics of Robotic Systems	6
3	Sensors and Actuators in Robotics	6
4	Nanomaterials in Electronics and Semiconductors	6
5	Applications of Nanotechnology in Energy and Medicine	6
	Total Hours	**30**

Resource Persons

Dr. E. Senthil Kumar
Associate Professor, SRM university

Course Coordinator
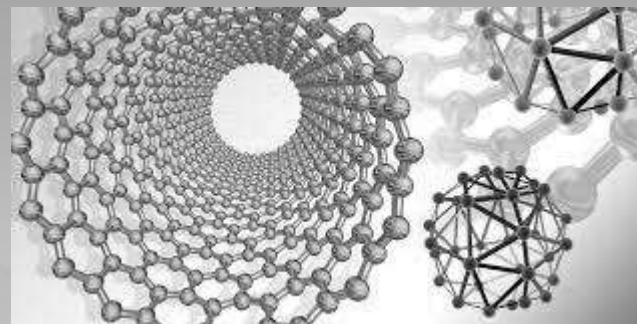
Dr. M Ramanjaneyulu
Associate Professor
Department of Physics, VFSTR
Mobile: 8144880410
Email: ramuiitmadras@gmail.com

Robotics and Mechatronics Physics

03.02.2024 – 02.03.2024
Saturday's)

Venue
VBF 04, A-block, VFSTR

Organized by

Department of Physics

School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

About VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

About Department of Physics, VFSTR

The Department of physics at VFSTR has faculty derived from institutes of national importance like IIT, NIT and prominent state universities. The department places emphasis on multidisciplinary research in the areas of energy harvesting materials and thin films, and to support the research activity, the department has one research center on thin films and a solid-state physics for the synthesis of materials. The department caters to the needs of core engineering departments by offering physics courses, including open electives and minor courses, for engineering students. The department also offers a Ph.D. program in physics.

Course Objectives:

The primary objectives of the training is to:

1) To understand the fundamental principles of physics that govern robotics and mechatronic systems, including mechanical dynamics, electronics, and control systems.

1) To explore the integration of sensors, actuators, and control algorithms to design and develop efficient robotic and mechatronic systems.

Course Outcome:

Upon completion of the training, the participants will :

1) Students gained the ability to apply principles of physics to analyze and design robotic and mechatronic systems, understanding how components interact in an integrated system.

1) They developed practical skills in controlling robotic systems through sensors, actuators, and feedback mechanisms, preparing them for careers in robotics and automation.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Value Added Course

on

"Negotiation Strategies"

13th to 16th March, 2024

1st Year BA LLB

Organized by

Vignan Institute of Law, VFSTR

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of studies.

ABOUT THE DEPARTMENT

Vignan Institute of Law, a relatively new law school on the horizon of other premier law schools in the country, aims to become the nursery for lawyers who play a pivotal role in society. Justice is the fountainhead of any civilised society, and fortunately, our country is rooted in the rule of law. The role lawyers can play in our future can thus not be overemphasised. At VIL, it is our objective to inculcate values such as courage, abilities to analyse, research and the spirit of inquiry. We are blessed with a world-class faculty, and have been constantly working towards building a congenial environment and robust and modern infrastructure, so that we can achieve the objectives.

COURSE OBJECTIVES

- Develop participants' understanding of negotiation principles and concepts.
- Enhance participants' ability to analyze negotiation situations.
- Improve participants' communication and interpersonal skills.
- Equip participants with effective negotiation strategies and tactics.
- Foster participants' ability to manage conflict and emotions.
- Develop participants' skills in creating and negotiating contracts.
- Promote participants' ability to negotiate in diverse cultural and organizational contexts.

COURSE OUTCOMES

- Analyze negotiation situations and identify effective strategies.
- Develop and maintain relationships through effective communication.
- Apply principled negotiation techniques.
- Manage conflict and emotions in negotiation.
- Create mutually beneficial agreements.
- Adapt negotiation approaches to diverse cultural and organizational contexts.
- Evaluate negotiation outcomes and improve future negotiations.

COURSE CONTENTS

The following topics will be covered:

Topics	Hours	Date
Introduction to Negotiation	8	13/03/24
Preparation for Negotiation	2	14/03/24
Communication and Relationship Building	6	14/03/24
Negotiation Tactics and Strategies	4	15/03/24
Creative Problem-Solving and Value Creation	4	15/03/24
Advanced Negotiation Topics	6	16/03/24

TOTAL HOURS 30

RESOURCE PERSON

Dr. Nagalatha, Advocate, High Court of AP
Venue: AFF02, U block, First floor
For registration please contact coordinator on or before

10th March,2024.

COORDINATOR

Mr. Abhinav Deep Dora
Assistant Professor, Vignan Institute of Law,
Mobile no: 9000193332,email id-
addv law@vignan.ac.in

Value Added Course

on

"Introduction to Mooting & Advocacy"

08th to 11thJanuary, 2024

2nd Year BA LLB

Organized by

Vignan Institute of Law,VFSTR

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals.Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals imbued with ethical consciousness and social awareness.All the departments are supported by a good mix of young and senior faculty with a rich research,teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of studies.

ABOUT THE DEPARTMENT

Vignan Institute of Law, a relatively new law school on the horizon of other premier law schools in the country, aims to become the nursery for lawyers who play a pivotal role in society. Justice is the fountainhead of any civilized society, and fortunately, our country is rooted in the rule of law. The role lawyers can play in our future can thus not be over emphasised. At VIL, it is our objective to inculcate values such as courage, abilities to analyse, research and the spirit of inquiry. We are blessed with a world-class faculty, and have been constantly working towards building a congenial environment and robust and modern infrastructure, so that we can achieve the objectives.

COURSE OBJECTIVES

- Understand the concepts of mooting and advocacy.
- Develop research and analytical skills to prepare effective arguments.
- Learn to draft persuasive memorials, briefs, and other legal documents.
- Improve oral advocacy skills through practice and feedback.
- Enhance communication and presentation skills.

COURSE OUTCOMES

Upon completion of the course, the students will be able to:

- Participate confidently in mooting competitions.
- Draft effective legal documents.
- Present persuasive oral arguments.
- Demonstrate understanding of courtroom procedures.
- Apply ethical principles in advocacy.

COURSE CONTENTS

The following topics will be covered:

Topics	Hours	Date
Introduction to Mooting and Advocacy	8	08/01/24
Research and Analysis	2	09/01/24
Courtroom Etiquette and Procedures	6	09/01/24
Oral Advocacy	4	10/01/24
Mooting Techniques	4	10/01/24
Mock Trials and Debates	6	11/01/24
TOTALHOURS	**30**	

RESOURCE PERSON

Mr. Romil Aryan   Asst. Professor in Law, VIL

Venue: ATF-10, U block, Third floor

For registration please contact coordinator on or

before 05th January, 2024

COORDINATOR

Mr. Abhinav Deep Dora

Assistant Professor, Vignan Institute of Law,

Mobileno:90001 93332 Email:addv_law@vignan.ac.in

Value Added Course

on

"Introduction to Debating Skills"

09th to 12h October, 2023

3rd Year BA LLB

Organized by

Vignan Institute of Law, VFSTR

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of studies.

ABOUT THE DEPARTMENT

Vignan Institute of Law, a relatively new law school on the horizon of other premier law schools in the country, aims to become the nursery for lawyers who play a pivotal role in society. Justice is the fountainhead of any civilised society, and fortunately, our country is rooted in the rule of law. The role lawyers can play in our future can thus not be overemphasised. At VIL, it is our objective to inculcate values such as courage, abilities to analyse, research and the spirit of inquiry. We are blessed with a world-class faculty, and have been constantly working towards building a congenial environment and robust and modern infrastructure, so that we can achieve the objectives.

COURSE OBJECTIVES

Enhance debating skills of the participants.
- Enhance participants' ability to analyze debating situations.
- Improve participants' communication and interpersonal skills.
- Promote participants' ability to negotiate in diverse cultural and organizational contexts.
- Foster participants' ability to manage contradicting situation.
- Develop participants' skills in framing arguments.
- Develop critical thinking, research, and analytical skills to Construct and deconstruct arguments.

COURSE OUTCOMES

Analyze argument and identify effective strategies.
- Develop and maintain relationships through effective communication.
- Apply principled argumentation techniques.
- Manage conflict and emotions while arguing.
- Research and organize evidence to support arguments.
By the end of this course, students will be equipped with the Skills to effectively engage in debates,

COURSE CONTENTS

The following topics will be covered:

Topics	Hours	Date
Introduction to Debating	8	09/10/23
Preparation for Motion	2	10/10/23
Arguments and Case Building	6	10/10/23
Rebuttal Tactics and Strategies	4	11/10/23
Creative Problem-Solving and Value Creation	4	11/10/23
Advanced Debating Topics	6	12/10/23

TOTAL HOURS   30

RESOURCE PERSON

Mr. Ritul Aryan,LLM Scholar CNLU, Core Adjudicator, APD
Venue: ATF-10, U block, Third floor
For registration please contact coordinator on or before

10th February,2024.

COORDINATOR

Mr. Romil Aryan
Associate Professor, Vignan Institute of Law,
Mobile no:
8809991603.arr law@vignan.ac.in

VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be UNIVERSITY)

-Estd. u/s 3 of UGC Act 1956

Value Added Course

on

"Legal Technology and E-discovery"

21st to 24th October, 2023

4th Year BA LLB

Organized by

Vignan Institute of Law, VFSTR

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of studies.

ABOUT THE DEPARTMENT

Vignan Institute of Law, a relatively new law school on the horizon of other premier law schools in the country, aims to become the nursery for lawyers who play a pivotal role in society. Justice is the fountainhead of any civilised society, and fortunately, our country is rooted in the rule of law. The role lawyers can play in our future can thus not be overemphasised. At VIL, it is our objective to inculcate values such as courage, abilities to analyse, research and the spirit of inquiry. We are blessed with a world-class faculty, and have been constantly working towards building a congenial environment and robust and modern infrastructure, so that we can achieve the objectives.

COURSE OBJECTIVES

- Enhance participants' ability to apply recent technology
- E-discovery and it's role in litigation.
- Explain the legal and technical aspects of e-discovery, including Data formats, metadata, and data analytics.
- Foster participants' ability to incorporate law and technology.
- Develop participants' skills in creating e-contracts.
- Familiarize themselves with relevant laws, regulations, and court rules governing e-discovery

COURSE OUTCOMES

- Analyze negotiation situations and identify effective strateg
- Support litigation teams in e-discovery matters.
- Manage electronic data in litigation.
- Develop effective e-discovery plans and protocols.
- Stay current with emerging trends and technologies in legal fields.

COURSE CONTENTS

The following topics will be covered:

Topics	Hours	Date
Introduction to Legal Technology	8	21/10/23
E-Discovery Basics	2	22/10/23
Data analytics and Visualization techniques	6	22/10/23
Recent research tools	4	23/10/23
Incorporating Artificial intelligence into legal research.	4	23/10/23
Practical Applications.	6	24/10/23

TOTAL HOURS   30

RESOURCE PERSON

Mr. Abhinav Deep, Asst Professor of Law, VIL
Venue: ATF10, U block, Third floor
For registration please contact coordinator on or before

20th October ,2023

COORDINATOR

Mr. Abhinav Deep Dora
Assistant Professor, Vignan Institute of Law,
Mobile no: 9000193332,email id-
addv law@vignan.ac.in

Value Added Course

on

"Public Speaking and Presentation Skills"

22nd to 25th April, 2024

1st Year BBA LLB

Organized by

Vignan Institute of Law, VFSTR

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is theflagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supportedby a good mix of young and senior faculty with a rich research, teachingand industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of studies.

ABOUT THE DEPARTMENT

Vignan Institute of Law, a relatively new law school on the horizon of other premier law schools in the country, aims to become the nursery for lawyers who play a pivotal role in society. Justice is the fountainhead of any civilized society, and fortunately, our country is rooted in the rule of law. The role lawyers can play in our future can thus not be overemphasized. At VIL, it is our objective to inculcate values such as courage, abilities to analyse, research and the spirit of inquiry. We are blessed with a world-class faculty, and have been constantly working towards building a congenial environment and robust and modern infrastructure, so that we can achieve the objectives.

COURSE OBJECTIVES

- Understand the fundamentals of public speaking and presentation skills
- Analyze audience needs and tailor messages accordingly
- Organize and structure presentations effectively
- Develop confident delivery techniques, including vocal and nonverbal communication
- Design and use visual aids to enhance presentations
- Practice handling questions, feedback, and difficult situations
- Apply public speaking and presentation skills in real-world scenarios.

COURSE OUTCOMES

- Develop effective public speaking and presentation skills to communicate ideas confidently and persuasively
- Understand the principles of audience analysis, message organization, and delivery techniques
- Create engaging visual aids and presentation materials
- Handle questions and feedback with confidence and poise
- Apply public speaking and presentation skills in various contexts, such as business, education, and community settings

COURSE CONTENTS

The following topics will be covered:

Topics	Hours	Date
Building Confidence and Understanding Your Audience	5	22/04/24
Crafting Your Message	2	22/04/24
Effective Delivery	5	23/04/24
Visual Aids and Presentation Materials	3	23/04/24
Handling Questions and Feedback	7	24/04/24
putting it all Together - Practice and Feedback	8	25/04/24
TOTAL HOURS	**30**	

RESOURCE PERSON

Ms. G. Neeharika, LLM in Corporate Law (DSNLU)

Venue: ATF-10, U block, Third floor
For registration please contact coordinator on or before 16th April ,2024.

COORDINATOR

Mr. Romil Aryan

Assistant Professor, Vignan Institute of Law, Mobile no:

8809991603,email-arr_law@vignan.ac.in

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Value Added Course

on

"IP VALUATION & COMMERCIALISATION"

20th to 23rd February, 2024

2nd Year BBA LLB

Organized by

Vignan Institute of Law, VFSTR

ABOUT THE INSTITUTION

Organized by

Vignan Institute of Law, VFSTR

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of studies.

ABOUT THE DEPARTMENT

Vignan Institute of Law, a relatively new law school on the horizon of other premier law schools in the country, aims to become the nursery for lawyers who play a pivotal role in society. Justice is the fountainhead of any civilised society, and fortunately, our country is rooted in the rule of law. The role lawyers can play in our future can thus not be overemphasised. At VIL, it is our objective to inculcate values such as courage, abilities to analyse, research and the spirit of inquiry. We are blessed with a world-class faculty, and have been constantly working towards building a congenial environment and robust and modern infrastructure, so that we can achieve the objectives.

COURSE OBJECTIVES

- Understand the fundamentals of intellectual property (IP) rights and their significance in business.
- Identify and assess the value of IP assets, such as patents, trademarks, copyrights, and trade secrets.
- Develop strategies for commercializing IP assets, including licensing, franchising, and joint ventures.
- Understand the role of IP in mergers and acquisitions, due diligence, and taxation.

COURSE OUTCOMES

Upon completion of the course, the student will be able to:
- Maximize the value of IP assets for businesses and innovators
- Make informed decisions about IP investments and commercialization strategies
- Navigate the complex legal and financial landscape of IP valuation and commercialization
- Contribute to the growth and competitiveness of organizations through effective IP management.

COURSE CONTENTS

The following topics will be covered:

Topics	Hours	Date
Introduction to IP	5	20/02/24
IP valuation	2	20/02/24
IP commercialization	5	21/02/24
	3	21/02/24
IP management	7	22/02/24
Legal and financial aspects	8	23/02/24
TOTAL HOURS	**30**	

RESOURCE PERSON

Mr. Abhinav Deep Dora Asst. Professor in Law, VIL

Venue: ATF-10, U block, Third floor
For registration please contact coordinator on or before

16th February,2024.

COORDINATOR

Mr. Abhinav Deep Dora

Assistant Professor, Vignan Institute of Law,

Mobileno:90001 93332 Email:addv_law@vignan.ac.in

Value Added Course

on

"*Judicial and opposing counsel dynamics*"

20th to 23rd November, 2023

3rd Year BBA LLB

Organized by

Vignan Institute of Law, VFSTR

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of studies.

ABOUT THE DEPARTMENT

Vignan Institute of Law, a relatively new law school on the horizon of other premier law schools in the country, aims to become the nursery for lawyers who play a pivotal role in society. Justice is the fountainhead of any civilised society, and fortunately, our country is rooted in the rule of law. The role lawyers can play in our future can thus not be overemphasised. At VIL, it is our objective to inculcate values such as courage, abilities to analyse, research and the spirit of inquiry. We are blessed with a world-class faculty, and have been constantly working towards building a congenial environment and robust and modern infrastructure, so that we can achieve the objectives.

COURSE OBJECTIVES

- Develop participants' understanding of negotiation principles and concepts.
- Understand the roles and responsibilities of judges and opposing Counsel in various legal settings..
- Improve participants' communication and interpersonal skills.
- Analyze the psychological and social factors influencing judicial and opposing counsel dynamics
- Foster participants' ability to manage court room dynamics.
- Develop participants' skills in constructing legal arguments.
- Develop effective communication and advocacy skills.

COURSE OUTCOMES

- Analyze Court room situations and identify effective strategies.
- Develop and maintain relationships through effective communication.
- Identify and explain key factors influencing judicial decision-making.
- Manage conflict and emotions in court room.
- Create mutually beneficial agreements.
- Develop and implement strategies for building and maintaining constructive relationships with opposing counsel.
- Evaluate argumentation outcomes and improve future negotiations.

COURSE CONTENTS

The following topics will be covered:

Topics	Hours	Date
Introduction to Judicial dynamics	8	20/11/23
Preparation for Court room	2	21/11/23
Communication and arguments Building	6	21/11/23
Cross examination Tactics and Strategies	4	22/11/23
Sample cross examination	4	22/11/23
Simulated court room exercises	6	23/11/23

TOTAL HOURS 30

RESOURCE PERSON

Dr. Santhosh, Research Scholar, Andhra University
Venue: ATF-10, U block, Third floor
For registration please contact coordinator on or before

19th November,2023.

COORDINATOR

Mr. Romil Aryan
Assistant Professor, Vignan Institute of Law,
Mobile no: 8809991603,email-
arr law@vignan.ac.in

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Value Added Course

on

"Career Applications and Networking "

11th to 14th November, 2023

4th Year BBA LLB

Organized by

Vignan Institute of Law, VFSTR

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of studies.

ABOUT THE DEPARTMENT

Vignan Institute of Law, a relatively new law school on the horizon of other premier law schools in the country, aims to become the nursery for lawyers who play a pivotal role in society. Justice is the fountainhead of any civilised society, and fortunately, our country is rooted in the rule of law. The role lawyers can play in our future can thus not be overemphasised. At VIL, it is our objective to inculcate values such as courage, abilities to analyse, research and the spirit of inquiry. We are blessed with a world-class faculty, and have been constantly working towards building a congenial environment and robust and modern infrastructure, so that we can achieve the objectives.

COURSE OBJECTIVES

-
- Understand the importance of career planning and management.
- Develop strong interviewing skills.
- Identify personal strengths, skills, and interests relevant to Career goals.
- Identify personal strengths, skills, and interests.
- Develop participants' skills in creating legal documents .
- Familiarize themselves with relevant laws, regulations, and Court Procedures.

COURSE OUTCOMES

- To establish a network of professional contacts.
- To understand ethics in litigation.
- To Understand Professionals Ethics.
- To develop legal Entrepreneurship.

COURSE CONTENTS

The following topics will be covered:

Topics	Hours	Date
Introduction to Legal Career	8	11/11/23
Professional Networking basics	2	12/11/23
Creating engaging content and thought leadership	6	12/11/23
Recent trends	4	13/11/23
Incorporating Artificial intelligence into legal research.	4	13/11/23
Practical Applications.	6	14/11/23

TOTAL HOURS   30

RESOURCE PERSON

Advocate Harsha, Advocate, AP High Court
Venue: ATF10, U block, Third floor
For registration please contact coordinator on or before

10th November ,2023

COORDINATOR

Mr. Abhinav Deep Dora
Assistant Professor, Vignan Institute of Law,
Mobile no: 9000193332,email id-
addv law@vignan.ac.in

ABOUT THE INISTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. A good mix of young and senior faculty with a rich research, teaching and industry background supports all the departments. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

**Value Added Course
On**

Web Designing & Development

For Students of Bachelor of Business Administration

(16.12.2023 to 23.12.2023)

Organized by

Department of Management Studies

Venue: AFTF11, U-Block, VFSTR

ABOUT THE DEPARTMENT

The thrust of the department of management studies is to impart functional knowledge of general management and specialized knowledge of the related subject. One of the differentiating features of the curriculum is the range and depth of electives, which are industry specific and where rigor and relevance are appropriately balanced, resulting in greater marketability of the graduates anywhere or to become entrepreneurs.

COURSE OBJECTIVES

To teach student participants the principle and basic of web page design, CSS and elements of HTML.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- *To analyse elements, attributes and formatting HTML*
- *To analyse Images, colours and frames through HTML*
- *To analyse forms, tables, lists and developing web pages in HTML*

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
Introduction to HTML	2
Elements of HTML	2
Elements, Attributes, formatting	4
Colors	2
Working with images and links in HTML	2
Working with Frames, forms and tables	2
Working with Frames, forms and tables	2
Working with Frames, forms and tables	3
Working with tables and lists in HTML	4
Working with tables and lists in HTML	2
Developing Webpages	3
Developing Webpages	2
Total	**30**

RESOURCE PERSONS

Dr.G V R K Acharyulu,
Professor, Dept. of Management Studies,
University of Hyderabad.
Ph.No: 9849471988, Mail id : acharyulyscm@gmail.com
For Registration, please contact course coordinator below:

COORDINATOR

Mr. Muthe Ramu, Assistant Professor, Department of Management Studies, VFSTR, Vadlamudi. Ph. 9491613663, Email: muthe.ramu@gmail.com

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals.

Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. A good mix of young and senior faculty with a rich research, teaching and industry background supports all the departments. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
Estd. u/s 3 of UGC Act 1956

Value Added Course
On
ADVANCED MS OFFICE FOR MANAGERIAL DECISIONS
For Students of Bachelor of Business Administration

(15.05.2024 to 20.05.2024)

Organized by
Department of Management Studies

Venue: AFTF12, U-Block, VFSTR

ABOUT THE DEPARTMENT

The thrust of the department of management studies is to impart functional knowledge of general management and specialized knowledge of the related subject. One of the differentiating features of the curriculum is the range and depth of electives, which are industry specific and where rigor and relevance are appropriately balanced, resulting in greater marketability of the graduates anywhere or to become entrepreneurs.

COURSE OBJECTIVES

1. Provide hands on use of Microsoft Office applications such as Word, Excel, and PowerPoint.
2. Provide requisite practice on data entry, manipulation, and visualization in the applications of MS Office.
3. Provide required knowledge and skill in preparation of business documents that assists in managerial decisions

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- *Hands on experience in data entry, manipulation, and visualization.*
- *Analyse business data using MS Office tools for decision making.*
- *Preparation of business documents that assists in managerial decisions.*

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
Text Basics, Formatting and saving file, Working with Objects and Header & Footers	2
Working with bullets and numbered lists Tables and Styles and Content	3
Merging, Comparing, Referencing, and review of Documents	4
Macros creation, Sharing and Maintaining Document & Printing	3
Introduction to Excel and formatting excel work book	4
Perform Calculations with Functions and Sort and Filter	4
Data with Excel Create Effective Charts to Present Data Visually	4
Setting Up PowerPoint Environment	3
Creating slides and applying themes	3
Total Hours	30

RESOURCE PERSON

Prof. Azeem, Professor, Department of Management,
Moulana Azad National Urdu University,
Hyderabad. Ph.No: 98493 25765.Mail id: drazeem@manuu.edu.in
For Registration, please contact course coordinator below:

COORDINATOR

Mr. M. Ramu, Assistant Professor, Department of Management Studies, Vignan's **Foundation for Science Technology and Research (Deemed to be University), Vadlamudi. Ph. 9966622197, Email: muthe.ramu@gmail.com**
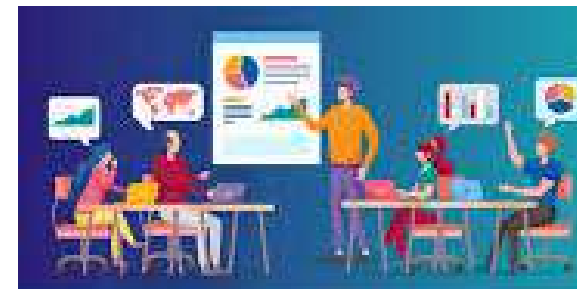
ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. A good mix of young and senior faculty with a rich research, teaching and industry background supports all the departments. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
Estd. u/s 3 of UGC Act 1956

Value Added Course On

Data Analysis using SPSS-I
For Students of Bachelor of Business Administration

(29.11.2023 to 05.12.2023)

Organized by

Department of Management Studies

Venue: AFTF08, U-Block, VFSTR

ABOUT THE DEPARTMENT

The thrust of the department of management studies is to impart functional knowledge of general management and specialized knowledge of the related subject. One of the differentiating features of the curriculum is the range and depth of electives, which are industry specific and where rigor and relevance are appropriately balanced, resulting in greater marketability of the graduates anywhere or to become entrepreneurs.

COURSE OBJECTIVES

1. This course is to summarize and aid in the interpretation of basic research findings.
2. This tools aids in conduction of social sciences research. Completion of the course results in acquisition of statistical knowledge and skill.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- *Understand the use of SPSS*
- *Analyse the data through visual schematic analysis.*
- *Analyse business data using SPSS for decision-making.*

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
Introduction to research tool SPSS	2
Understanding the concepts of data view and variable view	3
SPSS Commands	4
Importing data, and Descriptive analysis	4
Assumptions of Regression on data	4
Construction of frequency tables	4
Construction of frequency graphs	3
Application of central tendency formulas	3
Analyzing relation between variables using correlation and regression analysis	3
Total Hours	30

RESOURCE PERSON

Dr. Abhilash.Ponnam, Associate Professor
NMIM- Hyderabad, (Narsee Monjee Institute of Management)
Ph.No: 8143344893, Mail id: abhilashponnam@gmail.com
For Registration, please contact course coordinator below:

COORDINATOR

Mr S Sudheer, Assistant Professor, Department of Management Studies, VFSTR, Vadlamudi. Ph. 9703103940, Email: sannikantisudheer@gmail.com

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. A good mix of young and senior faculty with a rich research, teaching and industry background supports all the departments. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
Estd. u/s 3 of UGC Act 1956

Value Added Course
On

Excel Dashboards and Reports
For Students of Bachelor of Business Administration
(07.05.2024 to 11.05.2024)

Organized by

Department of
Management Studies
Venue: AFTF13, U-block, VFSTR

ABOUT THE DEPARTMENT

The thrust of the department of management studies is to impart functional knowledge of general management and specialized knowledge of the related subject. One of the differentiating features of the curriculum is the range and depth of electives, which are industry specific and where rigor and relevance are appropriately balanced, resulting in greater marketability of the graduates anywhere or to become entrepreneurs.

COURSE OBJECTIVES

- The objective of this course is to imbibe practical exposure on Excel dashboards, conditional formatting of data, logic and formula based conditional.
- To provide hands-on exposure on lookup functions for data retrieval.
- To provide hands-on exposure on data visualization using charts.
- To provide hands-on creating interactive dashboards and pivot tables

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- *Apply advanced functions and productivity tools to assist in developing worksheets.*
- *Manipulate data lists using conditional formatting and PivotTables*
- *Use filters and lookup functions and report results from multiple worksheets and visualize information.*

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
Introduction to Dashboards:	2
Conditional Formatting: Cell Highlighting, Data Bars, Icon Sets, Color Scales,	4
Logic Function Review, Formula Based Conditional Formats	4
Lookup, Vlookup. Hlookup	4
Exercises on Lookup, Vlookup. Hlookup	4
Exercises on Lookup, Vlookup. Hlookup	2
Charting: Bar Charts, Column Charts, Pie Charts, Line Charts, and Scatter chart.	4
Adding Interactivity to Dashboard	2
Exercises on Adding Interactivity to Dashboard	2
Leveraging Pivot Data in Dashboards	2
Total Hours	30

RESOURCE PERSON

Dr. B.B.R.N.K Benarjee, UGC Emeritus Professor,

Department of Industrial Relations, Andhra University, Ph.No: 9849398408, Mail id: profbenarjeedasariau@gmail.com

For Registration, please contact course coordinator below:

COORDINATOR

Mr.S Sudheer, Assistant Professor, Department of Management Studies, VFSTR, Vadlamudi. Ph. 9703103940, Email: sannikantisudheer@gmail.com

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. A good mix of young and senior faculty with a rich research, teaching and industry background supports all the departments. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
Estd. u/s 3 of UGC Act 1956

Value Added Course
On

TALLY FOR MANAGERS
For Students of Bachelor of Business Administration

(22.12.2023 to 26.12.2023)

Organized by
Department of Management Studies
Venue: AFTF07, U-Block, VFSTR

ABOUT THE DEPARTMENT

The thrust of the department of management studies is to impart functional knowledge of general management and specialized knowledge of the related subject. One of the differentiating features of the curriculum is the range and depth of electives, which are industry specific and where rigor and relevance are appropriately balanced, resulting in greater marketability of the graduates anywhere or to become entrepreneurs.

COURSE OBJECTIVES

The objective of this course is to familiarize students with the various concepts of Tally. Students are able to use data entry for transactions in tally, prepare financial statements, and generate financial reports for MIS and also assist to run an online business or work for an organization.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- *Understand the use of Tally as accounting package.*
- *Analyse the rules for computerized accounts*
- *Identify the pre-declined vouches.*
- *Analyse the financial position of the organization through final accounts and ratio analysis.*

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
Introduction to Tally	2
Basic Accounting concepts – meaning, principles, functions and limitations.	2
Basic Accounting concepts and preparation of ledger accounts	3
Preparation of journal entries in tally	2
Accounting information in tally	2
Inventory information in tally	2
Preparation of Accounting vouchers	2
Preparation of Order vouchers	3
Preparation of statutory reports	4
Import data in tally	2
Preparation of bank statements	2
Preparation of P & L Accounts	2
Preparation of Balance Sheets and Ratio Analysis	2
Total	30

RESOURCE PERSON

Prof.N.Sambasiva Rao, Professor, Department of Commerce and Management Studies, Andhra University, Visakhapatnam – 530003,

Mail Id: nadendlasr@gmail.com, Phone: 9848170274

For Registration, please contact course coordinator below:

COORDINATOR

Mr.M S K Varma, Assistant Professor, Department of Management Studies, VFSTR, **Vadlamudi. Ph. 9866285808, Email: mskishanvarma@gmail.com**
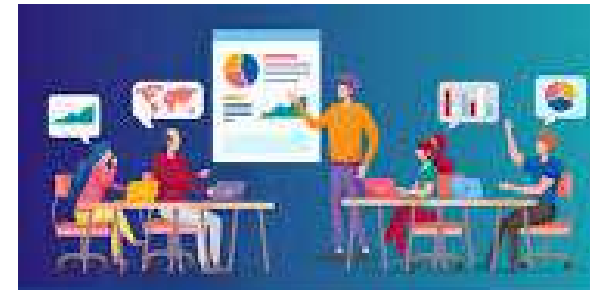
ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. A good mix of young and senior faculty with a rich research, teaching and industry background supports all the departments. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
Estd. u/s 3 of UGC Act 1956

Value Added Course
On

STATISTICAL ANALYSIS USING SPSS-II

For Students of Bachelor of Business Administration
(21.05.2024 to 25.05.2024)

Organized by
Department of Management Studies
Venue: AFTF14, U-block, VFSTR

ABOUT THE DEPARTMENT

The thrust of the department of management studies is to impart functional knowledge of general management and specialized knowledge of the related subject. One of the differentiating features of the curriculum is the range and depth of electives, which are industry specific and where rigor and relevance are appropriately balanced, resulting in greater marketability of the graduates anywhere or to become entrepreneurs.

COURSE OBJECTIVES

This course is useful to summarize and aid in the interpretation of research findings. Students will be comfortable in using SPSS as a data analysis tool.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- *Understand frequency distribution of data (for multiple sets).*
- *Analyze the data through cross-tabulation analysis (use chi-square for dependency relation).*
- *Understand the relation between categorical and continues variables (Defining applicability of test as per type of variable).*

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
Perform Recoding of variables into same variable and different variables, visual binning and draw histogram.	2
Construct frequency tables and apply graphs for demographic questionnaire.	3
Apply cross-tabulation, clustered bar charts and interpret.	3
Apply custom tables for customizing tables.	4
Exploratory Factor Analysis (EFA)	4
Observe correlation and reliability analysis on the extracted factors.	4
Perform SLR and test for regression assumptions.	4
Perform Multiple Linear Regression (MLR)	3
Perform Hierarchal Regression	3
Total Hours	**30**

RESOURCE PERSON

Dr. B.Naga Raju, Associate Professor, Department of HRM,
Acharya Nagarjuna University, Ph.No: 9440022859,
Mail id: jaswinhrmanu@gmail.com
For Registration, please contact course coordinator below:

COORDINATOR

Mr. M Kishan Varma, Assistant Professor, Department of Management Studies, VFSTR, Vadlamudi. Ph. 9866285808, Email: mskishanvarma@gmail.com

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology, and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur - Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands- on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering.

Value Added Course on

Essential Skills in IT Tools

19th - 22th October, 2023

Venue : Srujana Seminar Hall H- Block

Organized by
Department of Pharmaceutical Sciences

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Vadlamudi, Guntur-522213. A.P., | Tel: 0863 2344700

ABOUT THE DEPARTMENT

Provides a premier professional education Programme leading to the Bachelor of Pharmacy degree with specialization in various areas of interest in the field of pharmacy (the first of its kind) and is committed to prepare future pharmacy leaders with essentials to thrive as a successful individual in pharmaceutical sector. It also provides them with the tools necessary to practice in different roles, Develop and maintain research initiatives in the formulation, analysis, clinical, regulatory, management and discovery sciences to implement new knowledge and approaches for enhancing health care.

COURSE OBJECTIVES

To provide knowledge and training on Ms word, excel sheet in data entry and Microsoft Powerpoint.

COURSE OUTCOMES

❖ Provide detail information about Ms word.
❖Powerpoint help users create presentations that convey information through multimedia-rich slide
❖Provide information various shortcuts used in Microsoft excel.

COURSE CONTENTS

Contents	Hours
Introduction and Applications of Ms word	8
Introduction and Applications of Microsoft Powerpoint	8
Introduction and Applications of Microsoft excel sheet	8
Data filling in excel sheet	8
Total No. of Hours	32

RESOURCE PERSON

Mr. R. Praveen Kumar,
Manager,
Capgemini, Hyderabad.

For registration please contact coordinator on or before 15th October, 2023

Coordinator

Dr. CHIMAKURTHY JITHENDRA
Associate Professor,
Dept. of Pharmaceutical Sciences,
VFSTR, Vadlamudi, Guntur - 522 213. Cell : 9866394437

Microsoft Office EXCEL

Microsoft Office POWERPOINT

Microsoft Office WORD

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology, and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur - Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands- on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering.

Value Added Course on

Introduction to Instruments in Pharma Industry

23rd – 26th August, 2023

Venue : Srujana Seminar Hall H- Block

Organized by

Department of Pharmaceutical Sciences

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
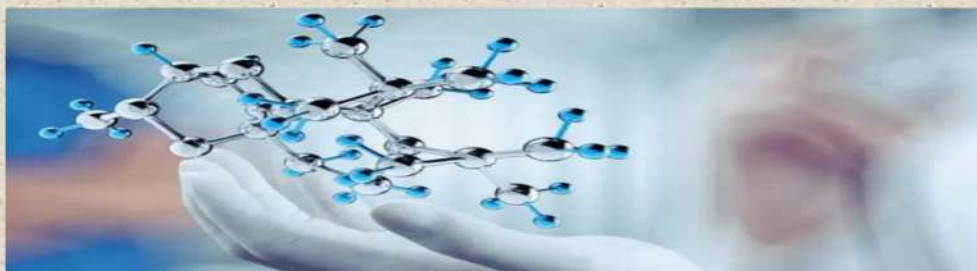-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

Provides a premier professional education Programme leading to the Bachelor of Pharmacy degree with specialization in various areas of interest in the field of pharmacy (the first of its kind) and is committed to prepare future pharmacy leaders with essentials to thrive as a successful individual in pharmaceutical sector. It also provides them with the tools necessary to practice in different roles, Develop and maintain research initiatives in the formulation, analysis, clinical, regulatory, management and discovery sciences to implement new knowledge and approaches for enhancing health care.

COURSE OBJECTIVES

To provide knowledge and training on instruments used in pharma industry

COURSE OUTCOMES

❖ Manufacturing of various dosage forms at industry level.
❖ Analysis of the drugs or products
❖ To ensure proper use and maintenance of the instruments.
❖ To provide accuracy and reliability in measurement and control.

COURSE CONTENTS

Contents	Hours
Introduction to instruments used in pharma industry	8
Role of instrumentation in the pharmaceutical industry	8
Instrument's used in pharma industry	8
Calibration & Processing of equipment	8
Total hours	32

RESOURCE PERSON

Dr. Sriharsha Koreddi,

Deputy Manager, Formulations R&D,

Hetero Drugs Pvt. Ltd., Hyderabad

For registration please contact coordinator on or before 20th August , 2023

Coordinator

Dr. Grandhi Srikar
Associate Professor,
Dept. of Pharmaceutical Sciences,
VFSTR, Vadlamudi, Guntur - 522 213. Cell : 9885589543

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology, and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur - Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands- on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering.

MEDICAL CODING

Value Added Course on

Fundamentals of Medical Coding

06th - 09th November, 2023

Venue : Srujana Seminar Hall H- Block

Organized by
Department of Pharmaceutical Sciences

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Vadlamudi, Guntur-522213. A.P., | Tel: 0863 2344700

Vadlamudi, Guntur-522213. A.P., | Tel: 0863 2344700

ABOUT THE DEPARTMENT

Provides a premier professional education Programme leading to the Bachelor of Pharmacy degree with specialization in various areas of interest in the field of pharmacy (the first of its kind) and is committed to prepare future pharmacy leaders with essentials to thrive as a successful individual in pharmaceutical sector. It also provides them with the tools necessary to practice in different roles, Develop and maintain research initiatives in the formulation, analysis, clinical, regulatory, management and discovery sciences to implement new knowledge and approaches for enhancing health care.

COURSE OBJECTIVES

To provide knowledge and training on various software's that are using in Biomedical Research

COURSE OUTCOMES

❖ Provide the biostatistical components of the design of a public health or biomedical experiment.
❖ Select appropriate statistical tools, methodology alternatives and graphical descriptive to analyze and summarize public health and biomedical data
❖ Apply appropriate statistical analysis methods using SAS to analyze both categorical and quantitative data.

COURSE CONTENTS

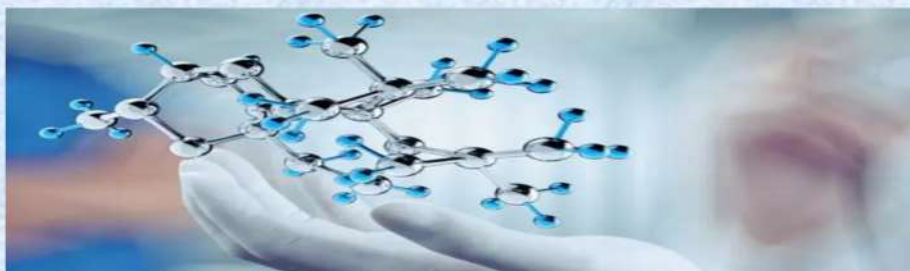| Contents	Hours
Medical terminology	8
Anatomy, Physiology, Pathology & Clinical procedures	8
ICD-10-CM	8
CPT, HCPCS	8
Total No. of Hours	32

RESOURCE PERSON

Mrs. Ravipati.Sireesha
MD of Healtx Healthcare Pvt Ltd.

For registration please contact coordinator on or before 30th October, 2023

Coordinator

Dr. SATHISH KUMAR KONIDALA
Associate Professor,
Dept. of Pharmaceutical Sciences,
VFSTR, Vadlamudi, Guntur - 522 213. Cell : 8121051151

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology, and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur - Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands- on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering.

Value Added Course on

Pharmacovigilance and its Importance

18th - 21th December, 2023

Venue : Srujana Seminar Hall H- Block

Organized by
Department of Pharmaceutical Sciences

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Vadlamudi, Guntur-522213. A.P., | Tel: 0863 2344700

Vadlamudi, Guntur-522213. A.P., | Tel: 0863 2344700
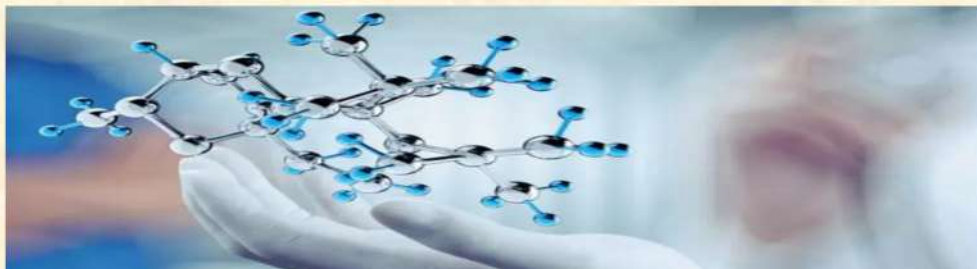
ABOUT THE DEPARTMENT

Provides a premier professional education Programme leading to the Bachelor of Pharmacy degree with specialization in various areas of interest in the field of pharmacy (the first of its kind) and is committed to prepare future pharmacy leaders with essentials to thrive as a successful individual in pharmaceutical sector. It also provides them with the tools necessary to practice in different roles, Develop and maintain research initiatives in the formulation, analysis, clinical, regulatory, management and discovery sciences to implement new knowledge and approaches for enhancing health care.

COURSE OBJECTIVES

To provide knowledge and training on Pharmacovigilance.

COURSE OUTCOMES

❖ Provide the in-depth information regarding pharmacovigilance.
❖ Training how to write ADR Reporting form.
❖ signal detection and management

COURSE CONTENTS

Contents	Hours
Introduction to pharmacovigilance	8
ADR Reporting	8
Post marketing Surveillance	8
Signal detection and management	8
Total No. of Hours	32

RESOURCE PERSON

Dr. CH. Arun Kumar,
Associate professor,
CHIPS, Guntur.

For registration please contact coordinator on or before 15th December, 2023

Coordinator

Dr. Mitta Raghavendra,
Associate Professor,
Dept. of Pharmaceutical Sciences,
VFSTR, Vadlamudi, Guntur - 522 213. Cell : 9948773693

About the Institution

Vignan's Foundation for Science, Technology and Research is a renowned institution which provides quality education in a diverse and intellectual stimulating environment. It imparts value addition training to students to make them competent and inspired engineers. This institution celebrates the power of knowledge, cultivates vision, and encourages new ideas, besides aiming to inculcate human values and instil social consciousness among its students.

This institution is well known for its dedicated faculty, state-of-the-art infrastructure, and good learning outcomes. As a University, it is in the process of improving its standards to the level of a global technical institution. Living up to its motto, "**Technology with Human Face**". In a recent nationwide survey of Indian Universities carried out by NIRF, VFSTR was placed at less than 75 rank in engineering and university. domain. The University is accredited with NAAC 'A+' Grade in 2021.

Value added Course
on
Full stack web development
06th to 11th November 2023

Organized by
**Department of
Information Technology &
Computer Applications**

About the Department

Department of IT & CA has well-qualified and experienced faculty who are specialists in the areas of Programming Languages, Data Mining, Software Engineering, Information Security, Artificial Intelligence, Data Analytics, Internet of Things and Data Science. The Department attributes its success to the creative and innovative outlook of its students. The Department encourages students to participate in Technical Workshops, Coding competitions, Project Exhibitions and Symposiums to present papers. Students are also made to undergo 6 Month Industrial Internship during final year, where they hone their technical skills in the realm of computers. The department effectively prepares students to pursue leadership, technical, and management positions in a variety of industries. Students have obtained successful top-notch placements at leading companies like IBM, Infosys, Wipro, Cognizant, TCS, HCL and other leading companies.

Course Objectives

To become knowledgeable about the most recent web development technologies. Idea for creating two tier and three tier architectural web applications. Design and Analyse real time web applications. Constructing suitable client and server side applications. To learn core concept of both front end and back end programming.

Course Outcomes

Upon completion of the course, the student will be able to achieve the following outcomes:

- Develop a fully functioning website and deploy on a web server. Gain Knowledge about the front end and back end Tools. Find and use code packages based on their documentation working results ina project

Course Contents

Topic	Hours
Web Development Basics	4
Frontend Development	5
REACT JS	5
Java Web Development:	5
Databases & Deployment	5
JSON data format.	8
Total	32

Resource Person

Mr. ARUL BRUNO XAVIER

Senior Specialist, Full stack web development

arul.bruno@gmail.com,

(91) 83095 12354

Venue

ATF-15, III-Floor, U-Block,
VFSTR Deemed to be university

Coordinator

Mrs.Sk.Nazma Sultana
Assistant Professor, Department of IT, VFSTR, Vadlamudi
Ph: 9100844780, e-mail: skns_it@vignan.ac.in

Head of the Department

Dr. VEERANJANEYULU NARALASETTY
Professor, HOD, IT & CA, VFSTR,
Ph:9347162038, e-mail:hodit@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research is a renowned institution which provides quality education in a diverse and intellectual stimulating environment. It imparts value addition training to students to make them competent and inspired engineers. This institution celebrates the power of knowledge, cultivates vision, and encourages new ideas, besides aiming to inculcate human values and in still social consciousness among its students.

This institution is well known for its dedicated faculty, state-of-the-art infrastructure, and good learning outcomes. As a University, it is in the process of improving its standards to the level of a global technical institution. Living up to its motto, "**Technology with Human Face**". In a recent nationwide survey of Indian Universities carried out by NIRF, VFSTR was placed at less than 75 rank in engineering and university. domain. The University is accredited with NAAC 'A+' Grade in 2021.

Value added Course
on
SoftwareTesting &Quality Assurance
11th to 16th March 2024

Organized by
**Department of
Information Technology &
Computer Applications**

About the Department

Department of IT & CA has well-qualified and experienced faculty who are specialists in the areas of Programming Languages, Data Mining, Software Engineering, Information Security, Artificial Intelligence, Data Analytics, Internet of Things and Data Science. The Department attributes its success to the creative and innovative outlook of its students. The Department encourages students to participate in Technical Workshops, Coding competitions, Project Exhibitions and Symposiums to present papers. Students are also made to undergo 6 Month Industrial Internship during final year, where they hone their technical skills in the realm of computers. The department effectively prepares students to pursue leadership, technical, and management positions in a variety of industries. Students have obtained successful top-notch placements at leading companies like IBM, Infosys, Wipro, Cognizant, TCS, HCL and other leading companies.

Course Objectives

In this course, we will explore the process of software verification and examine a variety of methods to test systems, prove their correctness, and make an argument that the software we build is reliable and safe to use.

.

Course Outcomes

Upon completion of the course, the student will be able to achievethe following outcomes:

- The students will understand and be able to distinguish between methods of judging test case adequacy methods.
- The students will understand how to build models of system behavior and prove that their obey required properties

Course Contents

Topic	Hours
Introduction and Fundamentals	5
Functional Testing	7
Structural Testing	6
Oracles and Fault-Based Testing	4
Test Execution and Automation	8
Model-Based Testing and Verification	2
Total	32

Resource Person

Mr. Kurt Guntheroth

Specialist, software Quality Assurance
TN, India.
kurt.123@gmail.com, (+91) 83123 69382

Venue

ATF-15, III-Floor, U-Block,
VFSTR Deemed to be university

Coordinator

Shaik. Nyamathulla
Assistant Professor, Department of IT, VFSTR, Vadlamudi
Ph: 9885423099 e-mail:nyamath.j@gmail.com

Head of the Department

Dr. VEERANJANEYULU NARALASETTY
Professor, HOD, IT & CA, VFSTR,
Ph:9347162038, e-mail:hodit@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research is a renowned institution which provides quality education in a diverse and intellectual stimulating environment. It imparts value addition training to students to make them competent and inspired engineers. This institution celebrates the power of knowledge, cultivates vision, and encourages new ideas, besides aiming to inculcate human values and instil social consciousness among its students.

This institution is well known for its dedicated faculty, state-of-the-art infrastructure, and good learning outcomes. As a University, it is in the process of improving its standards to the level of a global technical institution. Living up to its motto, "**Technology with Human Face**". In a recent nationwide survey of Indian Universities carried out by NIRF, VFSTR was placed at less than 75 rank in engineering and university. domain. The University is accredited with NAAC 'A+' Grade in 2021.

Value added Course
on
Virtual Reality & Augment Reality
11th to 16th September 2023

Organized by
Department of Information Technology & Computer Applications

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

About the Department

Department of IT & CA has well-qualified and experienced faculty who are specialists in the areas of Programming Languages, Data Mining, Software Engineering, Information Security, Artificial Intelligence, Data Analytics, Internet of Things and Data Science. The Department attributes its success to the creative and innovative outlook of its students. The Department encourages students to participate in Technical Workshops, Coding competitions, Project Exhibitions and Symposiums to present papers. Students are also made to undergo 6 Month Industrial Internship during final year, where they hone their technical skills in the realm of computers. The department effectively prepares students to pursue leadership, technical, and management positions in a variety of industries. Students have obtained successful top-notch placements at leading companies like IBM, Infosys, Wipro, Cognizant, TCS, HCL and other leading companies.

Course Objectives

Augmented Reality (AR) and Virtual Reality (VR) seamlessly integrate the digital world with the real world. This course provides students with an in-depth understanding of technologies such as Computer Graphics,3D modelling, UX/UI design and Computer Vision.

Course Outcomes

Upon completion of the course, the student will be able to achieve the following outcomes:

- The students will learn a ton about Virtual and Augmented Reality, get familiar with the latest technology, techniques and software.
- Furthermore, each student will be exposed to the process of creating virtual environment.

Course Contents

Topic	Hours
Introduction	4
VR Modeling	8
Travel and Wayfinding in Virtual Environments,	4
Human Factors in Virtual Reality	7
Traditional and Emerging VR/AR applications	5
Case study on Construction of Geographic Virtual World	4
Total	32

Resource Person

Mr. Avirald Wivedi
Senior Specialist, VIrtual Reality & Augment Reality
India.
mr.aviraldrivedi@gmail.com, (+91) 89085 69382

Venue

ATF-15, III-Floor, U-Block,
VFSTR Deemed to be university

Coordinator

Dr. K. Sujatha
Assistant Professor, Department of IT, VFSTR, Vadlamudi
Ph: 9989728642, e-mail: sujatha101012@gmail.com

Head of the Department

Dr. VEERANJANEYULU NARALASETTY
Professor, HOD, IT & CA, VFSTR,
Ph:9347162038, e-mail:hodit@vignan.ac.in

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. A good mix of young and senior faculty with a rich research, teaching and industry background supports all the departments. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value Added Course On

Basics of MS Excel
For Master of Business Administration

(16.12.2023 to 23.12.2023)

Organized by
DEPARTMENT OF MANAGEMENT STUDIES
Venue: AFTF09, U-Block

ABOUT THE DEPARTMENT

The thrust of the department of management studies is to impart functional knowledge of general management and specialized knowledge of the related subject. One of the differentiating features of the curriculum is the range and depth of electives, which are industry specific and where rigor and relevance are appropriately balanced, resulting in greater marketability of the graduates anywhere or to become entrepreneurs.

COURSE OBJECTIVES

1. To teach students the advanced formulas of MS Excel as well as how to use which formula for which occasion.
2. To equip students with the knowledge on how to debug and audit the advanced formulas and create sophisticated outputs for financial analysis, including tables, charts, and graphs.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- *Apply advanced formulas to lay data in readiness for analysis*
- *Use advanced techniques for report visualization*
- *Leverage on various mythologies of summarizing data*
- *Understand and apply basic principles of laying out excel models for decision making*

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
Working with Data and time function	2
Working with mathematical functions of MS Excel	2
Working with logical functions in MS Excel	2
Practicing formulae on large data sets	4
Working with LOOK UP function in MS Excel	2
Working with VLOOK UP function in MS Excel	3
Working with HLOOK UP function in MS Excel	2
Working with index and match functions	2
Working with PIVOT tables in MS-Excel	2
Working with graphs and charts	4
Working with filters in MS Excel	3
Working with conditional formatting	2
Total Hours	30

RESOURCE PERSONS

Dr. P. Chenchu Reddy, Assistant Professor, Dept of Business Management

Vikrama Simhapuri University, Nellore - 524004

Mail Id: drpcreddy9@gmail.com, Ph No: 9059082462

For Registration, please contact course coordinator below:

COORDINATOR

Mr. T Nagendra Kumar, Assistant Professor, Department of Management Studies, VFSTR, Vadlamudi. Ph. 9550938786, Email: nagendrakumarturaga@gmail.com

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. A good mix of young and senior faculty with a rich research, teaching and industry background supports all the departments. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value Added Course On

ACCOUNTING USING TALLY
For Students of Master of Business Administration
(15.05.2024 to 20.05.2024)

Organized by
Department of Management Studies
Venue: AFTF07, U-Block, VFSTR

ABOUT THE DEPARTMENT

The thrust of the department of management studies is to impart functional knowledge of general management and specialized knowledge of the related subject. One of the differentiating features of the curriculum is the range and depth of electives, which are industry specific and where rigor and relevance are appropriately balanced, resulting in greater marketability of the graduates anywhere or to become entrepreneurs.

COURSE OBJECTIVES

The objective of this course is to familiarize students with the various concepts of Tally. Students are able to use data entry for transactions in tally, prepare financial statements, and generate financial reports for MIS and also assist to run an online business or work for an organization.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- *Understand the use of Tally as accounting package.*
- *Analyse the rules for computerized accounts*
- *Identify the pre-declined vouches.*
- *Analyse the financial position of the organization through final accounts and ratio analysis.*

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
Introduction to Tally	2
Accounting concepts – meaning, principles, functions and limitations.	2
Accounting concepts and preparation of ledger accounts	3
Preparation of journal entries in tally	2
Accounting information in tally	2
Inventory information in tally	2
Preparation of Accounting vouchers	2
Preparation of Order vouchers	3
Preparation of statutory reports	4
Import data in tally	2
Preparation of bank statements	2
Preparation of P & L Accounts	2
Preparation of Balance Sheets and Ratio Analysis	2
Total	30

RESOURCE PERSON

Dr.Sharmista Banerjee
Professor, Department of Management Studies
Calcutta University, 09830251744, sharmisthabanerjee@hotmail.com
For Registration, please contact course coordinator below:

COORDINATOR

Mr. Nagendra Kumar, Assistant Professor, Department of Management Studies, VFSTR, Vadlamudi. Ph. 9550938786, Email: nagendrakumarturaga@gmail.com

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. A good mix of young and senior faculty with a rich research, teaching and industry background supports all the departments. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value Added Course On

Advanced Excel for Data Analysis
(01.02.2024 to 06.02.2024)

Organized by

Department of
Management Studies
Venue: AFTF06, U-Block

ABOUT THE DEPARTMENT

The thrust of the department of management studies is to impart functional knowledge of general management and specialized knowledge of the related subject. One of the differentiating features of the curriculum is the range and depth of electives, which are industry specific and where rigor and relevance are appropriately balanced, resulting in greater marketability of the graduates anywhere or to become entrepreneurs.

COURSE OBJECTIVES

The role of this course is to teach participants the various formulas used in Excel, how to debug them, audit them and how to use which formula for which occasion (and also know few alternatives for any given formula problem).

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- *Use advanced functions and productivity tools to assist in developing worksheets*
- *Manipulate data lists using PivotTables*
- *Use filters and lookup functions and report results from multiple worksheets*

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
Data: Import from web, Import from text, Text to columns, Remove duplicates, Grouping and ungrouping.	4
Review: Proofing, Comments, Protection.	4
Working with index and match functions: Absolute Referencing; Problems with Absolute/ Relative Cell Referencing, Creating Absolute / Mixed References.	4
Working with LOOK UP functions	4
Working with HLOOK UP function in MS Excel	4
Working with PIVOT tables in MS-Excel	3
Statistical Functions: Using The SUMIF/COUNTIF Functions Using AVERAGE /COUNT/ LARGER/ SMALLER Functions	4
Conditional formatting	3
Total Hours	30

RESOURCE PERSONS

Dr. Talluri. Sreenivas, Professor, Department of Business Administration, Yogi Vemana University, Kadapa – 516003, Mail Id: tallurus@gmail.com

Phone: 9440261444

For Registration, please contact course coordinator below:

COORDINATOR

Mr A Sai Manideep, Assistant Professor, Department of Management Studies, VFSTR, Vadlamudi. Ph. 9000652592, Email: asm_mgt@vignan.ac.in

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. A good mix of young and senior faculty with a rich research, teaching and industry background supports all the departments. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value Added Course On

Statistical computation using SPSS

For Students of Master of Business Administration
(13.06.2024 to 18.06.2024)

Organized by
Department of Management Studies
Venue: AFTF08, U-block, VFSTR

ABOUT THE DEPARTMENT

The thrust of the department of management studies is to impart functional knowledge of general management and specialized knowledge of the related subject. One of the differentiating features of the curriculum is the range and depth of electives, which are industry specific and where rigor and relevance are appropriately balanced, resulting in greater marketability of the graduates anywhere or to become entrepreneurs.

COURSE OBJECTIVES

1. This course is to summarize and aid in the interpretation of basic research findings.
2. This tools aids in conduction of social sciences research. Completion of the course results in acquisition of statistical knowledge and skill.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- *Understand the use of SPSS*
- *Analyse the data through visual schematic analysis.*
- *Analyse business data using SPSS for decision-making.*

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
Introduction to research tool SPSS	2
Understanding the concepts of data view and variable view	3
SPSS Commands	3
Importing data, and Descriptive analysis	4
Assumptions of Regression on data	4
Construction of frequency tables	3
Construction of frequency graphs	4
Application of central tendency formulas	3
Analyzing relation between variables using correlation and regression analysis	4
Total Hours	30

RESOURCE PERSON

Dr.Y.Srinivasulu, Professor- Department of Management studies
Pondicherry Central University, Pondicherry, 07639846101
yarlagadda_srinivasulu@rediffmail.com
For Registration, please contact course coordinator below:

COORDINATOR

Mr. A Sai Manideep, Assistant Professor, Department of Management Studies, VFSTR, Vadlamudi. Ph. 9000652592, Email: asm_mgt@vignan.ac.in
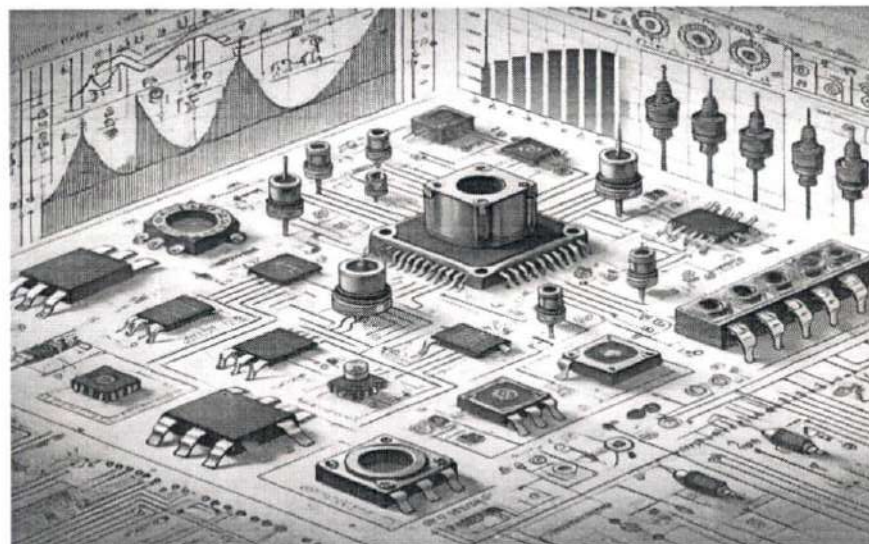
ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
PRACTICAL INSIGHTS INTO POWER ELECTRONICS APPLICATIONS

08th – 12th August, 2023
Venue: Power Electronics Lab

Organized by
Department of
Electrical and Electronics Engineering

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering was established in the year 1999 with the motto: *Excellence in Engineering Education*. The department strives for excellence in teaching, research and consultancy services to the industry. It has eminence in selected niche areas of Electrical and Electronics Engineering. The Department has highly qualified and experienced faculty with a strong research and professional expertise. Besides teaching undergraduate and post-graduate courses, the faculty members are engaged in a broad range of research and development areas in collaboration with renowned overseas universities, research institutions and multinational companies. The aim is to produce engineers who are flexible across disciplines and able to apply their knowledge and skills to solve complex problems. The department aims to produce thinking engineers, who will create new technologies for the future. The Department of Electrical and Electronics Engineering currently offers B.Tech in EEE, M.Tech programme in Power Electronics & Drives and Power Systems besides the Ph.D programme.

COURSE OBJECTIVE

The objective of this course is to equip students with practical knowledge of power electronics circuits and their applications in real-world systems. It aims to develop hands-on skills in designing, analysing, and troubleshooting power electronic devices. By the end, students will be capable of applying power electronics concepts to solve industry-relevant challenges.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- Analyse and design basic power electronics circuits used in various industrial applications.
- Demonstrate practical skills in operating and troubleshooting power electronic devices and converters.
- Integrate power electronic solutions to improve efficiency and performance in real-world engineering projects.

COURSE CONTENTS

The following topics will be covered:

Topic	Hours
Overview of Power Electronics	4
Applications of Power Electronics	4
Role of Power Electronic in Modern Technology	4
Power Semiconductor Devices	4
Detailed Study of Diodes and Thyristors	4
Introduction to Rectifier Circuits	4
Real-world Applications of Rectifiers in Power Electronics	6
Total Hours	**30**

Last date of registration: 05-08-2023

RESOURCE PERSONS

Dr. S. Senthil Kumar,
Professor, EEE, NIT, Tirchy.

Dr. K. Raja Rajeswari ,
Professor, EEE, JNTU, Kakinada.

COORDINATOR

Dr. P.M. Venkatesh
Assistant Professor, Department of EEE,
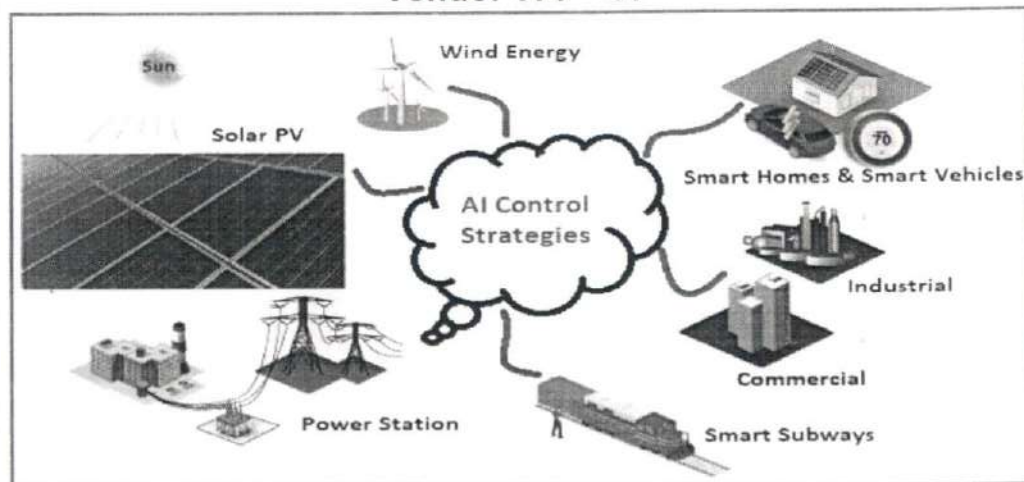VFSTR, Vadlamudi.
9030695565

ABOUT THE INSTITUTE

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
On
Applications of AI in power electronics and renewable energy systems

4th - 9thSeptember 2023

Venue: VFF - 07

Organized by
Department of
Electrical and Electronics Engineering

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering was established in the year 1999 with the motto: *Excellence in Engineering Education*. The department strives for excellence in teaching, research, and consultancy services to the industry. It has eminence in selected niche areas of Electrical and Electronics Engineering. The Department has highly qualified and experienced faculty with a strong research and professional expertise. Besides teaching undergraduate and post-graduate courses, the faculty members are engaged in a broad range of research and development areas in collaboration with renowned overseas universities, research institutions and multinational companies. The aim is to produce engineers who are flexible across disciplines and able to apply their knowledge and skills to solve complex problems. The department aims to produce thinking engineers, who will create new technologies for the future. The Department of Electrical and Electronics Engineering currently offers B.Tech in EEE, M.Tech programme in Power Electronics & Drives and Power Systems besides the Ph.D programme.

COURSE OBJECTIVE

The objective of applying AI in power electronics and renewable energy systems includes enhancing system efficiency through intelligent control strategies and optimization. AI can enable predictive maintenance and fault diagnosis, reducing downtime and operational costs. It facilitates the integration of renewable energy by forecasting energy generation and demand, ensuring grid stability. AI-driven techniques also improve energy storage management, ensuring optimal use of renewable sources. Finally, AI supports the development of adaptive algorithms for real-time decision-making in dynamic energy environments.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- *Students will understand how to apply AI techniques like neural networks, fuzzy logic, and machine learning*
- *Course will equip students with skills to develop AI models for forecasting renewable energy generation*
- *Students will gain experience in using AI for real-time decision-making in complex power electronic systems*

COURSE CONTENTS

The following topics will be covered:

Topic	Hours
Introduction to AI in Energy Systems	5
AI in Power Electronics Control Systems	5
AI for Renewable Energy Forecasting	5
Fault Detection and Diagnosis using AI	5
AI in Energy Storage Management	5
Case Studies and Emerging Trends	5
Total Hours	**30**

RESOURCE PERSONS

Dr. T. Vinay Kumar,
Assistant Professor, NIT warangal.

Dr. B. SatishBabu,
Sr. Staff Engineer
Cypress semiconductor technology india
Bangalore

CO-ORDINATOR

Dr.A.R. Vijaybabu
Assoc. Professor, Department of EEE,
VFSTR, Vadlamudi.
Contact No: 8096777458

❖ Last date for the Registration: **3rdSeptember, 2023**
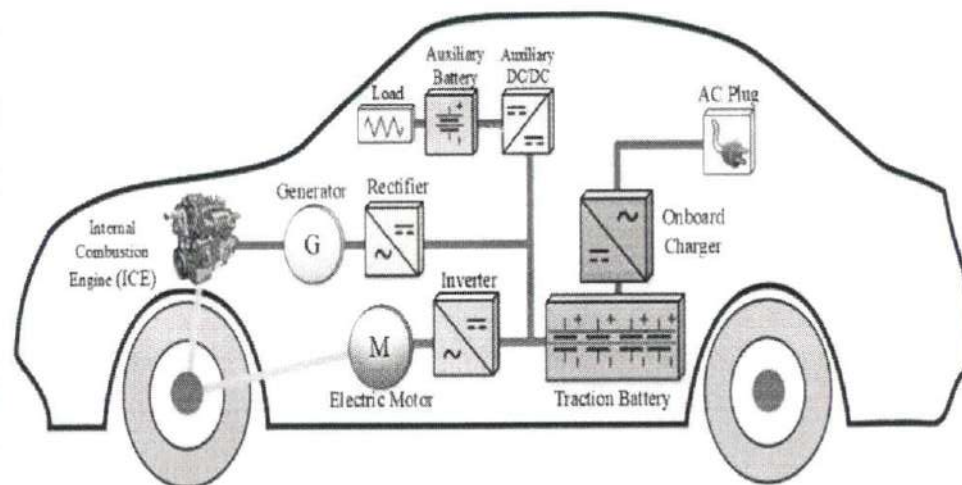
ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Electric Vehicle Powertrain Performance Design

09 - 14 October, 2023
Venue: Sravanthi Seminar Hall, H-Block.

Organized by
Department of
Electrical and Electronics Engineering

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

The Department of Electrical and Electronics Engineering was established in the year 1999 with the motto: *Excellence in Engineering Education*. The department strives for excellence in teaching, research and consultancy services to the industry. It has eminence in selected niche areas of Electrical and Electronics Engineering. The Department has highly qualified and experienced faculty with a strong research and professional expertise. Besides teaching undergraduate and post-graduate courses, the faculty members are engaged in a broad range of research and development areas in collaboration with renowned overseas universities, research institutions and multinational companies. The aim is to produce engineers who are flexible across disciplines and able to apply their knowledge and skills to solve complex problems. The department aims to produce thinking engineers, who will create new technologies for the future. The Department of Electrical and Electronics Engineering currently offers B.Tech in EEE, M.Tech programme in Power Electronics & Drives and Power Systems besides the Ph.D programme.

COURSE OBJECTIVE

The primary objective of this course is for students to acquire knowledge on EV overall power train modelling, parameter calculation, and performance.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- *Upon successfully completing of the COURSE, the students will be able to understand the main systems/components of an electric vehicle and how they operate*
- *Also, students learn the vehicle Dynamics and Parameters calculation.*
- *Students also learn how to model vehicles in simulation.*

COURSE CONTENTS

The following topics will be covered:

Topic	Hours
Introduction to Electric Vehicle System and Components	4
Vehicle Parameter Calculation	4
Longitudinal Vehicle Dynamics	4
Electric Machine Calculation	4
Vehicle Average Energy Consumption	4
High Voltage Battery Pack Calculation	4
Electric Vehicle simulation and Data Analysis	6
Total Hours	**30**

Last date of registration: 07-10-2023

RESOURCE PERSON

Mr. N. Rajanandh Patnayak

Lead Engineer,

Eaton, Pune.

COORDINATOR

Mr. N. Bharath Kumar
Assistant Professor, Department of EEE,
VFSTR, Vadlamudi.
+91 7586985867
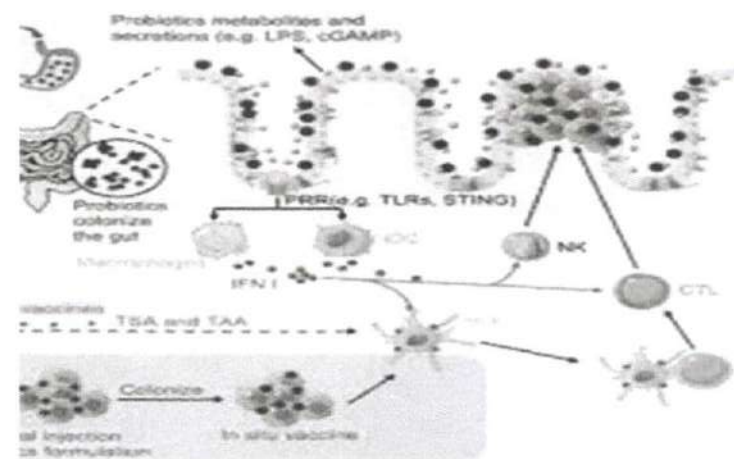
ABOUT THE INSTITUTION

Vignan 's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of educational Institutions, is a NAAC 'A⁺' accredited institution. Located in serene environs of Vadlamudi on the Guntur- Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the earner building of many students who step into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value added Course
on
Advancements in the Study and Application of Probiotics

Date : 30th Jan to 3rd Feb 2023

Organized by

Department of Biotechnology
(NBA Accredited 2020 - 26)

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/r 3 of UGC Act 1956

NAAC A⁺
Accredited

ABOUT THE DEPARTMENT

Department of Biotechnology has well qualified and experienced faculty and supported by DST- FIST since 2015 and several sponsored projects from DST and MoEF, Govt. of India. All the various facets of teaching – learning process such as state of art infrastructure, innovative teaching methodologies engineer who is abreast of the latest and fast changing technological trends in the market. The Department of Biotechnology is having equipment related to enzyme technology, bioprocess engineering, animal cell culture and plants tissue culture. In addition, the department is endowed with BSL-II and clean room facility

COURSE OBJECTIVES

1. To learn techniques for isolating and cultivating probiotic strains from diverse sources.
2. To acquire skills for identifying and enumerating probiotic microorganisms.
3. To optimize fermentation parameters for effective probiotic growth and viability.

COURSE OUTCOMES

1. Able to isolate and cultivate probiotic strains from diverse sources effectively.
2. Skilled in identifying and enumerating probiotic microorganisms.

VENUE

ASF-02 U BLOCK

COURSE CONTENTS

The following topics with be covered

S.No	Date	Subject Expert	No. of hrs	Activity
1	30.01.2023	Mrs. M.V.S.S.Pawan	7	Perform isolation and culturing of probiotic strains from diverse sources using selective media.
2	31.01.2023	Mrs. M.V.S.S.Pawan	7	Use microscopic examination and colony counting methods to identify and quantify probiotics.
3	1.02.2023	Dr. D. Shyam Babu	6	Conduct fermentation experiments with controlled pH, temperature, and nutrients to optimize probiotic growth.
4	2.02.2023	Dr. D. Shyam Babu	6	Perform assays to test acid and bile tolerance, antimicrobial activity, and cell adhesion of probiotics.
5	3.02.2023	Dr. M. Indira	6	Conduct viable cell count assays and shelf-life studies to evaluate probiotic strain stability and viability in any probiotic product.
	Total		32	

RESOURSCE PERSONS

Mrs. M.V.S.S.Pawan
Manager R and D, APIIC Industrial Growth Centre, Gundlapalli
Dr. D. Shyam babu
Assistant professor, Department of Biotechnology, VFSTR,Vadlamudi

COURSE COORDINATOR

Dr. M. Indira
Associate professor, Department of Biotechnology, VFSTR,Vadlamudi
Email : indu221007@gmail.com,
Cell: 9010181728

ABOUT THE INSTITUTION

Vignan 's Foundation for Science, Technology and Research is the Flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A$^+$' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the earner building of many students who step into competitive and global professionals, imbued with ethical consciousness and social awareness. All the Departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value added Course
on
Herbal Formulations in Cosmetics: Bridging Nature and Skincare

Date : **30th Jan to 3rd Feb 2023**

Organized by

Department of Biotechnology
(NBA Accredited 2020 - 26)

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

NAAC A$^+$
Accredited

ABOUT THE DEPARTMENT

Department of Biotechnology has well qualified and experienced faculty, supported by DST- FIST since 2015 and several sponsored projects from DST and MoEF, Govt. of India. Our commitment to excellence encompasses all facets of teaching learning process, including state-of-the-art infrastructure and innovative teaching methodologies. Our faculty who are professionals well versed in the latest and rapidly evolving technological trends in the market. Department of Biotechnology is equipped with cutting edge facilities related to enzyme technology, bioprocess engineering, animal cell culture and plants tissue culture. In addition, the department is endowed with BSL-II and clean room facility

COURSE OBJECTIVES

1. To Identify and Authentication of MAPs.
2. To Prepare the Herbal extracts with suitable extraction methods
3. To incorporate the herbal extracts in various cosmetic formulations

COURSE OUTCOMES

1. Apply the herb process techniques for their applications.
2. Analyze active compounds using extraction methods.

VENUE

ASF-15 U BLOCK

COURSE CONTENTS

The following topics will be covered

S.No	Date	Subject Expert	No. of hrs	Activity
1	30.01.2023	Dr. K. Chandra Sekhar	7	Different methods of processing of herbs like collection, harvesting, garbling, packing and storage
2	31.01.2023	Dr. K. Chandra Sekhar	6	Different methods of extraction including maceration, infusion, soxhlet extraction
3	1.02.2023	Dr. N. Jalaja	7	Formulations like skin care and hair care preparations
4	2.02.2023	Dr. N. Jalaja	6	Formulation of herbal therapeutic products
5	3.02.2023	Dr. Md. Nazneen Bobby	7	Quality control of raw materials
		Total	33	

RESOURSCE PERSONS

Dr. K. Chandra Sekhar, Manager, Sugen Life Sciences, Tirupati.
Dr. N. Jalaja, Associate Professor, Department of Biotechnology, VFSTR, Vadlamudi-522213.

COURSE COORDINATOR

Dr. Md. Nazneen Bobby
Associate professor, Department of Biotechnology, VFSTR,Vadlamudi
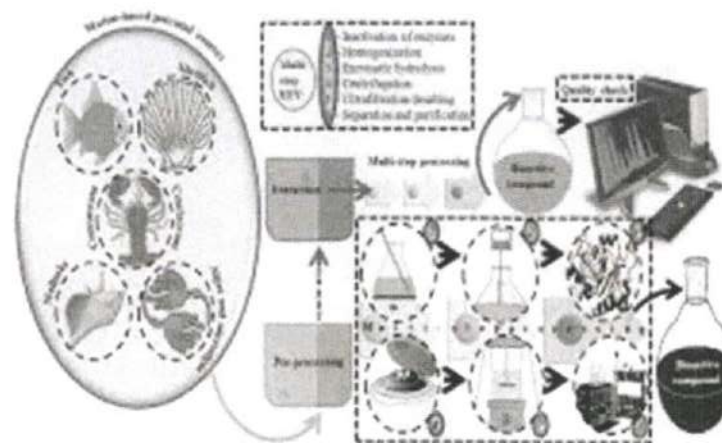*Email : slh41025@gmail.com , Cell: 9010181728*

ABOUT THE INSTITUTION

Vignan 's Foundation for Science, Technology and Research is the Flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A⁺' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the earner building of many students who step into competitive and global professionals, imbued with ethical consciousness and social awareness. All the Departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value added Course
on
Extraction, Identification, and Analysis of bioactive compounds

Date : **30th Jan to 3rd Feb 2023**

Organized by

Department of Biotechnology
(NBA Accredited 2020 - 26)

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
Estd. u/s 3 of UGC Act 1956
NAAC A⁺ Accredited

ABOUT THE DEPARTMENT

Department of Biotechnology has well qualified and experienced faculty, supported by DST- FIST since 2015 and several sponsored projects from DST and MoEF, Govt. of India. Our commitment to excellence encompasses all facets of teaching learning process, including state-of-the-art infrastructure and innovative teaching methodologies. Our faculty who are professionals well versed in the latest and rapidly evolving technological trends in the market. Department of Biotechnology is equipped with cutting edge facilities related to enzyme technology, bioprocess engineering, animal cell culture and plants tissue culture. In addition, the department is endowed with BSL-II and clean room facility

COURSE OBJECTIVES

1. To extract and identify bioactive compounds using different solvents.
2. To determine bioactive compounds by preliminary screening and GC-MS.
3. To identify bioactive compounds TLC, Preparative TLC and HPLC.

COURSE OUTCOMES

1. Identification of bioactive compounds by GC-MS.
1. Application of TLC, Prepartive TLC and HPLC techniques.

VENUE

ASF-03 U BLOCK

COURSE CONTENTS

The following topics will be covered

S.No	Date	Subject Expert	No. of hrs	Activity
1	30.01.2023	Dr.U. Jayalakshmi,	7	Isolation of bioactive compounds
2	31.01.2023	Dr.U. Jayalakshmi,	6	Extraction of bioactive compounds from medicinal plants using different solvents
3	1.02.2023	Dr. S. Anil Kumar	7	Determination of secondary metabolites and bioactive compounds by GC-MS
4	2.02.2023	Dr. S. Anil Kumar	6	Isolation of bioactive compounds
5	3.02.2023	Dr. S. Asha	6	Identification of bioactive compounds
		Total	32	

RESOURSCE PERSONS

Dr. U. Jayalakshmi
Sr. Scientist, Vimta Labs, Hyderabad

Dr. S. Anil Kumar
Associate Professor,
Department of Biotechnology, VFSTR

COURSE COORDINATOR

Dr. S. Asha
professor, Department of Biotechnology, VFSTR, Vadlamudi
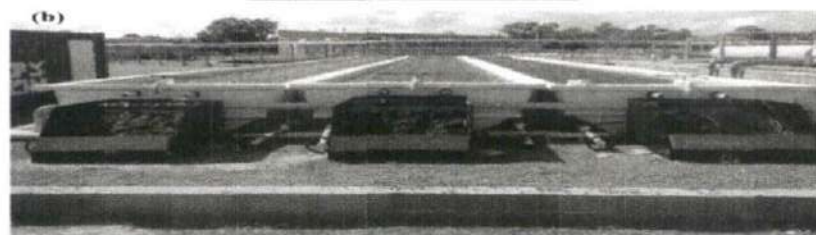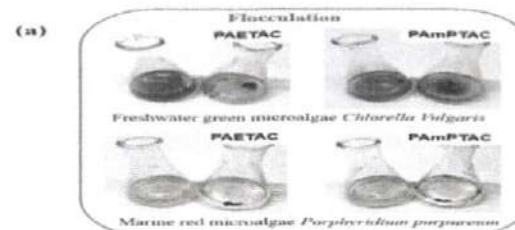*Email : sai848@gmail , Cell: 9440757505*

ABOUT THE INSTITUTION

Vignan 's Foundation for Science, Technology and Research is the Flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the earner building of many students who step into competitive and global professionals, imbued with ethical consciousness and social awareness. All the Departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value added Course
on
Microalgae for nutrient removal from wastewater

Date : **30th Jan to 3rd Feb 2023**

Organized by

Department of Biotechnology
(NBA Accredited 2020 - 26)

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
Estd. u/s 3 of UGC Act 1956

NAAC A+
Accredited

ABOUT THE DEPARTMENT

Department of Biotechnology has well qualified and experienced faculty, supported by DST- FIST since 2015 and several sponsored projects from DST and MoEF, Govt. of India. Our commitment to excellence encompasses all facets of teaching learning process, including state-of-the-art infrastructure and innovative teaching methodologies. Our faculty who are professionals well versed in the latest and rapidly evolving technological trends in the market. Department of Biotechnology is equipped with cutting edge facilities related to enzyme technology, bioprocess engineering, animal cell culture and plants tissue culture. In addition, the department is endowed with BSL-II and clean room facility

COURSE OBJECTIVES

1. To select suitable microalga for bioremediation applications.
2. To check the efficient removal of nutrients from the wastewater streams.
3. To evaluate microalgal growth and their performance.

COURSE OUTCOMES

1. Identify possible wastewater streams and their nutrient levels.
2. Selection of algae for wastewater Treatment.

VENUE

ASF-07 U BLOCK

COURSE CONTENTS

The following topics will be covered

S.No	Date	Subject Expert	No. of hrs	Activity
1	30.01.2023	Mr.B Sravan	8	Isolation and screening of feasible microalgae for the treatment
2	31.01.2023	Mr.B Sravan	7	Screened microalgae cultivation in the selective media
3	1.02.2023	Dr. Sankaran K	7	Acclimatization of microalgae to the wastewater
4	2.02.2023	Dr. Sankaran K	7	Growth of microalgae in the wastewater and pollution load reduction
5	3.02.2023	Dr. A. Ranga Rao	6	Characterization of microalgae biomass and its utilization
		Total	35	

RESOURSCE PERSONS

B Sravan., CEO, BlueDrop Enviro Pvt. Ltd., Hyderabad

Dr. Sankaran K, Assistant Professor, Department of Biotechnology, VFSTR, Vadlamudi-522213.

COURSE COORDINATOR

Dr. A. Ranga Rao
Associate Department of Biotechnology, VFSTR, Vadlamudi
Email : Dr. Ranga Rao Ambati , Cell: 7358744500
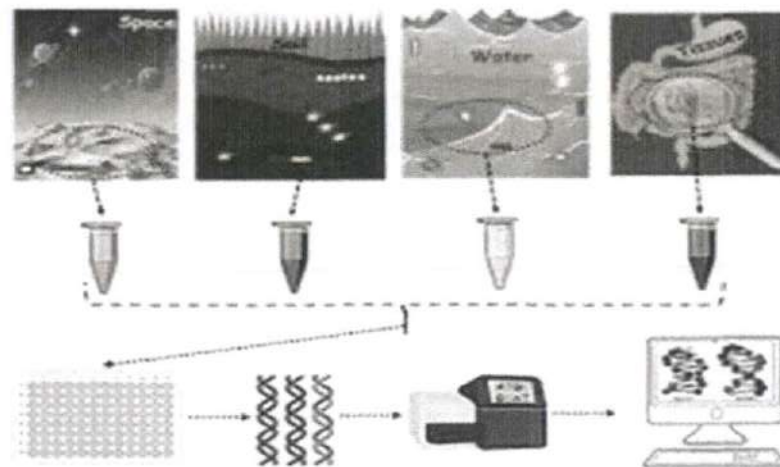
ABOUT THE INSTITUTION

Vignan 's Foundation for Science, Technology and Research is the Flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A⁺' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the earner building of many students who step into competitive and global professionals, imbued with ethical consciousness and social awareness. All the Departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value added Course
on

NGS for Microbial Metagenomics

Date : **30th Jan to 3rd Feb 2023**

Organized by

Department of Biotechnology
(NBA Accredited 2020 - 26)

ABOUT THE DEPARTMENT

Department of Biotechnology has well qualified and experienced faculty, supported by DST- FIST since 2015 and several sponsored projects from DST and MoEF, Govt. of India. Our commitment to excellence encompasses all facets of teaching learning process, including state-of-the-art infrastructure and innovative teaching methodologies. Our faculty who are professionals well versed in the latest and rapidly evolving technological trends in the market. Department of Biotechnology is equipped with cutting edge facilities related to enzyme technology, bioprocess engineering, animal cell culture and plants tissue culture. In addition, the department is endowed with BSL-II and clean room facility

COURSE OBJECTIVES

1. To learn the technique of Next-Generation Sequencing for the analysis of microbial metagenomes.
2. To enlighten about the current trends in NGS as a cutting edge technology
3. To enlighten about the future directions of various opportunities in the industries.

COURSE OUTCOMES

1. Analyze microbial metagenomes using NGS techniques
2. Solve real-world challenges in microbiology and related fields.

VENUE

ASF-06 U BLOCK

COURSE CONTENTS

The following topics will be covered

S.No	Date	Subject Expert	No. of hrs	Activity
1	30.01.2023	Dr.V.Naveen Kumar	8	Lecture and practice on microbial metagenome
2	31.01.2023	Dr.V.Naveen Kumar	7	Lecture and practice on primer design
3	1.02.2023	Dr. A.Ranganadh Reddy	7	Lecture and practice on mutational analysis
4	2.02.2023	Dr. Charan Raja	7	Lecture and practice NGS techniques
5	3.02.2023	Dr. A.Ranganadh Reddy	6	NGS data analysis
		Total	35	

RESOURSCE PERSONS

Dr. V. Naveen Kumar, Founder and Director, Immu Genix Biosciences Pvt Ltd., Chennai

Dr. A. Ranganadh Reddy, Associate Professor, Department of Biotechnology, VFSTR, Vadlamudi-522213.

COURSE COORDINATOR

Dr. M. Charan Raja
Assistant Professor, Department of Biotechnology, VFSTR, Vadlamudi
Email: mrcharanraja@gmail.com, Cell: 9944320772

ABOUT THE INSTITUTION

Vignan 's Foundation for Science, Technology and Research is the Flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the earner building of many students who step into competitive and global professionals, imbued with ethical consciousness and social awareness. All the Departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value added Course

on

Emerging Trends in Xenobiotic Bioremediation

Date : **30th Jan to 3rd Feb 2023**

Organized by

Department of Biotechnology
(NBA Accredited 2020 - 26)

ABOUT THE DEPARTMENT

Department of Biotechnology has well qualified and experienced faculty, supported by DST- FIST since 2015 and several sponsored projects from DST and MoEF, Govt. of India. Our commitment to excellence encompasses all facets of teaching learning process, including state-of-the-art infrastructure and innovative teaching methodologies. Our faculty who are professionals well versed in the latest and rapidly evolving technological trends in the market. Department of Biotechnology is equipped with cutting edge facilities related to enzyme technology, bioprocess engineering, animal cell culture and plants tissue culture. In addition, the department is endowed with BSL-II and clean room facility

COURSE OBJECTIVES

1. To adopt emerging bioremediation techniques for enhanced environmental remediation.
2. To analyze factors affecting the efficiency of bioremediation
3. To investigate enzymatic mechanisms for breaking down persistent organic pollutants.

COURSE OUTCOMES

1. Understand the classification of xenobiotic compounds and their environmental consequences.
2. Explore how plants contribute to the removal of xenobiotic compounds.

VENUE

ASF-09 U BLOCK

COURSE CONTENTS

The following topics will be covered

S.No	Date	Subject Expert	No. of hrs	Activity
1	30.01.2023	Mrs. P. Ajay	8	Case studies on major xenobiotic pollution incidents.
2	31.01.2023	Mrs. P. Ajay	7	Determination of factors affecting the efficiency of bioremediation
3	1.02.2023	Dr. D. John Babu	6	Isolation and characterization of potential microbial species for enhancing biodegradation rate
4	2.02.2023	Dr. D. John Babu	6	Mechanisms of microbial degradation of xenobiotics: co-metabolism, mineralization
5	3.02.2023	Dr. A.V. Narayana	6	Case studies of plants used in bioremediation (e.g., Populus, Brassica, Indian mustard)
		Total	33	

RESOURSCE PERSONS

Mr. P. Ajay, R and D Manager,
Syngene International Limited, Bangalore
Dr. D. John Babu, Professor,
Department of Biotechnology, VFSTR

COURSE COORDINATOR

Dr. A.V. Narayana
Associate Department of Biotechnology, VFSTR, Vadlamudi
Email : venkat.alugunulla@gmail.com, Cell: 9640374940

ABOUT THE INSTITUTION

Vignan 's Foundation for Science, Technology and Research is the Flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A⁺' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the earner building of many students who step into competitive and global professionals, imbued with ethical consciousness and social awareness. All the Departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value added Course
on
CAR T-Cells in Cancer Therapy: Design and Clinical Applications

Date : **30th Jan to 3rd Feb 2023**

Organized by

Department of Biotechnology
(NBA Accredited 2020 - 26)

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
Estd. u/s 3 of UGC Act 1956

NAAC A⁺
Accredited

ABOUT THE DEPARTMENT

Department of Biotechnology has well qualified and experienced faculty, supported by DST- FIST since 2015 and several sponsored projects from DST and MoEF, Govt. of India. Our commitment to excellence encompasses all facets of teaching learning process, including state-of-the-art infrastructure and innovative teaching methodologies. Our faculty who are professionals well versed in the latest and rapidly evolving technological trends in the market. Department of Biotechnology is equipped with cutting edge facilities related to enzyme technology, bioprocess engineering, animal cell culture and plants tissue culture. In addition, the department is endowed with BSL-II and clean room facility

COURSE OBJECTIVES

1. Analyze the therapeutic applications of CAR T-cells in cancer treatment.
2. Explore the latest advancements and challenges in CAR T-cell therapy..
3. Develop practical skills in designing, modifying, and evaluating CAR T-cells.

COURSE OUTCOMES

1. Engineering T-cells for cancer therapeutic purposes.
2. Providing modern solutions to challenges associated with CAR T-cells

VENUE

ASF-04 U BLOCK

COURSE CONTENTS

The following topics will be covered

S.No	Date	Subject Expert	No. of hrs	Activity
1	30.01.2023	Dr.Esdan Basha	7	Techniques for isolating T-cells from blood samples.
2	31.01.2023	Dr.Esdan Basha	6	Explore in-silico tools to design CAR constructs.
3	1.02.2023	Dr. Vijaya Sai	7	Transduction of T-cells with CAR genes.
4	2.02.2023	Dr. Vallayya Chari	6	Functional assays to assess T-cell activity (e.g., cytotoxicity assays).
5	3.02.2023	Dr. Vijaya Sai	6	Case Studies and Data Analysis of CAR T-Cells clinical trails for cancer treatment
		Total	32	

RESOURSCE PERSONS

Dr. Esdan Basha, Sr. Genomic Analyst, Yoda Diagnostics, Hyderabad, Telangana.

Dr. A. Vijaya Sai, Assistant Professor, Department of Biotechnology, VFSTR, Vadlamudi-522213.

COURSE COORDINATOR

Dr. K. Vallayya chari
Assistant professor, Department of Biotechnology, VFSTR,Vadlamudi
Email : charivfstr@gmail.com *, Cell : 8525054655*
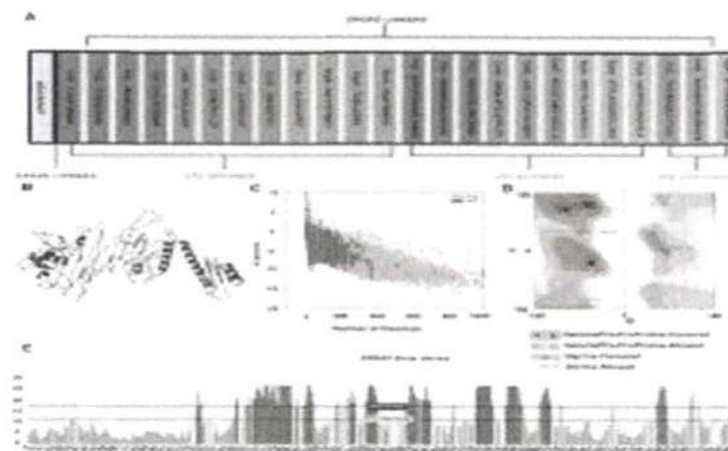
ABOUT THE INSTITUTION

Vignan 's Foundation for Science, Technology and Research is the Flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A⁺' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the earner building of many students who step into competitive and global professionals, imbued with ethical consciousness and social awareness. All the Departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value added Course

on

In silico reverse vaccinology studies on Clostridium difficle strains

Date : **30th Jan to 3rd Feb 2023**

Organized by

Department of Biotechnology
(NBA Accredited 2020 - 26)

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
Estd. u/t J of UGC Act 1956

NAAC A⁺
Accredited

ABOUT THE DEPARTMENT

Department of Biotechnology has well qualified and experienced faculty, supported by DST- FIST since 2015 and several sponsored projects from DST and MoEF, Govt. of India. Our commitment to excellence encompasses all facets of teaching learning process, including state-of-the-art infrastructure and innovative teaching methodologies. Our faculty who are professionals well versed in the latest and rapidly evolving technological trends in the market. Department of Biotechnology is equipped with cutting edge facilities related to enzyme technology, bioprocess engineering, animal cell culture and plants tissue culture. In addition, the department is endowed with BSL-II and clean room facility

COURSE OBJECTIVES

1. Proteomes retrieval *of Clostridium difficle* strains from NCBI.
2. Highly conserved vaccine candidate identification through computational approaches.
3. Subunit vaccine efficiency determination on MHC I and II.

COURSE OUTCOMES

1. Genomes, proteomes and their annotations information can be explored.
2. Application of computational methods for vaccine target identification.

VENUE

ASF - 14 U BLOCK

COURSE CONTENTS

The following topics will be covered

S.No	Date	Subject Expert	No. of hrs	Activity
1	30.01.2023	Dr.S. Karthik Kumar	7	Data Retrieval: Students will learn to retrieve relevant biological data from online databases and resources.
2	31.01.2023	Dr.S. Karthik Kumar	6	Application of computational methods for vaccine target identification
3	1.02.2023	Dr. Aparna	7	In Silico Vaccine Design: Students will design computational-based vaccines targeting specific diseases by identifying potential antigens and designing vaccine candidates.
4	2.02.2023	Dr. Aparna	6	Docking Studies: They will dock proposed subunit vaccines against MHC I and MHC II molecules to predict their binding affinity and potential immunogenicity.
5	3.02.2023	Dr.K.Sudheer Kumar	7	Molecular Dynamics Simulations: Students will conduct molecular dynamics simulations to evaluate the stability, flexibility, and interactions of the best-docked MHC-peptide complexes.
		Total	33	

RESOURSCE PERSONS

Dr. S. Karthik Kumar, Scientist,
Apollo Hospitals Educational & Research Foundation, Tirupati.
Dr. N. Aparna, Assistant Professor,
Department of Biotechnology, VFSTR.

COURSE COORDINATOR

Dr. K. Sudheer Kumar
Assistant professor, Department of Biotechnology, VFSTR,Vadlamudi
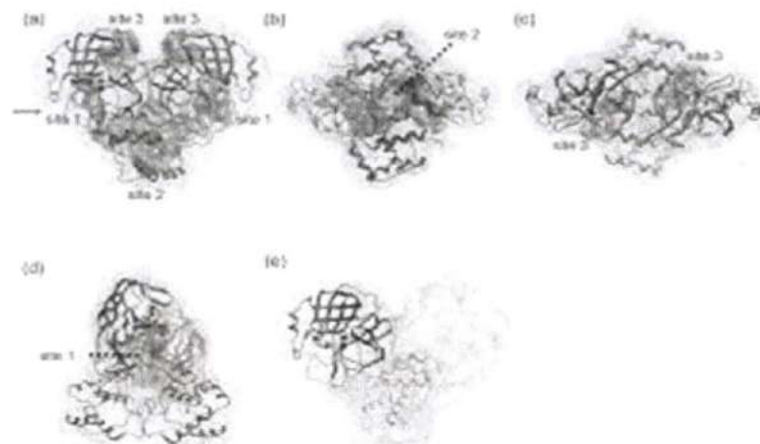*Email : drksk_bi@vignan.ac.in , Cell: 9100442636*

ABOUT THE INSTITUTION

Vignan 's Foundation for Science, Technology and Research is the Flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A⁺' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the earner building of many students who step into competitive and global professionals, imbued with ethical consciousness and social awareness. All the Departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value added Course
on
Molecular Dynamics Simulations in Drug Design

Date : **30ᵗʰ Jan to 3ʳᵈ Feb 2023**

Organized by

Department of Biotechnology
(NBA Accredited 2020 - 26)

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

NAAC A⁺
Accredited

ABOUT THE DEPARTMENT

Department of Biotechnology has well qualified and experienced faculty, supported by DST- FIST since 2015 and several sponsored projects from DST and MoEF, Govt. of India. Our commitment to excellence encompasses all facets of teaching learning process, including state-of-the-art infrastructure and innovative teaching methodologies. Our faculty who are professionals well versed in the latest and rapidly evolving technological trends in the market. Department of Biotechnology is equipped with cutting edge facilities related to enzyme technology, bioprocess engineering, animal cell culture and plants tissue culture. In addition, the department is endowed with BSL-II and clean room facility

COURSE OBJECTIVES

1. Explore the applications of GROMACS in studying bimolecular interactions.
2. Develop hands-on proficiency in preparing MD simulation input files and running simulations.
3. Foster critical thinking in the analysis and interpretation of MD simulation results for drug design.

COURSE OUTCOMES

1. Acquire knowledge of MD simulation workflows using GROMACS.
2. Apply MD simulation techniques to assess the dynamic behavior of protein-ligand complexes.

VENUE

AFF-09 U BLOCK

COURSE CONTENTS

The following topics will be covered

S. No	Date	Subject Expert	No. of hrs	Activity
1	30.01.2023	Mr.Shashank	7	System Setup: Set up protein-ligand complexes in GROMACS, including force field selection and topology generation.
2	31.01.2023	Mr.Shashank	6	Solvation and Energy Minimization: Solvate the system with appropriate solvent (e.g., water) and perform energy minimization to remove steric clashes and optimize the initial structure.
3	1.02.2023	Mrs.Naga Lakshmi	7	MD Simulation: Run MD simulations using GROMACS, consisting of equilibration and production phases to explore the conformational space of the protein-ligand complex.
4	2.02.2023	Mrs.Naga Lakshmi	7	Trajectory Analysis: Analyze trajectory files generated during MD simulations to assess system stability, protein-ligand interactions, and conformational changes.
5	3.02.2023	Dr.K.Abrahm Peele	7	Post-MD Analysis and Visualization: Perform post-MD analysis using GROMACS tools to calculate RMSD, RMSF, hydrogen bonds, and radius of gyration, and visualize the results using VMD.
		Total	34	

RESOURSCE PERSONS

Mr. K. Shashank, Manager, Thomson Reuters, Chennai.
Mrs. Naga Lakshmi, Assistant Professor, Department of Biotechnology, VFSTR, Vadlamudi-522213.

COURSE COORDINATOR

Dr. K. Abraham Peele
Associate professor, Department of Biotechnology, VFSTR,Vadlamudi
Email :drapk_bt@vignan.ac.in , Cell: 8297164147

ABOUT THE INSTITUTION

Vignan 's Foundation for Science, Technology and Research is the Flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A⁺' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the earner building of many students who step into competitive and global professionals, imbued with ethical consciousness and social awareness. All the Departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value added Course
on
Exploring Machine Learning Applications for Healthcare

Date : **30ᵗʰ Jan to 3ʳᵈ Feb 2023**

Organized by

Department of Biotechnology
(NBA Accredited 2020 - 26)

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
Estd. u/s 3 of UGC Act 1956
NAAC A⁺
Accredited

ABOUT THE DEPARTMENT

Department of Biotechnology has well qualified and experienced faculty, supported by DST- FIST since 2015 and several sponsored projects from DST and MoEF, Govt. of India. Our commitment to excellence encompasses all facets of teaching learning process, including state-of-the-art infrastructure and innovative teaching methodologies. Our faculty who are professionals well versed in the latest and rapidly evolving technological trends in the market. Department of Biotechnology is equipped with cutting edge facilities related to enzyme technology, bioprocess engineering, animal cell culture and plants tissue culture. In addition, the department is endowed with BSL-II and clean room facility

COURSE OBJECTIVES

1. Explore the WEKA Tool: various functionalities.
2. Application of Machine Learning Techniques to Healthcare Data.
3. Evaluate and Optimize Machine Learning Models.

COURSE OUTCOMES

1. Proficiency in Using WEKA for Healthcare Data.
2. Capability to Implement and Analyze Machine Learning Models

VENUE

AFF-07 U BLOCK

COURSE CONTENTS

The following topics will be covered

S. No	Date	Subject Expert	No. of hrs	Activity
1	30.01.2023	Mr. M. Narasimhulu	7	Hands-on Data Pre-processing Workshop: Students will learn and practice data cleaning and preparation techniques using real healthcare datasets in the WEKA environment.
2	31.01.2023	Mr. M. Narasimhulu	6	Model Building and Evaluation: Students will work in groups to build various machine learning models (e.g., decision trees, Naive Bayes) on healthcare datasets using WEKA and evaluate their performance.
3	1.02.2023	Dr.N. Anand Kumar	8	Case Study Analysis: Students will apply their newly acquired knowledge and skills to solve a real-world healthcare problem by building and evaluating machine learning models in WEKA.
4	2.02.2023	Dr.A. Ranganadh Reddy	7	Presentation and Discussion: Students will present their findings and discuss the challenges and insights gained from their case study analysis.
5	3.02.2023	Dr.A. Ranganadh Reddy	7	Feedback and Improvement: The instructor will provide feedback on students' work and suggest areas for improvement.
		Total	35	

RESOURSCE PERSONS

Mr. M. Narasimhulu, Manager, Medgenome, Bangalore.
Dr. A. Ranganadh Reddy, Associate Professor, Department of Biotechnology, VFSTR, Vadlamudi-522213.

COURSE COORDINATOR

Dr. N. Anand Kumar
Assistant professor, Department of Biotechnology, VFSTR,Vadlamudi
Email : drakn_bt@vignan.ac.in , Cell: 9949586996
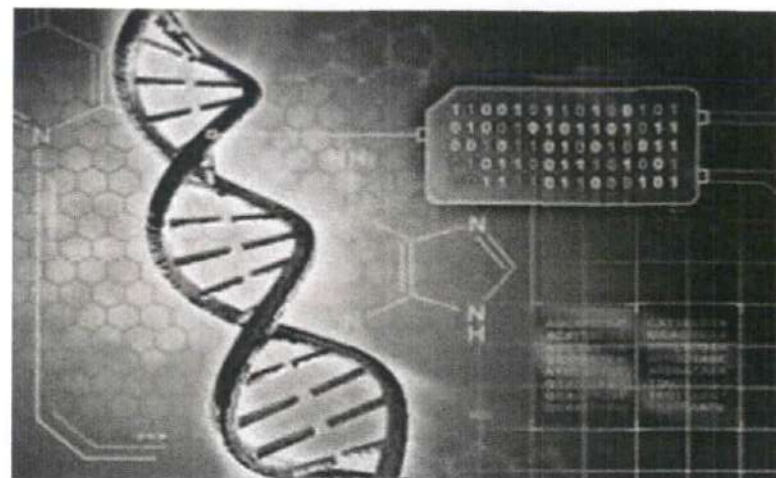
ABOUT THE INSTITUTION

Vignan 's Foundation for Science, Technology and Research is the Flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the earner building of many students who step into competitive and global professionals, imbued with ethical consciousness and social awareness. All the Departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value added Course
on
Methods in Computational Evolutionary Biology

Date : **30th Jan to 3rd Feb 2023**

Organized by

Department of Biotechnology
(NBA Accredited 2020 - 26)

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estb. u/s 3 of UGC Act 1956

NAAC A+
Accredited

ABOUT THE DEPARTMENT

Department of Biotechnology has well qualified and experienced faculty, supported by DST- FIST since 2015 and several sponsored projects from DST and MoEF, Govt. of India. Our commitment to excellence encompasses all facets of teaching learning process, including state-of-the-art infrastructure and innovative teaching methodologies. Our faculty who are professionals well versed in the latest and rapidly evolving technological trends in the market. Department of Biotechnology is equipped with cutting edge facilities related to enzyme technology, bioprocess engineering, animal cell culture and plants tissue culture. In addition, the department is endowed with BSL-II and clean room facility

COURSE OBJECTIVES

1. Exploring the fundamentals of Evolutionary theory and use of computational methods to solve evolutionary problems.
2. Applying different methods in Phylogenetic tree construction.
3. Analyzing Phylogenetic trees for modeling trait evolution to understand adaptation and coevolution.

COURSE OUTCOMES

1. A better understanding of evolutionary theory and evolutionary processes
2. Knows to construct phylogentic trees using appropriate method

VENUE

AFF- 06 U BLOCK

COURSE CONTENTS

The following topics will be covered

S. No	Date	Subject Expert	No. of hrs	Activity
1	30.01.2023	Mr. D.Trinath	7	Phylogenetic tree construction with MEGA and Phylip
2	31.01.2023	Mr. D.Trinath	6	Phylogenetic tree construction with RaXML and Fastree
3	1.02.2023	Dr. Raveena Madhulitha	7	Usage of caper, ape and geiger
4	2.02.2023	Dr. Raveena Madhulitha	7	Ancestral character reconstruction using Phytools
5	3.02.2023	Dr.Akash Ajay	6	Contrasting trait evolutionary models for discrete and continuous models
		Total	32	

RESOURSCE PERSONS

Mr. Trinath Daggupati, Manager, Eurofins Genomics, Bangalore.

Dr. N. Raveena Madhulitha, Assistant Professor, Department of Biotechnology, VFSTR, Vadlamudi-522213.

COURSE COORDINATOR

Dr. Akash Ajay
Assistant professor, Department of Biotechnology, VFSTR,Vadlamudi
Email : akashajay14@gmail.com , Cell : 8074470628

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A$^+$' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Applications of Drones in Agriculture
22 to 29th November 2023

Organized by

Department of
Applied Engineering

ABOUT THE DEPARTMENT

The Department of Applied Engineering. Here, the students are exposed to a wide range of topics within the field, including the technical aspects on systems design and implementation. The flexible academic curricula and hands-on research opportunities prepare the undergraduate and graduate students for successful careers in a multitude of disciplines. Live projects like battery Solar operated sprayer, and greenhouses for vegetables and fruits, managed completely by students are examples of initiatives taken by the Department.

COURSE OBJECTIVES

After completing this course, a student will be able to:

- To provide exposure to students in gaining knowledge on concepts and applications leading to using Drones in major agricultural operations.

- The study has a potential to move towards commercialization and achieving precision in agriculture in many ways.

- To acquire skills in increasing the efficiency of crop protection chemicals by reducing manpower requirement, reducing time, the volume of water, the quantity of chemicals and saving drift to the environment.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- The science and mechanism involved in drones and their different applications in agricultural field operations.

- Understand to monitor soil health, the seeding process and the processing of the sonication images

- Familiarize various areas of Drones applications and new developments

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
General Overview of drones technology	6
Introduction about: drone applications in agriculture	6
Area usage by drone and spraying of fertilizer	6
Applications of drones in monitoring the soil health, seeding process and examining the flaws	6
Use of drones to keep crops healthy by dispersing water, fertilizer, and pesticides. Drones coupled with spectroscopic and thermography technology for dry areas	6
Applications of drones to operate as mechanical pollinators and replaces bees	6
Total Hours	**36**

RESOURCE PERSON

Dr. Sandesh Kumar
Jain Principal Director & Head- CSTS - Bhopal

Programme Venue: AFTF – 05 (U – Block, VFSTRU)

For Registration Please Contact Coordinator on orbefore-20/11/2021

COORDINATOR

Dr. Ayyanna D S
Assistant Professor, Department of Applied Engineering, VFSTR, Vadlamudi.
Mobile : 8105130846 Email ID: ayyasiddapur@gmail.com

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A$^+$' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
On
Extreme precipitation changes and its implications in the Indian Subcontinent
3rd to 12th January 2024

Organized by
Department of
Applied Engineering

ABOUT THE DEPARTMENT

The Department of Applied Engineering. Here, the students are exposed to a wide range of topics within the field, including the technical aspects on systems design and implementation. The flexible academic curricula and hands-on research opportunities prepare the undergraduate and graduate students for successful careers in a multitude of disciplines. Live projects like Solar power operated sprayer and greenhouses for vegetables and fruits, managed completely by students are examples of initiatives taken by the Department

COURSE OBJECTIVES

After completing this course, a student will be able to:

- The major impacts of climate change in India would be on the hydrology, water resources and agriculture of the country.
- A rise in sea level due to thermal expansion of sea water and melting of ice from high altitudes and latitudes is also expected.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- Students acquire skills about essential components such as Rain drop, Snow, mist, drizzle and hail.
- Understand the working of the system, working of automated measurement of Rainfall Understand the advantages and limitations of existing system
- Familiarize various areas of rise in sea level due to thermal expansion of sea water and melting of ice from high altitudes and latitudes.

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
General Overview of precipitation and its impact	6
Introduction about impacts of climate change in India	6
Description about the hydrology, water resources and agriculture of the country	6
Types of Rainfall, Need for automated measurement of Rainfall	6
Use of Automatic weather station	6
About rise in sea level due to thermal expansion of sea water and melting of ice from high altitudes and latitudes	6
Total Hours	**36**

RESOURCE PERSON

Dr. Harshvardhan Korla,
Assistant professor,
Centurion University of Technology and Management,
Odisha:
Programme Venue: AFTF – 05 (U – Block, VFSTRU)

For Registration Please Contact Coordinator on orbefore-1/01/2024

COORDINATOR

Dr. Ayyanna D S
Assistant Professor, Department of Applied Engineering,
VFSTR, Vadlamudi.
Mobile : 8105130846 Email ID: ayyasiddapur@gmail.com

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A$^+$' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Role of Mechanization in Agriculture
1 to 8th December- 2023

Organized by
Department of
Applied Engineering

ABOUT THE DEPARTMENT

The Department of Applied Engineering. Here, the students are exposed to a wide range of topics within the field, including the technical aspects on systems design and implementation. The flexible academic curricula and hands-on research opportunities prepare the undergraduate and graduate students for successful careers in a multitude of disciplines. Live projects like battery Solar operated sprayer, and greenhouses for vegetables and fruits, managed completely by students are examples of initiatives taken by the Department.

COURSE OBJECTIVES

After completing this course, a student will be able to:

- To provide exposure to students in gaining knowledge on concepts and applications leading to using Mechanization in major agricultural operations.

- The study has a potential to move towards commercialization and achieving precision in agriculture in many ways.

- To acquire skills in increasing the efficiency of crop protection chemicals by reducing manpower requirement, reducing time, the volume of water, the quantity of chemicals and saving drift to the environment.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- The science and mechanism involved in drones and their different applications in agricultural field operations.

- Understand to monitor soil health, the seeding process and the processing of the sonication images

- Familiarize various areas of Mechanization applications and new developments

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
General Overview of Mechanization technology	6
Introduction about: Mechanization applications in agriculture	6
Area usage by Mechanization for spraying of Chemical to control pest	6
Applications of Mechanization in monitoring the soil health, seeding process and examining the flaws	6
Use of Mechanization to keep crops healthy by dispersing water, fertilizer, and pesticides.	6
Applications of Mechanization to operate as mechanical pollinators and replaces bees	6
Total Hours	**36**

RESOURCE PERSON

Er. Santhosh Kumar
Area Manager, Sonalika Tractor- Hyderabad

Programme Venue: AFTF – 05 (U – Block, VFSTRU)

For Registration Please Contact Coordinator on orbefore-30/11/2022

COORDINATOR

Dr. Ayyanna D S
Assistant Professor, Department of Applied Engineering, VFSTR, Vadlamudi.
Mobile : 8105130846 Email ID: ayyasiddapur@gmail.com

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Role of Micro Irrigation in Precision Agriculture
1 to 5th February -2024

Organized by
Department of
Applied Engineering

ABOUT THE DEPARTMENT

The Department of Applied Engineering. Here, the students are exposed to a wide range of topics within the field, including the technical aspects on systems design and implementation. The flexible academic curricula and hands-on research opportunities prepare the undergraduate and graduate students for successful careers in a multitude of disciplines. Live projects like Solar powered sprayer, and greenhouses for vegetables and fruits, managed completely by students are examples of initiatives taken by the Department

COURSE OBJECTIVES

After completing this course, a student will be able to:

- To use the datasets to develop and predict the model for forecasting the futuristic for Irrigation system

- Developed a predicted model to take decisions accurately regarding forecasting for Irrigation system

- Comparative assessment in between different methods for Irrigation system.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- Students acquire skills about developing a predictive model for precise application of Irrigation system.

- Understand the validation of the model and use it in water use efficiency.

- Understand the advantages and limitations of different predictive models for Irrigation system.

- Familiarize various models and take the comparative assessment between different irrigation methods.

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
General Overview of study area and Different irrigation methods	6
Introduction about training models, partition simple iteration micro irrigation	6
Description about predicted model to take decisions accurately regarding forecasting for Irrigation system	6
Gene expression programming on DSS for model selection and model performance evaluation	6
Evaluation and validation of MISD, the performance of decision MISD, comparative analysis in between different irrigation system and its advantages and disadvantages	6
Total Hours	**36**

RESOURCE PERSON

Mr. Peddish Kumar
Senior Area Manager Netafim Irrigation AP.
Programme Venue: AFTF – 05 (U – Block, VFSTRU)

For Registration Please Contact Coordinator on orbefore-30/01/2024

COORDINATOR

Dr. Ayyanna D S
Assistant Professor, Department of Applied Engineering,
VFSTR, Vadlamudi.
Mobile : 8105130846 Email ID: ayyasiddapur@gmail.com

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A$^+$' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
"Application of Auto-CAD in Farm Machinery"

20 to 28th December- 2023

Organized by

Department of
Applied Engineering

ABOUT THE DEPARTMENT

The Department of Applied Engineering. Here, the students are exposed to a wide range of topics within the field, including the technical aspects on systems design and implementation. The flexible academic curricula and hands-on research opportunities prepare the undergraduate and graduate students for successful careers in a multitude of disciplines. Live projects like Solar powered operated sprayer and greenhouses for vegetables and fruits, managed completely by students are examples of initiatives taken by the Department

COURSE OBJECTIVES

After completing this course, a student will be able to:

- To train the students in modelling and simulation of machine parts and their assemblies in 2D modelling software like AutoCAD.
- Use of AutoCAD in farm Machinery for Developing machinery Farmer day today activities

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- Create 2D and 3D computer drawings and models for manufacturing and prototyping.
- Evaluate computer aided design models and assemblies based on critical thinking and problem-solving skills
- Evaluate mechanical designs and select the proper process and materials for production
- Develop a solution through group work

COURSE CONTENTS

The following topics will be covered:

Topics	Hours
Introduction to Engineering drawings and Auto cad History, GUI	6
File Management and Drawing settings	6
Tools and their functions	6
Parametric modelling	6
Introduction to 3D designs and its commands	6
Practicing of 2D and 3D models	6
Total Hours	**36**

RESOURCE PERSON

Mr.G.Karthikeyan
Assistant Professor,
Centurion University of Technology and Management,
Paralekhemundi, Odish
Programme Venue: AFTF – 05 (U – Block, VFSTRU)

For Registration Please Contact Coordinator on orbefore-19/12/2023

COORDINATOR

Dr. Ayyanna D S
Assistant Professor, Department of Applied Engineering,
VFSTR, Vadlamudi.
Mobile : 8105130846 Email ID: ayyasiddapur@gmail.com

Resource Person

Dr. M. Ramesh Naidu

Professor, Dept. of Chemical Engineering
VFSTR, Vadlamudi, Guntur (AP)

and

Mr. P. Srinivas Reddy

Sr. Advanced Chemical Engineer,
Honeywell UOP

COURSE CO-ORDINATOR:
Dr. B. Sumalatha
Associate Professor
Department of Chemical Engineering

For Registration: 9948384772
drbsl_chem@vignan.ac.in

Venue
H-Block, First Floor (VFF-10)
VFSTR

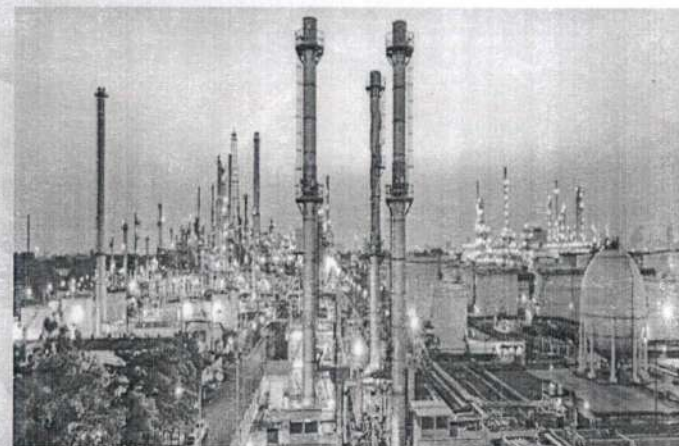# VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-added course
On
HEAT EXCHANGER DESIGN AND SIMULATION
27th Feb, 2024 to 13th Apr, 2024

Organised by

DEPARTMENT OF CHEMICAL ENGINEERING

Vignan's Foundation for Science, Technology and Research

Vadlamudi, Guntur District. Andhra Pradesh India - 522213

ABOUT VFSTR

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC A+ accredited institution Located in serene environs of Vadlamudi on the Guntur-Tenali highway. VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of studies.

ABOUT THE DEPARTMENT

The Department of Chemical Engineering was established under Vignan's Engineering College in the year 1997 to address the phenomenally growing Chemical Industry in India. The department primarily offered Undergraduate (B.Tech) program to fulfill the ever-growing local and global demands in allied chemical engineering streams viz. Textile Technology, Food Technology, Petroleum Engineering etc.,. Various undergraduate, postgraduate degree programs and vocational training programs have been launched since its inception.

COURSE OBJECTIVE:

The objective of this course is to provide participants with an in-depth understanding for conceptualizing, designing, and simulating various types of heat exchangers used in industrial applications. Participants will delve into the fundamental theories underlying heat transfer processes, enabling them to apply this knowledge to the design and simulation of efficient and optimized heat exchanger systems.

COURSE OUTCOMES :

Upon completion of this course participant will possess the proficiency to employ simulation tools effectively, enabling them to optimize designs, predict thermal behavior, and troubleshoot performance issues. Participants will showcase the ability to analyze, optimize, and design heat exchangers, empowering them to address real-world challenges in heat transfer applications within industrial settings. Through project-based learning, they will acquire hands-on experience, enhancing their capability to tackle practical heat exchanger design problems and simulations encountered in professional environments.

PROGRAM SCHEDULE

No. of Days	Topic	No. of Hrs Per Day
Day-1	Heat Exchanger Design Procedure	6
Day-2	Design of Double Pipe Heat Exchanger	6
Day-3	Design of Shell & Tube Heat Exchanger	6
Day-4	Simulation of Shell & Tube Heat Exchanger	6
Day-5	Analysis of Performance of Heat Exchanger	6
Total Hours		30

Resource Person

Mr. K. Kiran Kumar
Professor
Priyadarshini Institute of Technology &
Science, Chintalapudi, Tenali (AP)

COURSE CO-ORDINATOR:
Dr. B. Sumalatha
Associate Professor
Department of Chemical Engineering

For Registration: 9948384772
drbsl_chem@vignan.ac.in

Venue
H-Block, First Floor (VFF-10)
VFSTR

VIGNAN'S
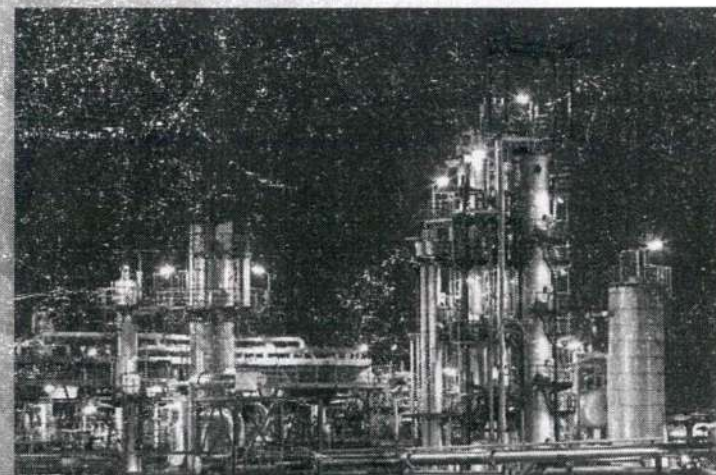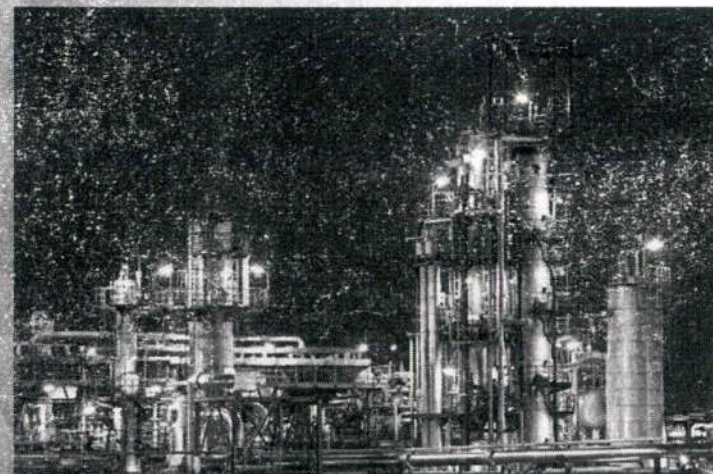Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-added course
On
ADSORPTION APPLICATIONS IN EFFLUENT TREATMENT
5th Aug, 2023 to 2nd Sep, 2023

Organised by

DEPARTMENT OF CHEMICAL ENGINEERING

Vignan's Foundation for Science, Technology and Research

Vadlamudi, Guntur District. Andhra Pradesh India - 522213

ABOUT VFSTR

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC A+ accredited institution Located in serene environs of Vadlamudi on the Guntur-Tenali highway. VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of studies.

ABOUT THE DEPARTMENT

The Department of Chemical Engineering was established under Vignan's Engineering College in the year 1997 to address the phenomenally growing Chemical Industry in India. The department primarily offered Undergraduate (B.Tech) program to fulfill the ever-growing local and global demands in allied chemical engineering streams viz. Textile Technology, Food Technology, Petroleum Engineering etc.,. Various undergraduate, postgraduate degree programs and vocational training programs have been launched since its inception.

COURSE OBJECTIVE:

This course provides an in-depth understanding of adsorption techniques and their use in effluent treatment. Students will explore adsorption principles, types of adsorbents, and isotherms, with a focus on removing pollutants like heavy metals, organic compounds, and dyes from wastewater. By the end, students will be equipped to design and optimize adsorption systems, address challenges in adsorption technologies, and evaluate adsorbent performance in practical applications.

COURSE OUTCOMES :

Upon completing the course, students will understand the key principles of adsorption, including isotherms and the behavior of adsorbents in effluent treatment processes. They will acquire the ability to identify, compare, and select adsorbents such as activated carbon, zeolites, and natural materials, evaluating their effectiveness for specific contaminants in industrial wastewater. Students will gain hands-on experience in designing and optimizing adsorption systems by factoring in adsorption capacity, kinetics, and regeneration techniques. They will also assess adsorption performance using real-world case studies and laboratory analyses

PROGRAM SCHEDULE

No. of Days	Topic	No. of Hrs Per Day
Day-1	Introduction to Adsorption in Effluent Treatment	6
Day-2	Adsorption Isotherms and Kinetics	6
Day-3	Adsorbent Selection and Characterization	6
Day-4	Design and Optimization of Adsorption Systems	6
Day-5	Advanced Adsorption Technologies and Environmental Regulations	6
Total Hours		30

Resource Person

Dr. Nageswara rao peela

Professor, Dept. of Chemical Engineering
Indian Institute of Technology,
Guwahati, Assam, India

COURSE CO-ORDINATOR:
Dr. B. Sumalatha
Associate Professor
Department of Chemical Engineering

For Registration: 9948384772
drbsl_chem@vignan.ac.in

Venue
H-Block, First Floor (VFF-10)
VFSTR

VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be University)

-Estd. u/s 3 of UGC Act 1956

Value-added course
On
BiOMASS CONVERSION

9th Sep, 2023 to 7th Oct, 2023

Organised by

DEPARTMENT OF CHEMICAL ENGINEERING

Vignan's Foundation for Science, Technology and Research
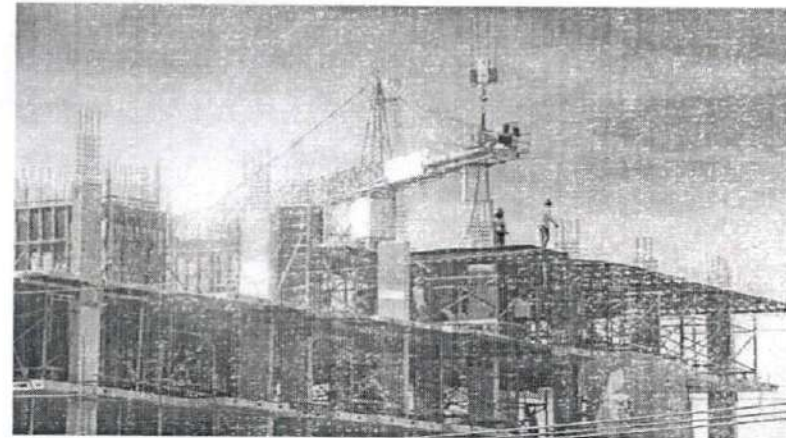
Vadlamudi, Guntur District. Andhra Pradesh India - 522213

ABOUT VFSTR

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC A+ accredited institution Located in serene environs of Vadlamudi on the Guntur-Tenali highway. VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of studies.

ABOUT THE DEPARTMENT

The Department of Chemical Engineering was established under Vignan's Engineering College in the year 1997 to address the phenomenally growing Chemical Industry in India. The department primarily offered Undergraduate (B.Tech) program to fulfill the ever-growing local and global demands in allied chemical engineering streams viz. Textile Technology, Food Technology, Petroleum Engineering etc.,. Various undergraduate, postgraduate degree programs and vocational training programs have been launched since its inception.

COURSE OBJECTIVE:

This course provides with a comprehensive understanding of the science and technology behind converting biomass into valuable products like bioenergy, biofuels, and biochemicals. The course will explore various conversion processes including thermal, biological, and chemical methods, emphasizing their industrial applications. It also focuses on the environmental and economic benefits of biomass utilization, alongside hands-on demonstrations of conversion techniques. Additionally, the course will address policy, regulatory aspects, and future trends, preparing students to engage with real-world biomass challenges and innovations.

COURSE OUTCOMES :

Upon completing the course, students will understand the key principles of biomass as a renewable energy resource and various conversion technologies such as thermal, biological, and chemical processes. They will be able to analyze the environmental and economic benefits of biomass, identify its industrial applications like biofuels and bioenergy, and perform basic hands-on experiments. Additionally, students will gain insights into policy frameworks and explore future trends and innovations in biomass conversion for sustainable development.

PROGRAM SCHEDULE

No. of Days	Topic	No. of Hrs Per Day
Day-1	Overview of Biomass Resources and Types	6
Day-2	Biomass Composition and Properties	6
Day-3	Thermochemical Conversion Processes	6
Day-4	Introduction to Biochemical Processes	6
Day-5	Recent Advances in Thermochemical and Biochemical Biomass Conversion	6
Total Hours		30

About the Institution

H Block - Front Elevation View

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC A⁺ accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
On
STRUCTURAL HEALTH MONITORING
5ᵗʰ to 10ᵗʰ February, 2024

Venue: - VFSTR Constructions

Organized
by
Department of Civil Engineering

VIGNAN'S
Foundation for Science, Technology & Research

(Deemed to be University)

-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

The Department of Civil Engineering at Vignan was established in 2008 and it is committed to research and development in Civil Engineering. Vision of the department is to give an exposure to the budding civil technocrats to various challenges in the profession. The principal educational objective of our department is to provide the students, fundamental knowledge and the skills needed to resolve the problems related to construction and maintenance of infrastructure in harmony with the society and the environment. Department also offers an M.Tech Degree Program in Structural Engineering. Research Scholars are also pursuing their Ph. D research, in many relevant and advanced areas of Civil Engineering.

COURSE OBJECTIVES

The objective of this course is to:

1. Performance and enhancement of an existing structure.
2. Monitoring of structures affected by external factors.
3. Feedback loop to improve the future design based on experience.
4. Decline in construction and growth in maintenance needs.

COURSE OUTCOMES

At the end of the course, student should be able to:

1. Analyze the needs and challenges of Structural Health Monitoring.
2. Apply various methods to damage detection.
3. Apply the structural Health Monitoring technique for building.
4. Evaluate the factor affecting the Health of structures.

COURSE CONTENT

Topic	Hours
Introduction to Structural Health Monitoring	3
SHM using Magnetostrictive & Optical fibers sensors	5
Vibration Control for SHM	5
Case study of performance Estimation for different patches	4
SHM using Piezo and Magnetostrictive Layers	5
Case study – Results and Discussions	4
SHM using LDV	6
Total Hours	32

Resource Person

Mr. M. Sudhakar
Project Manager
Vishwa Infrastructures & Services Pvt. Ltd, Hyderabad, Telangana.

&

Dr. M. Karthikeyan
Professor & Head
Department of Civil Engineering
VFSTR, Vadlamudi.

Coordinator

Mr. K. Bala Gopi Krishna
Assistant Professor
Department of Civil Engineering
VFSTR, Vadlamudi.
Mob: +91-9985385856; Email: bgk_civil@vignan.ac.in

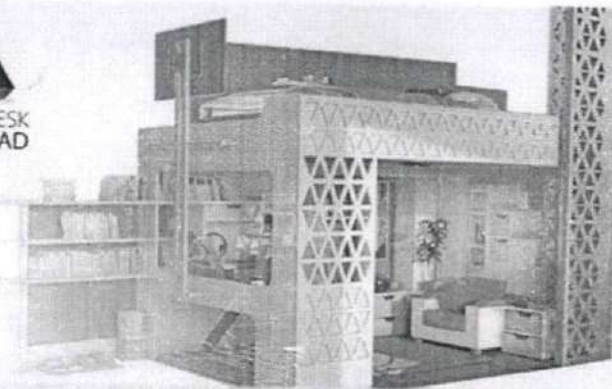## About the Institution

H Block - Front Elevation View

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC A+ accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
On
BUILDING DRAFTING USING AUTOCAD
8th to 12th January, 2024

Venue: - U Block, AFF-08

AUTODESK
AUTOCAD

Organized
by
Department of Civil Engineering

VIGNAN'S
Foundation for Science, Technology & Research

(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

The Department of Civil Engineering at Vignan was established in 2008 and it is committed to research and development in Civil Engineering. Vision of the department is to give an exposure to the budding civil technocrats to various challenges in the profession. The principal educational objective of our department is to provide the students, fundamental knowledge and the skills needed to resolve the problems related to construction and maintenance of infrastructure in harmony with the society and the environment. Department also offers an M.Tech Degree Program in Structural Engineering. Research Scholars are also pursuing their Ph. D research, in many relevant and advanced areas of Civil Engineering.

COURSE OBJECTIVES

The objective of this course is to:
1. Define, explain and make use of major navigating tools in AutoCAD.
2. Utilize common functions/commands of AutoCAD.
3. Outline and Illustrate the sketch of orthographic views.
4. Construct and create sketches and 3D modelling in AutoCAD.

COURSE OUTCOMES

At the end of the course, student should be able to:
1. Make use of basic commands and functions in AutoCAD.
2. Apply the basic commands for sketching orthographic views.
3. Create line plan and cross-section of buildings.
4. Analyze and develop draft model of floor plan and elevation of buildings.

COURSE CONTENT

Topic	Hours
Introduction, New features overviews	3
Guide to AutoCAD basics and Additional Resources	3
Commands in AutoCAD and its functions	5
Layers and Orthographic Views	3
Isometric Views	3
Line plan, c/s of two room building	4
Line plan, c/s of residential building	5
Elevation of a building & Vasthu	6
Total Hours	32

Resource Person

Mr. V. Bramhesh & Ms. P. Pravallika
Training Engineer
Andhra Pradesh State Skill Development Corporation
Vijayawada, Andhra Pradesh.

Coordinator
Mr. K. Bala Gopi Krishna
Assistant Professor
Department of Civil Engineering
VFSTR, Vadlamudi.
Mob: +91-9985385856; Email: bgk_civil@vignan.ac.in

About the Institution

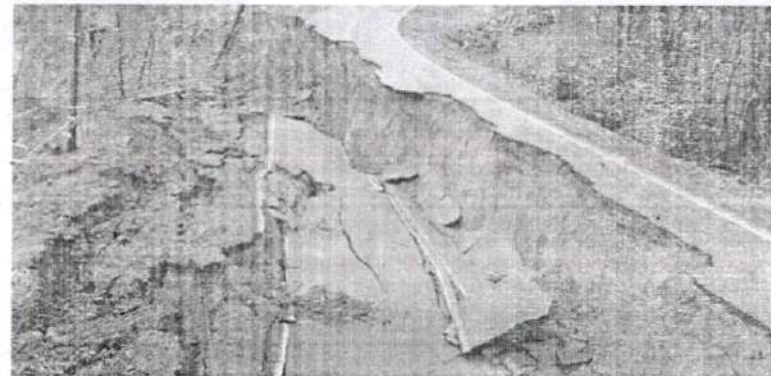

H Block - Front Elevation View

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
On

Geotechnical Investigations in Civil Engineering

24th to 29th July 2023

Venue: - VFSTR Constructions

Organized

by

Department of Civil Engineering

VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be University)

Estd. u/s 3 of UGC Act 1956

About the Department

The Department of Civil Engineering at Vignan was established in 2008 and it is committed to research and development in Civil Engineering. Vision of the department is to give an exposure to the budding civil technocrats to various challenges in the profession. The principal educational objective of our department is to provide the students, fundamental knowledge and the skills needed to resolve the problems related to construction and maintenance of infrastructure in harmony with the society and the environment. Department also offers an M. Tech Degree Program in Structural Engineering. Research Scholars are also pursuing their Ph. D research, in many relevant and advanced areas of Civil Engineering.

COURSE OBJECTIVES

The objectives of this course is to:

1. Know the Engineering properties of Soil.
2. Stabilization of soils by waste materials.
3. Predict the lateral earth pressure against retaining walls and abutments.
4. Examine the inadequate geotechnical investigations with case studies

COURSE OUTCOMES

At the end of the course, students should be able to:

1. Index properties and classification of soil.
2. Analyze the compressibility, consolidation and shear strength parameters.
3. Determine the permeability and seepage analysis.
4. Compute the settlement in shallow foundation.

COURSE CONTENTS

Topic	Hours
Introduction	6
Scope of Investigations	7
Regional Geologic and Site Reconnaissance Investigations	7
Surface Investigations	7
Subsurface Investigations	7
Total Hours	34

Resource Person

Dr. G. Kalyan Kumar
Associate Professor
Department of Civil Engineering
NIT Warangal, Telangana

Coordinator

Mr. K. Bala Gopi Krishna
Assistant Professor
Department of Civil Engineering
Vignan's Foundation for Science Technology Reasearch,
Vadlamudi, Andhra Pradesh.

ABOUT VFSTR

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
NX CAD
21st-26th August 2023
AGF-06, U- Block

Organized by

Department of
Mechanical Engineering

ABOUT THE DEPARTMENT

VFSTR offers various programs in Mechanical Engineering at bachelor, master and Ph.D level. Our strong and interactive curriculum incorporates learning with hands-on practice that makes the students capable of taking their career to the next level, be it in the professional engineering practice or in further studies. Right from its inception in 1997, the Department has been focusing on quality teaching with integrated laboratory practice. The Department has 14 laboratories, one research center and a Center of Excellence in Composite Materials that are designed to cater to the needs of academic, industrial and research activities.

COURSE OBJECTIVE

To train the students in modelling of structure of surfaces, complex shapes, achieving curvature continuity, and understanding the nuances of surface design, enabling them to excel in industries such as automotive, aerospace, product design, and more.

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes :

- Use their capacity of vision to interpret and/or convey the technical information in an industrial drawing.
- Know and be able to apply graphical representation techniques using traditional metric geometry and descriptive geometry methods.
- Know, identify, interpret and apply the current standards on Industrial Technical Drawing
- *Computer aided design applications that allow students to elaborate and use graphical and technical information.*

COURSE CONTENTS

The following topics will be covered:

Topic	Hours
Introduction to standardization	6
Dimensioning	6
Dimensional and geometric tolerances	6
Wireframe and Surface Design Workbench	6
Point and Curve Creation	6
Surface Operations	6
Total Hours	**36**

RESOURCE PERSONS

Mr.Maheshbabu.N

Expert Trainer, APSSDC

Priyadarshi Kumar Mayank

Trainer, APSSDC

COORDINATOR

Mr. K. Pradeep Chand
Assistant Professor, Department of Mech.Engg.,
VFSTR, Vadlamudi.
Email Id: kpc_mech@vignan.ac.in
Contact number: 9948082031

ABOUT THE INSTITUTE

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Fusion 360

$22^{nd} - 27^{th}$ April 2024

Venue: AFF-08, U-Block

Organized by

Department of
Mechanical Engineering

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be **UNIVERSITY**)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

Vignan University offers various programs in Mechanical Engineering at bachelor, master, and Ph.D. level. Our strong and interactive curriculum incorporates learning with hands-on practice that makes the students capable of taking their career to the next level, be it in the professional engineering practice or in further studies. Right from its inception in 1997, the Department has been focusing on quality teaching with integrated laboratory practice. Mechanical Engineering program accredited by NBA. The Department has 14 laboratories, one research center and a Center of Excellence in Composite Materials that are designed to cater to the needs of academic, industrial and research activities.

COURSE OBJECTIVE

- After completion of the course, students will be able to design their product from idea to prototype, Navigate through the user interface of Autodesk Fusion 360

COURSE OUTCOMES

Upon completion of the course, the student will be able to achieve the following outcomes:

- Understand design process in Autodesk Fusion 360
- Create conceptual design and organic forms using T-Splines
- Design mechanical parts using solid modelling tools.
- Create mechanical assemblies and motion studies.
- Collaborate with other members of the project and manage the data in the cloud.
- Create drawings and renderings.

COURSE CONTENTS

The following topics will be covered:

Topic	Hours
Introduction of Autodesk Fusion 360: Sketching	6
Part Modeling, Practice	6
Creating various features like 3D-thread, planes, and axes	6
Assembly Modeling, Practice	6
Introduction to different Drawing Views, Practice	6
Assessment Test	6
Total Hours	**36**

RESOURCE PERSONS

Mr. L. Vara Prasad
Expert Trainer, APSSDC
Mr. T. Sreedhar
Trainer CAD lab

COORDINATOR

G.Govindarajulu
Assistant Professor
Department of Mechanical Engineering
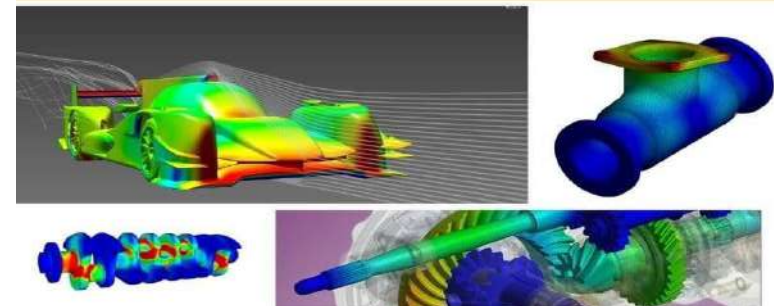Email: egr_mech@vignan.ac.in
Contac Number: 7981972223
.

ABOUT THE INSTITUTE

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
ANSYS Workbench
18th to 23rd December 2023
Venue: AFF-08, U-Block

Organized by

Department of
Mechanical Engineering

ABOUT THE DEPARTMENT

Vignan University offers various programs in Mechanical Engineering at bachelor, master, and Ph.D. level. Our strong and interactive curriculum incorporates learning with hands-on practice that makes the students capable of taking their career to the next level, be it in the professional engineering practice or in further studies. Right from its inception in 1997, the Department has been focusing on quality teaching with integrated laboratory practice. Mechanical Engineering program accredited by NBA. The Department has 14 laboratories, one research center and a Center of Excellence in Composite Materials that are designed to cater to the needs of academic, industrial and research activities.

COURSE OBJECTIVE

To train the students in the simulation of machine parts and their assemblies in advance modelling & simulation software like Ansys Workbenchs and certification will be provided after successful completion.

COURSE OUTCOMES

Upon completion of the course, the student will be able to:

- *Demonstrate* Static Structural Analysis

- Create Dynamic Analysis for customised components

- Develop the Modal Analysis of structures

- Apply Explicit Analysis of practical problems

COURSE CONTENTS

The following topics will be covered:

Topic	Hours
The interface of Ansys Workbench	6
Finite Element Analysis Steps	6
Creating Mesh Model Technique	6
Joints Contacts and Boundary Conditions	6
Practising of various problems on static analysis	6
Practicing of various problems on dynamic analysis	6
Total Hours	**36**

RESOURCE PERSONS

Mr. K Sambasiva Rao
  Center Manager APSSDC-TSDI, CBT trainer
Mr. M.S.R. Krishnaiah
  Trainer, CAD labs

COORDINATOR

Mr. Mihir Barman
Assistant Professor
Department of Mechanical Engineering
Email: mb_mech@vignan.ac.in
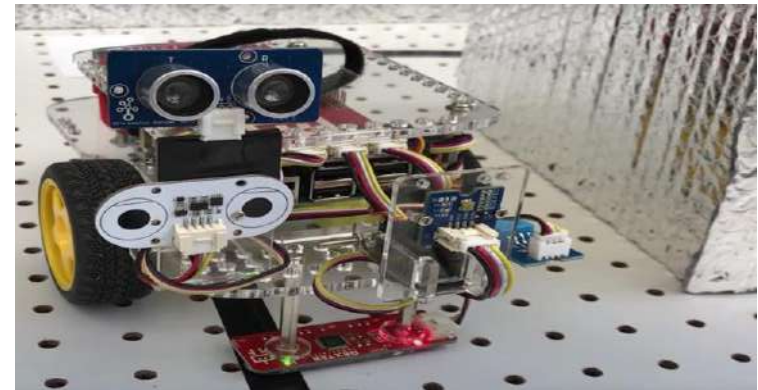Contac Number: 9900345321.

ABOUT THE INSTITUTE

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Autonomous Mobile Robots for Industrial Applications
21st to 26th August 2023
Venue: NB-108, N-Block

Organized by
Department of
Mechanical Engineering

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be **UNIVERSITY**)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

Vignan University offers various programs in Mechanical Engineering at bachelor, master, and Ph.D. level. Our strong and interactive curriculum incorporates learning with hands-on practice that makes the students capable of taking their career to the next level, be it in the professional engineering practice or in further studies. Right from its inception in 1997, the Department has been focusing on quality teaching with integrated laboratory practice. Mechanical Engineering program accredited by NBA. The Department has 14 laboratories, one research center and a Center of Excellence in Composite Materials that are designed to cater to the needs of academic, industrial and research activities.

COURSE OBJECTIVE

The course aims to equipped with a robust understanding of the fundamental concepts and technologies driving Autonomous Mobile Robots (AMRs) in industrial settings. The course emphasizes hands-on projects and real-world case studies, enhancing problem-solving skills and preparing students for industry challenges.

COURSE OUTCOMES

Upon completion of the course, the student will be able to:

- Technologies driving Autonomous Mobile Robots (AMRs)
- Evaluating their performance based on efficiency, & reliability
- AMR implementation, articulate the ethical considerations and safety protocols
- Tackle complex problems related to AMR applications

COURSE CONTENTS

The following topics will be covered:

Topic	Hours
Sensors and perception systems	6
System integration and interoperability	6
Reliability and maintenance of AMRs	6
Programming and operating AMRs	6
Industry-specific applications (logistics, manufacturing, etc.)	6
Predictions for the future of automation in industry	6
Total Hours	**36**

RESOURCE PERSONS

Mr. Imam Shaik
Center Manager APSSDC-TSDI, CBT trainer
MR. K. Bhanu Chandar
Trainer, Robotics lab

COORDINATOR

Dr. MD. FAIYAZ AHMED
Assistant Professor
Department of Mechanical Engineering
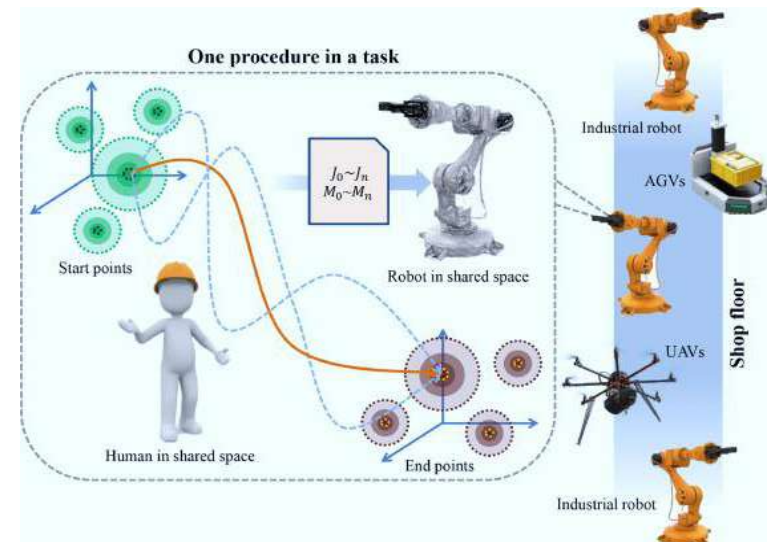Email: drmdfa_mech@vignan.ac.in
Contac Number: 9390687903.

ABOUT THE INSTITUTE

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling playgrounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of engineering studies.

Value Added Course
on
Intelligent Algorithms for Mobile Robot Applications
22nd to 27th January 2024
Venue: NB-108, N-Block

Organized by

Department of
Mechanical Engineering

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

Vignan University offers various programs in Mechanical Engineering at bachelor, master, and Ph.D. level. Our strong and interactive curriculum incorporates learning with hands-on practice that makes the students capable of taking their career to the next level, be it in the professional engineering practice or in further studies. Right from its inception in 1997, the Department has been focusing on quality teaching with integrated laboratory practice. Mechanical Engineering program accredited by NBA. The Department has 14 laboratories, one research center and a Center of Excellence in Composite Materials that are designed to cater to the needs of academic, industrial and research activities.

COURSE OBJECTIVE

The course aims to provide students with a comprehensive understanding of the fundamental concepts and theories underlying intelligent algorithms in mobile robotics. Students will develop the skills necessary to design, implement and evaluate these algorithms for applications such as navigation, mapping, and obstacle avoidance.

COURSE OUTCOMES

Upon completion of the course, the student will be able to:

 Multiple sensors to enhance robotic performance

 Implement intelligent algorithms tailored for various mobile robot applications

 Diverse path planning techniques to navigate dynamic

 Demonstrating knowledge through a capstone project

COURSE CONTENTS

The following topics will be covered:

Topic	Hours
Sensors used in mobile robotics (LIDAR, cameras, IMUs)	6
Path planning algorithms	6
Navigation and Mapping	6
Communication protocols for muti-robot coordination	6
Development, Testing, & Presentation of Mobile Robot	6
Total Hours	**30**

RESOURCE PERSONS

Mr. R. Bharat Kumar
Center Manager APSSDC-TSDI, CBT trainer
MR. K. Bhanu Chandar
Trainer, Robotics lab

COORDINATOR

Dr. MD. FAIYAZ AHMED
Assistant Professor
Department of Mechanical Engineering
Email: drmdfa_mech@vignan.ac.in
Contac Number: 9390687903

Dr. S. Sivabalan

Senior Scientist,
Department of Computer Science
Periyar University.
Salem, Salem Dist. Tamil Nadu.

ABOUT THE RESOURCE PERSON

Having 15+ years of experience in Applications of Artificial intelligences and Textile applications. Worked in Lakshmi Machine Works Coimbatore and reputed industries and vast knowledge in software development and handling AI tools in textile manufacturing division.

COURSE CO-ORDINATOR:

Paranthaman R,
Assistant professor,
Dept.of.Textile Technology,
VFSTR, Vadlamudi,Guntur.

For Registration:

Contact: +91-9994303738
Mail id: rp_textile@vignan.ac.in

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

VALUE ADDED COURSE

On

Applications of Artificial intelligences in Textile and Innovation: Sustainable Technologies and Applications

05th – 23rd September 2023

by

Dr. S. Sivabalan

Venue: VFF- 13

Organised by

DEPARTMENT OF TEXTILE TECHNOLOGY

School of Core Engineering
Vignan's Foundation for Science, Technology and Research
Vadlamudi, Guntur District. Andhra Pradesh India - 522213

VFSTR - VISION

To evolve in to a center of excellence in science & technology through creative and innovative practices in teaching - learning, towards promoting academic achievement and research excellence to produce internationally accepted, competitive and world class professionals who are psychologically strong & emotionally balanced imbued with social consciousness & ethical values.

VFSTR - MISSION

To provide high quality academic programs, training activities, research facilities and opportunities supported by continuous industry - institute interaction aimed at promoting employability, entrepreneurship, leadership and research aptitude among students and contribute to the economic and technological development of the region, state and nation.

ABOUT THE DEPARTMENT

The B.Tech course in Textile Technology was offered from the year 2011, which is one of the most lucrative, appealing, glamorous and exciting career options in today's world. The course offered is one of its kinds and VFSTR is the only Institution offering such a diverse course in the state of Andhra Pradesh.

COURSE OBJECTIVE:

The objective of this value added course is to understand the computer applications in textile and using of commercially available AI tools to prepare the reports, presentation, develop designs and graphs.

Course outcomes :

- Understand the applications of computers in textile engineering.

- Analyze the need and importance of computers in textile manufacturing

- Apply AI tools to produce reports, presentation, design development and graph preparation

PROGRAM SCHEDULE

Date & Time	Topic	No. Of Hours
05/09/2023	Introduction about computer applications in textile	2 Hrs (8.00 am to 10.00 am)
07/09/2023	Software used to produce design (Paint)	2 Hrs (8.00 am to 10.00 am)
08/09/2023	Software used to produce design (Adobe photoshop)	2 Hrs (8.00 am to 10.00 am)
09/09/2023	Software used to produce design (Corel Draw)	2 Hrs (8.00 am to 10.00 am)
11/09/2023	AI tools and its applications in textile engineering	2 Hrs (8.00 am to 10.00 am)
12/09/2023	Using AI tools for preparing reports	2 Hrs (8.00 am to 10.00 am)
13/09/2023	Chat gpt	2 Hrs (8.00 am to 10.00 am)
14/09/2023	Gemini	2 Hrs (8.00 am to 10.00 am)
15/09/2023	Humanise	2 Hrs (8.00 am to 10.00 am)
16/09/2023	Practices on AI tools to develop project report with different topics.	4 Hrs(8.00 am to 12.00 noon)
19/09/2023	Practices on AI tools to develop excel sheet to graph	2 Hrs (8.00 am to 10.00 am)
20/09/2023	Practices on AI tools to develop presentation	2 Hrs (8.00 am to 10.00 am)
21/09/2023	Practices on AI tools to develop designs	2 Hrs (8.00 am to 10.00 am)
22/09/2023	AI tools and its applications in textile engineering	2 Hrs (8.00 am to 10.00 am)
23/09/2023	Evaluation of students	2 Hrs (8.00 am to 10.00 am)
Total		32 Hrs

Mr. Pream Kumar

Manager,
B1,II Floor, TST Complex,
742, Avinashi Road,
Coimbatore - 641018,Tamilnadu, India

ABOUT THE RESOURCE PERSON

Having 20 years of experience in supply chain management. Worked in leading textile mills and Everest logistics, Tuticorin and reputed industries and vast knowledge in supply chain management and material handling.

COURSE CO-ORDINATOR:

**Mr.Ch. Govardana Rao,
Assistant professor,
Dept.of.Textile Technology,
VFSTR, Vadlamudi,Guntur.**

For Registration:

Contact: +91- 8096745147
Mail id: chgr_textile@vignan.ac.in

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd u/s 3 of UGC Act 1956

VALUE ADDED COURSE

On

Global Textile Supply Chain Management and Ethical Practices

04th - 09th December 2023

by

Mr. Pream Kumar

Venue : VFF- 13

Organised by

DEPARTMENT OF TEXTILE TECHNOLOGY

**School of Core Engineering
Vignan's Foundation for Science, Technology and Research
Vadlamudi, Guntur District. Andhra Pradesh India - 522213**

VFSTR - VISION

To evolve in to a center of excellence in science & technology through creative and innovative practices in teaching - learning, towards promoting academic achievement and research excellence to produce internationally accepted, competitive and world class professionals who are psychologically strong & emotionally balanced imbued with social consciousness & ethical values.

VFSTR - MISSION

To provide high quality academic programs, training activities, research facilities and opportunities supported by continuous industry - institute interaction aimed at promoting employability, entrepreneurship, leadership and research aptitude among students and contribute to the economic and technological development of the region, state and nation.

ABOUT THE DEPARTMENT

The B.Tech course in Textile Technology was offered from the year 2011, which is one of the most lucrative, appealing, glamorous and exciting career options in today's world. The course offered is one of its kinds and VFSTR is the only Institution offering such a diverse course in the state of Andhra Pradesh.

COURSE OBJECTIVE:

The objective of this value added course is to understand the supply chain management in textile and using of Consumer Awareness and Challenges and Opportunities for Small and Medium-Sized Textile Enterprises

Course outcomes :

- Understand the supply chain management principles.

- Analyze the need and importance of supply chain management

- Awareness and Challenges and Opportunities for Small and Medium-Sized Textile Enterprises

PROGRAM SCHEDULE

Date & Time	Topic	No. Of Hours
04.12.23	Ethical Sourcing and Sustainability in the Textile	4 Hrs (9.00 am to 01.00 pm)
04.12.23	IndustryGlobal Textile Supply Chain Resilience and Risk	2 Hrs (2.00 Pm to 04.00 pm)
05.12.23	ManagementDigital Transformation and Innovation in Textile Supply Chain Management	4 Hrs (9.00 am to 01.00 pm)
05.12.23	Circular Economy and Textile Waste Management	2 Hrs (2.00 Pm to 04.00 pm)
06.12.23	Labor Rights and Fair Trade in the Textile Industry	4 Hrs (9.00 am to 01.00 pm)
06.12.23	Environmental Impact of Textile Production and Consumption	2 Hrs (2.00 Pm to 04.00 pm)
07.12.23	Traceability and Transparency in Textile Supply Chains	4 Hrs (9.00 am to 01.00 pm)
07.12.23	Ethical Sourcing of Raw Materials (e.g., cotton, polyester)	2 Hrs (2.00 Pm to 04.00 pm)
08.12.23	Supply Chain Modernization and Upgrading in Developing Countries	4 Hrs (9.00 am to 01.00 pm)
08.12.23	Consumer Awareness and Ethical Consumption of Textile Products	2 Hrs (2.00 Pm to 04.00 pm)
09.12.23	Challenges and Opportunities for Small and Medium-Sized Textile Enterprises	4 Hrs (9.00 am to 01.00 pm)
09.12.23	Evaluation of students and Valedictory	2 Hrs (2.00 Pm to 04.00 pm)
Total		36 Hrs

Mr. S P. Sivasubramanian

Senior Textile Consultant

49- B 5 th Street, Gandhi Pudur

Coimbatore, Tamil Nadu.

ABOUT THE RESOURCE PERSON

Having   20+ years of experience in academic and Sustainable Textile applications. Worked in DKTE and SITRA and reputed industries and vast knowledge in sustainable environmental audit, Smart textile applications and development and handling textile manufacturing machines.

COURSE CO-ORDINATOR:
Paranthaman R,
Assistant Professor,
Dept. of Textile Technology,
VFSTR, Vadlamudi,Guntur.

For Registration:
Contact: +91-9994303738
Mail id: rp_textile@vignan.ac.in

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

VALUE ADDED COURSE

On

Textile Technology for the Future: Digital Fabrication and Smart Materials

09th - 13th October 2023

by

Mr. S P. Sivasubramanian

Venue : VFF- 13

Organised by

DEPARTMENT OF TEXTILE TECHNOLOGY

School of Core Engineering
Vignan's Foundation for Science, Technology and Research
Vadlamudi, Guntur District. Andhra Pradesh India - 522213

VFSTR - VISION

To evolve in to a center of excellence in science & technology through creative and innovative practices in teaching - learning, towards promoting academic achievement and research excellence to produce internationally accepted, competitive and world class professionals who are psychologically strong & emotionally balanced imbued with social consciousness & ethical values.

VFSTR - MISSION

To provide high quality academic programs, training activities, research facilities and opportunities supported by continuous industry - institute interaction aimed at promoting employability, entrepreneurship, leadership and research aptitude among students and contribute to the economic and technological development of the region, state and nation.

ABOUT THE DEPARTMENT

The B.Tech course in Textile Technology was offered from the year 2011, which is one of the most lucrative, appealing, glamorous and exciting career options in today's world. The course offered is one of its kinds and VFSTR is the only Institution offering such a diverse course in the state of Andhra Pradesh.

COURSE OBJECTIVE:

The objective of this value added course is to understand the advanced machineries used in the industry and kind of sensors used in textile applications. The students can get knowledge of technical textile and sustainability in textile field.

Course outcomes :

- Understand the applications of advanced techniques and machines in industry.
- Analyze the need and importance of sensors in textile manufacturing
- Apply sensors and sustainable textile material.

PROGRAM SCHEDULE

Date	Topic	No. Of Hours & Time
09/10/2023	3D Printing Textiles	4 Hrs (9.00 am to 01.00 pm)
09/10/2023	Digital Knitting and Weaving	2 Hrs (02.00 pm to 04.00 pm)
10/10/2023	Textile Robotics	4 Hrs (9.00 am to 01.00 pm)
10/10/2023	Generative Design in Textiles	2 Hrs (02.00 pm to 04.00 pm)
11/10/2023	Smart Materials; Conductive Textiles	4 Hrs (9.00 am to 01.00 pm)
11/10/2023	Self-Healing Textiles	2 Hrs (02.00 pm to 04.00 pm)
12/10/2023	Shape-Memory Textiles	4 Hrs (9.00 am to 01.00 pm)
12/10/2023	Thermochromics and Photochromic Textiles	2 Hrs (02.00 pm to 04.00 pm)
13/10/2023	Biodegradable and Sustainable Textiles	4 Hrs (9.00 am to 01.00 pm)
13/10/2023	Evaluation and valedictory	2 Hrs (02.00 pm to 04.00 pm)
Total		30 Hrs

Vignan's Foundation for Science, Technology and Research is a renowned institution which provides quality education in a diverse and intellectual stimulating environment. It imparts value addition training to students to make them competent and inspired engineers. This institution celebrates the power of knowledge, cultivates vision, and encourages new ideas, besides aiming to inculcate human values and instil social consciousness among its students.

This institution is well known for its dedicated faculty, state-of-the-art infrastructure, and good learning outcomes. As a University, it is in the process of improving its standards to the level of a global technical institution. Living up to its motto, "**Technology with Human Face**". In a recent nationwide survey of Indian Universities carried out by NIRF, VFSTR was placed at less than 75 rank in engineering and university.

Value added Course
on
Cyber Security
07th to 12th August 2023

Organized by
**Department of
Information Technology**

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

About the Department

Department of IT & CA has well-qualified and experienced faculty who are specialists in the areas of Programming Languages, Data Mining, Software Engineering, Information Security, Artificial Intelligence, Data Analytics, Internet of Things and Data Science. The Department attributes its success to the creative and innovative outlook of its students. The Department encourages students to participate in Technical Workshops, Coding competitions, Project Exhibitions and Symposiums to present papers. Students are also made to undergo 6 Month Industrial Internship during final year, where they hone their technical skills in the realm of computers. The department effectively prepares students to pursue leadership, technical, and management positions in a variety of industries. Students have obtained successful top-notch placements at leading companies like IBM, Infosys, Wipro, Cognizant, TCS, HCL and other leading

Course Objectives

The course is designed in a way that a candidate can identify, analyse and remediate computer security breaches by learning and implementing the real-world scenarios in Cyber Investigations Laboratory, Network Security Laboratory and in Security and Penetration Testing Laboratory. Exhibit knowledge to secure corrupted systems, protect personal data, and secure computer networks in an organization. Practice with an expertise in academics to design and implement security solutions.

Course Outcomes

Upon completion of the course, the student will be able to achieve the following outcomes:

- Analyse and evaluate the cyber security needs of an organization.
- Determine and analyse software vulnerabilities and security solutions to reduce the risk of exploitation.
- Design and develop a security architecture for an organization.

Course Contents

Topic	Hours
Cybersecurity Fundamentals	4
Software Applications, System Hacking and & Security.	5
Malware analysis	5
Types of Cyber-attacks and prevention Tips	5
Network Security & Hacking	5
Data Security Recovery, Web Application Penetration Testing	8
Total	32

Resource Person

Ms. Prasanna Natarajan

Senior Specialist, Cyber Security,
Vestas India.
prasanna.vestas@gmail.com, (+91) 83095 69382

Venue

ATF-15, III-Floor, U-Block,
VFSTR Deemed to be university

Coordinator

Dr. Ziaul Haque Choudhury
Assistant Professor, Department of IT, VFSTR, Vadlamudi
Ph: 8072257855, e-mail: zhc_it@vignan.ac.in

Head of the Department

Dr. VEERANJANEYULU NARALASETTY
Professor, HOD, IT & CA, VFSTR,
Ph:9347162038, e-mail:hodit@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research is a renowned institution which provides quality education in a diverse and intellectual stimulating environment. It imparts value addition training to students to make them competent and inspired engineers. This institution celebrates the power of knowledge, cultivates vision, and encourages new ideas, besides aiming to inculcate human values and instil social consciousness among its students.

This institution is well known for its dedicated faculty, state-of-the-art infrastructure, and good learning outcomes. As a University, it is in the process of improving its standards to the level of a global technical institution. Living up to its motto, "**Technology with Human Face**". In a recent nationwide survey of Indian Universities carried out by NIRF, VFSTR was placed at less than 75 rank in engineering and university. domain. The University is accredited with NAAC 'A+' Grade in 2021.

Value added Course
on
Data Science & Analytics
09th to 14th October 2023

Organized by
Department of Information Technology

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

About the Department

Department of IT & CA has well-qualified and experienced faculty who are specialists in the areas of Programming Languages, Data Mining, Software Engineering, Information Security, Artificial Intelligence, Data Analytics, Internet of Things and Data Science. The Department attributes its success to the creative and innovative outlook of its students. The Department encourages students to participate in Technical Workshops, Coding competitions, Project Exhibitions and Symposiums to present papers. Students are also made to undergo 6 Month Industrial Internship during final year, where they hone their technical skills in the realm of computers. The department effectively prepares students to pursue leadership, technical, and management positions in a variety of industries. Students have obtained successful top-notch placements at leading companies like IBM, Infosys, Wipro, Cognizant, TCS, HCL and other leading companies.

Course Objectives

The main objective of data science is to discover patterns in data. It makes sense of the data through a variety of statistical techniques. After data extraction, wrangling, and pre-processing, a data scientist must carefully examine the data. The next step is for him to extrapolate predictions based on the data.

Course Outcomes

Upon completion of the course, the student will be able to achieve the following outcomes:

- Students will demonstrate proficiency with statistical analysis of data.
- Students will execute statistical analyses with professional statistical software.
- Students will apply data science concepts and methods to solve problems in real-world contexts and will communicate these solutions effectively.

Course Contents

Topic	Hours
Introduction to Data Science and Analytics	5
Identifying Data Problems	5
Arrays and Vectorized Computation	5
Data Wrangling, Plotting and Visualization	5
Data Aggregation and Group Operation	5
Financial and Economic Data Applications	7
Total	32

Resource Person

Dr. MD. Izhar Ashraf

Senior Specialist & Research Fellow, Data Science, Institute of Mathematical Sciences, Chennai, India. ashrafizhar.12@gmail.com, (+91) 73095 693222

Venue

ATF-06, III-Floor, U-Block, VFSTR Deemed to be university

Coordinator

Mr. Praveen Kumar

Assistant Professor, Department of IT, VFSTR, Vadlamudi Ph: 9290236544, e-mail: praveenkumarkazipeta@gmail.com

Head of the Department

Dr. VEERANJANEYULU NARALASETTY

Professor, HOD, IT & CA, VFSTR, Ph:9347162038, e-mail:hodit@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research is a renowned institution which provides quality education in a diverse and intellectual stimulating environment. It imparts value addition training to students to make them competent and inspired engineers. This institution celebrates the power of knowledge, cultivates vision, and encourages new ideas, besides aiming to inculcate human values and instil social consciousness among its students.

This institution is well known for its dedicated faculty, state-of-the-art infrastructure, and good learning outcomes. As a University, it is in the process of improving its standards to the level of a global technical institution. Living up to its motto, "**Technology with Human Face**". In a recent nationwide survey of Indian Universities carried out by NIRF, VFSTR was placed at less than 75 rank in engineering and university. domain. The University is accredited with NAAC 'A+' Grade in 2021.

Value added Course
on
ARTIFICIAL INTELLIGENCE & MACHINE LEARNING
18th to 23rd March 2024

Organized by
Department of Information Technology

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

About the Department

Department of IT & CA has well-qualified and experienced faculty who are specialists in the areas of Programming Languages, Data Mining, Software Engineering, Information Security, Artificial Intelligence, Data Analytics, Internet of Things and Data Science. The Department attributes its success to the creative and innovative outlook of its students. The Department encourages students to participate in Technical Workshops, Coding competitions, Project Exhibitions and Symposiums to present papers. Students are also made to undergo 6 Month Industrial Internship during final year, where they hone their technical skills in the realm of computers. The department effectively prepares students to pursue leadership, technical, and management positions in a variety of industries. Students have obtained successful top-notch placements at leading companies like IBM, Infosys, Wipro, Cognizant, TCS, HCL and other leading companies.

Course Objectives

Artificial Intelligence and machine Learning (AI&ML) is a new, emerging field which consists of a set of tools and techniques used to extract useful information from data. AI&ML is a fast-growing discipline and is full of rigorous practical analysis. The demand for undergraduates in AI and ML has industry required skills and demand in the Global market over the last few years. Artificial Intelligence and Machine Learning is also in line demand with computer science.

Course Outcomes

Upon completion of the course, the student will be able to achieve the following outcomes:

- Apply the knowledge of mathematics, science, engineering specialization to the solution of complex engineering problems.
- Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

Course Contents

Topic	Hours
Problem-Solving and Decision Making	6
Natural Language Processing (NLP)	5
Machine Learning and Deep Learning	5
Robotics and Automation	5
Enhancing Healthcare and Medicine	5
Fostering Creativity and Innovation	6
Total	32

Resource Person

Dr. Lakshmanapravu K

Assistant Manager, AI,
Vestas India, Chennai.
pravuk.vestas@gmail.com, (+91) 89884 22379

Venue

AFTF-05, IV-Floor, U-Block,
VFSTR Deemed to be university

Coordinator

Dr. Subbarao Peram

Associate Professor, Department of IT, VFSTR, Vadlamudi
Ph: 8978883898, e-mail: Subbarao.peram@gmail.com

Head of the Department

Dr. VEERANJANEYULU NARALASETTY
Professor, HOD, IT & CA, VFSTR,
Ph:9347162038, e-mail:hodit@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research is a renowned institution which provides quality education in a diverse and intellectual stimulating environment. It imparts value addition training to students to make them competent and inspired engineers. This institution celebrates the power of knowledge, cultivates vision, and encourages new ideas, besides aiming to inculcate human values and instil social consciousness among its students.

This institution is well known for its dedicated faculty, state-of-the-art infrastructure, and good learning outcomes. As a University, it is in the process of improving its standards to the level of a global technical institution. Living up to its motto, "**Technology with Human Face**". In a recent nationwide survey of Indian Universities carried out by NIRF, VFSTR was placed at less than 75 rank in engineering and university. domain. The University is accredited with NAAC 'A+' Grade in 2021.

Value added Course
on
Blockchain Technology
12th to 16th September 2023

Organized by
**Department of
Information Technology**

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

About the Department

Department of IT & CA has well-qualified and experienced faculty who are specialists in the areas of Programming Languages, Data Mining, Software Engineering, Information Security, Artificial Intelligence, Data Analytics, Internet of Things and Data Science. The Department attributes its success to the creative and innovative outlook of its students. The Department encourages students to participate in Technical Workshops, Coding competitions, Project Exhibitions and Symposiums to present papers. Students are also made to undergo 6 Month Industrial Internship during final year, where they hone their technical skills in the realm of computers. The department effectively prepares students to pursue leadership, technical, and management positions in a variety of industries. Students have obtained successful top-notch placements at leading companies like IBM, Infosys, Wipro, Cognizant, TCS, HCL and other leading companies.

Course Objectives

Blockchain technology offers a revolutionary approach to data management and trust. Its decentralized nature, secure cryptography, and smart contract capabilities make it ideal for various applications. A comprehensive course is essential to understand its core concepts, potential use cases, and technical aspects. By equipping students with these skills, we can foster innovation and address the challenges of the digital age.

Course Outcomes

Upon completion of the course, the student will be able to achieve the following outcomes:

- Including distributed ledgers, consensus mechanisms, cryptocurrencies, and smart contracts.
- In various industries, such as finance, healthcare, supply chain management, and government.

Course Contents

Topic	Hours
Introduction and Evolution Blockchain Technology	5
Permissions & Permission-less Block Chains	4
Consensus Protocols and Smart Contracts	5
Block Chain Technology Standards, Applications & Global Scenario	5
Bitcoin and Cryptography Behind it	5
Demonstration of Block Chain Application and the future of Block Chain Technology	8
Total	32

Resource Person

Dr. N. Srinivas Naik

Asst. Professor, IIIT Naya Raipur

Srinu.naik@gmail.com, (+91) 70562 99872

Venue

ATF-15, III-Floor, U-Block,
VFSTR Deemed to be university

Coordinator

Mr. B. Naga Sudheer

Assistant Professor, Department of IT, VFSTR, Vadlamudi
Ph: 9346727904, e-mail: sudheer.bandlamudi44@gmail.com

Head of the Department

Dr. VEERANJANEYULU NARALASETTY

Professor, HOD, IT & CA, VFSTR,
Ph:9347162038, e-mail:hodit@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research is a renowned institution which provides quality education in a diverse and intellectual stimulating environment. It imparts value addition training to students to make them competent and inspired engineers. This institution celebrates the power of knowledge, cultivates vision, and encourages new ideas, besides aiming to inculcate human values and instil social consciousness among its students.

This institution is well known for its dedicated faculty, state-of-the-art infrastructure, and good learning outcomes. As a University, it is in the process of improving its standards to the level of a global technical institution. Living up to its motto, "**Technology with Human Face**". In a recent nationwide survey of Indian Universities carried out by NIRF, VFSTR was placed at less than 75 rank in engineering and university. domain. The University is accredited with NAAC 'A+' Grade in 2021.

Value added Course
on
Internet of Things (IoT)
05th to 11th January 2024

Organized by
**Department of
Information Technology**

About the Department

Department of IT & CA has well-qualified and experienced faculty who are specialists in the areas of Programming Languages, Data Mining, Software Engineering, Information Security, Artificial Intelligence, Data Analytics, Internet of Things and Data Science. The Department attributes its success to the creative and innovative outlook of its students. The Department encourages students to participate in Technical Workshops, Coding competitions, Project Exhibitions and Symposiums to present papers. Students are also made to undergo 6 Month Industrial Internship during final year, where they hone their technical skills in the realm of computers. The department effectively prepares students to pursue leadership, technical, and management positions in a variety of industries. Students have obtained successful top-notch placements at leading companies like IBM, Infosys, Wipro, Cognizant, TCS, HCL and other leading companies.

Course Objectives

Internet of Things (IoT) refers to the networked objects that include devices, appliances, and people that provide information from where the data collected is exchanged and further analyzed. This involves several components such as sensors, actuators, gateways, and cloud platforms. Several benefits are derived from IoT: efficiency, automation, and decision-making. This concept also has some challenges, including security, privacy, and scalability. Therefore, there is a need to understand IoT architecture, protocols, and applications since it provides more

Course Outcomes

Upon completion of the course, the student will be able to achieve the following outcomes:

- The Internet of Things (IoT), including sensors, actuators, connectivity protocols, and cloud computing.
- With IoT, such as security, privacy, scalability, and interoperability.

Course Contents

Topic	Hours
IoT Using Node MCU	3
IIoT (Industrial IoT)	4
IoT with Raspberry Pi	6
IoT Using Arduino	5
IoRT Robotics	5
IoT Workshop and Embedded Systems	7
Total	30

Resource Person

Mr. A. Anil Kumar Reddy
Assistant Professor, NITW, TS.
anilkumar1988@gmail.com, (+91) 68569 24551

Venue

ATF-15, III-Floor, U-Block,
VFSTR Deemed to be university

Coordinator

Dr. P. Subba Rao
Assistant Professor, Department of IT, VFSTR, Vadlamudi
Ph: 8977178466, e-mail: subbarao.peram@gmail.com

Head of the Department

Dr. VEERANJANEYULU NARALASETTY
Professor, HOD, IT & CA, VFSTR,
Ph:9347162038, e-mail:hodit@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research is a renowned institution which provides quality education in a diverse and intellectual stimulating environment. It imparts value addition training to students to make them competent and inspired engineers. This institution celebrates the power of knowledge, cultivates vision, and encourages new ideas, besides aiming to inculcate human values and instil social consciousness among its students.

This institution is well known for its dedicated faculty, state-of-the-art infrastructure, and good learning outcomes. As a University, it is in the process of improving its standards to the level of a global technical institution. Living up to its motto, "**Technology with Human Face**". In a recent nationwide survey of Indian Universities carried out by NIRF, VFSTR was placed at less than 75 rank in engineering and university. domain. The University is accredited with NAAC 'A+' Grade in 2021.

Value added Course
on
Computer Vision
25th to 30th October 2023

Organized by
**Department of
Information Technology &
Computer Applications**

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

About the Department

Department of IT & CA has well-qualified and experienced faculty who are specialists in the areas of Programming Languages, Data Mining, Software Engineering, Information Security, Artificial Intelligence, Data Analytics, Internet of Things and Data Science. The Department attributes its success to the creative and innovative outlook of its students. The Department encourages students to participate in Technical Workshops, Coding competitions, Project Exhibitions and Symposiums to present papers. Students are also made to undergo 6 Month Industrial Internship during final year, where they hone their technical skills in the realm of computers. The department effectively prepares students to pursue leadership, technical, and management positions in a variety of industries. Students have obtained successful top-notch placements at leading companies like IBM, Infosys, Wipro, Cognizant, TCS, HCL and other leading companies.

Course Objectives

To introduce students the fundamentals of image formation; To introduce students the major ideas, methods, and techniques of computer vision and pattern recognition; To develop an appreciation for various issues in the design of computer vision and object recognition systems; and to provide the student with programming experience from implementing computer vision and object recognition applications.

Course Outcomes

Upon completion of the course, the student will be able to achieve the following outcomes:

- Identify basic concepts, terminology, theories, models and methods in the field of computer vision.
- Describe known principles of human visual system.
- Describe basic methods of computer vision related to multi-scale representation, edge detection and detection of other primitives.

Course Contents

Topic	Hours
Introduction to Computer Vision	5
Imaging and Image Representation	4
Binary Image Analysis	4
Pattern Recognition Concepts	8
Filtering and Enhancing Images	6
Color and Shading	5
Total	32

Resource Person

Prof. Jayanta Mukhopadhyay
Senior Member, IEEE, Computer Vision, IIT Kharagpur.
jay@cse.iitkgp.ac.in, (+91) 82095 59382

Venue

ATF-15, III-Floor, U-Block, VFSTR Deemed to be university

Coordinator

Dr. Hemanth Kumar Bhuyan
Assistant Professor, Department of IT&CA, VFSTR, Vadlamudi
Ph: 9937935207, e-mail: mthmb.bhuyan@gmail.com

Head of the Department

Dr. VEERANJANEYULU NARALASETTY
Professor, HOD, IT & CA, VFSTR,
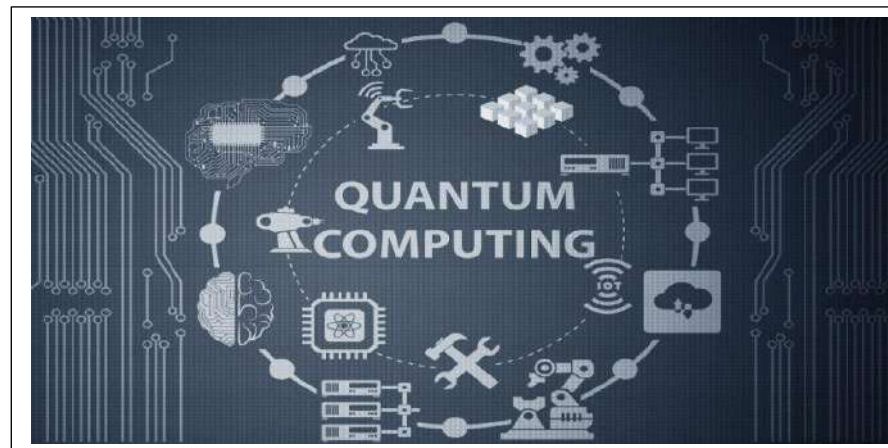Ph:9347162038, e-mail:hodit@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research is a renowned institution which provides quality education in a diverse and intellectual stimulating environment. It imparts value addition training to students to make them competent and inspired engineers. This institution celebrates the power of knowledge, cultivates vision, and encourages new ideas, besides aiming to inculcate human values and instil social consciousness among its students.

This institution is well known for its dedicated faculty, state-of-the-art infrastructure, and good learning outcomes. As a University, it is in the process of improving its standards to the level of a global technical institution. Living up to its motto, "**Technology with Human Face**". In a recent nationwide survey of Indian Universities carried out by NIRF, VFSTR was placed at less than 75 rank in engineering and university. domain. The University is accredited with NAAC 'A+' Grade in 2021.

Value added Course
on
Quantum Computing
12th to 17th February 2024

Organized by
**Department of
Information Technology &
Computer Applications**

About the Department

Department of IT & CA has well-qualified and experienced faculty who are specialists in the areas of Programming Languages, Data Mining, Software Engineering, Information Security, Artificial Intelligence, Data Analytics, Internet of Things and Data Science. The Department attributes its success to the creative and innovative outlook of its students. The Department encourages students to participate in Technical Workshops, Coding competitions, Project Exhibitions and Symposiums to present papers. Students are also made to undergo 6 Month Industrial Internship during final year, where they hone their technical skills in the realm of computers. The department effectively prepares students to pursue leadership, technical, and management positions in a variety of industries. Students have obtained successful top-notch placements at leading companies like IBM, Infosys, Wipro, Cognizant, TCS, HCL and other leading companies.

Course Objectives

The course aims to serve as an introduction to the quantum computational model with the goal of understanding basic quantum algorithms and analyzing them. The course also addresses limitations of quantum algorithms and introduces the necessary tools and techniques to prove the same.

Course Outcomes

Upon completion of the course, the student will be able to achieve the following outcomes:

- Being able to analyze simple quantum algorithms and argue optimality.
- Familiarity with 1-qubit / 2-qubit gate operators and ability to design simple quantum circuits.
- Ability to read and understand recent results as well as research papers on quantum algorithms

Course Contents

Topic	Hours
Quantum Computing Introduction	4
The Circuit Model and the Deutsch-Jozsa Algorithm	6
Simon's Algorithm	5
The Fourier Transform	6
Shor's Factoring Algorithm	5
Hidden Subgroup Problem, Grover's Search Algorithm, Quantum Walk Algorithms	8
Total	32

Resource Person

Dr. Jaya Kumar Vaithiyashankar

IBM Certified Associate Developer, Quantum Computing, Assistant Professor, Presidency University, Chennai
(+91) 83065 69282, jayak_1880@gmail.com

Venue

ATF-15, III-Floor, U-Block,
VFSTR Deemed to be university

Coordinator

Dr. Srikanth Yadav

Assistant Professor, Department of IT, VFSTR, Vadlamudi
Ph: 8121827423, e-mail: srikanthyadav.m@gmail.com

Head of the Department

Dr. VEERANJANEYULU NARALASETTY
Professor, HOD, IT & CA, VFSTR,
Ph:9347162038, e-mail:hodit@vignan.ac.in

VALUE ADDED COURSE

On

"Gandhi's Vision for Modern India: Ethics, Politics, and Society"

Date: 25/07/2023 to 29/07/2023

Aevin Thomas

organised by

Department of Social Science and Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd u/s 3 of UGC Act 1956

ABOUT THE INSTITUTE

Vignan's Foundation for Science, Technology and Research (VFSTR), established in 1997, is a leading educational institution located in Vadlamudi, near Guntur. Surrounded by greenery, VFSTR promotes high standards in technical education, focusing on career development for students. With a diverse curriculum, industry exposure, and hands-on training, the institution prepares students to be competitive professionals with ethical and social awareness. Its strong faculty, comprising both experienced and young educators, along with advanced laboratories and research centers, makes VFSTR a preferred choice for aspiring engineers.

ABOUT SCHOOL & DEPARTMENT

The Department of Social Sciences and Humanities at Vignan's University, located in Vadlamudi, Guntur, plays a pivotal role in the School of Applied Sciences and Humanities. This department aims to provide students with a well-rounded education that integrates the social sciences and humanities with technical and scientific knowledge.

COURSE CONTENT

Date	Theme	Hours
25/07/2023	Non-Violence	6
26/07/2023	Truth (Satyagraha)	6
27/07/2023	Service and Sacrifice	7
28/07/2023	Political Ethics and Leadership,	6
29/07/2023	Social Structures	6
31/07/2023	Cultural and Spiritual Identity	7
	Total Hours	31

RESOURCE PERSONS

Dr. Sadananda Sahoo.

Associate Professor,

IGNOU, New Delhi

Aswathy Chandra C H

Assistant professor, Department of Social Science and Humanities

VFSTR Vadlamudi

COORDINATOR

Dr D Adam Stephen

HoD, **Department of Social Science and Humanities**

VFSTR Vadlamudi

Mail id: hod_ssh@vignan.ac.in

Mobile Number :9949119167

COURSE OBJECTIVES/METHODOLOGY

Theme based programs and activities with specific objectives to inculcate human values and develop appreciation for Gandhian philosophy and way of life. Gandhian Principles of non-violence, Ethical Leadership, Grassroots Empowerment, Advocacy for Social Justice and Sustainable Living Practice.

COURSE OUTCOMES

- **Articulate Gandhi's Philosophy**: Clearly explain the principles of non-violence and Satyagraha and their relevance to contemporary social movements.
- **Analyse Social Structures**: Critically assess the impact of caste dynamics and social inequality in India, applying Gandhi's ideas for social justice.
- **Evaluate Sustainable Practices**: Assess sustainable development initiatives through Gandhi's vision of rural empowerment and self-sufficiency.
- **Demonstrate Ethical Leadership**: Identify and exemplify qualities of ethical leadership inspired by Gandhi's principles in various contexts.
- **Reflect on Cultural Identity**: Engage thoughtfully with the interplay of spirituality and culture in shaping modern Indian identity and values.

VENUE: VPT:12

VALUE ADDED COURSE

On

"Gandhian Thought in Contemporary Context: Leadership and Moral Values"

Date: 23/09/2023 to 29/09/2023

Aevin Thomas

organised by

Department of Social Science and Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE INSTITUTE

Vignan's Foundation for Science, Technology and Research (VFSTR), established in 1997, is a leading educational institution located in Vadlamudi, near Guntur. Surrounded by greenery, VFSTR promotes high standards in technical education, focusing on career development for students. With a diverse curriculum, industry exposure, and hands-on training, the institution prepares students to be competitive professionals with ethical and social awareness. Its strong faculty, comprising both experienced and young educators, along with advanced laboratories and research centers, makes VFSTR a preferred choice for aspiring engineers.

ABOUT SCHOOL & DEPARTMENT

The Department of Social Sciences and Humanities at Vignan's University, located in Vadlamudi, Guntur, plays a pivotal role in the School of Applied Sciences and Humanities. This department aims to provide students with a well-rounded education that integrates the social sciences and humanities with technical and scientific knowledge.

COURSE CONTENT

Date	Theme	Hours
23/09/2023	Gandhian Leadership and Ethics	7
25/09/2023	Moral Values in Leadership	7
26/09/2023	Conflict Resolution and Social Responsibility	7
27/09/2023	Gandhi's Approach to Conflict Resolution and Social Responsibility	6
29/09/2023	The Relevance of Gandhian Thought in the Modern World	6
	Total Hours	33

RESOURCE PERSONS

Dr. Sadananda Sahoo,

Associate Professor,

IGNOU, New Delhi

Aswathy Chandra C H

Assistant professor, Department of Social Science and Humanities

VFSTR Vadlamudi

COORDINATOR

Dr D Adam Stephen
HoD, Department of Social Science and Humanities
VFSTR Vadlamudi
E mail Id: hod_ssh@vignan.ac.in
Mobile Number :9949119167

COURSE OBJECTIVES/METHODOLOGY

Theme based programs and activities with specific objectives to inculcate human values and develop appreciation for Gandhian philosophy and way of life. Gandhian Principles of non-violence, Ethical Leadership, Grassroots Empowerment, Advocacy for Social Justice and Sustainable Living Practice.

COURSE OUTCOMES

1. **Understanding of Gandhian Principles**: Students will demonstrate a comprehensive understanding of key Gandhian principles such as non-violence, truth, and ethical leadership, and articulate their relevance to contemporary social and political issues.
2. **Application of Ethical Leadership**: Students will be able to apply Gandhian moral values in real-life leadership scenarios, demonstrating the ability to make ethically sound decisions that prioritize the welfare of the community.
3. **Critical Analysis of Modern Issues**: Students will critically analyze contemporary challenges in society—such as inequality, environmental degradation, and conflict—through the lens of Gandhian thought, proposing viable solutions grounded in ethical practices.
4. **Development of Service-Oriented Mindset**: Students will cultivate a service-oriented mindset, engaging in community service projects that reflect the spirit of selflessness and sacrifice advocated by Gandhi, thus fostering a commitment to social responsibility.
5. **Promotion of Cultural and Spiritual Values**: Students will appreciate and promote the importance of cultural and spiritual identity in fostering unity and diversity in society, using Gandhian teachings to advocate for dialogue and respect among different communities.

VENUE: VPT:12

VALUE ADDED COURSE

On

"Exploring Gandhian Philosophy: Satyagraha, Swaraj, and Sarvodaya"

Date: 04/10/2023 to 09/10/2023

Aerin Thomas

organised by

Department of Social Science and Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE INSTITUTE

Vignan's Foundation for Science, Technology and Research (VFSTR), established in 1997, is a leading educational institution located in Vadlamudi, near Guntur. Surrounded by greenery, VFSTR promotes high standards in technical education, focusing on career development for students. With a diverse curriculum, industry exposure, and hands-on training, the institution prepares students to be competitive professionals with ethical and social awareness. Its strong faculty, comprising both experienced and young educators, along with advanced laboratories and research centers, makes VFSTR a preferred choice for aspiring engineers.

ABOUT SCHOOL & DEPARTMENT

The Department of Social Sciences and Humanities at Vignan's University, located in Vadlamudi, Guntur, plays a pivotal role in the School of Applied Sciences and Humanities. This department aims to provide students with a well-rounded education that integrates the social sciences and humanities with technical and scientific knowledge.

COURSE CONTENT

Date	Theme	Hours
04/10/2023	The Principle of Satyagraha	6
05/10/2023	Swaraj: The Meaning of Self-Rule	7
06/10/2023	Sarvodaya: The Welfare of All	6
07/10/2023	Ethics of Nonviolence in Conflict Resolution	7
09/10/2023	Gandhi's Views on Economic Justice and Sustainable Development	6
	Total Hours	32

RESOURCE PERSONS

Dr. Sadananda Sahoo.

Associate Professor,

IGNOU, New Delhi

Ch Ravi Kiran

Assistant professor, Department of Social Science and Humanities

VFSTR, Vadlamudi

COORDINATOR

Dr D Adam Stephen

HoD, **Department of Social Science and Humanities**

VFSTR Vadlamudi

E mail Id: hod_ssh@vignan.ac.in

Mobile Number :9949119167

COURSE OBJECTIVES/METHODOLOGY

The course "Exploring Gandhian Philosophy: Satyagraha, Swaraj, and Sarvodaya" aims to deepen students' understanding of Gandhian principles and their relevance to contemporary societal challenges. Through lectures, discussions, and case studies, students will analyze Satyagraha as a method of nonviolent resistance, explore Swaraj for individual and communal empowerment, and examine Sarvodaya in promoting social justice. The methodology encourages active engagement and critical reflection, enabling connections between Gandhi's teachings and modern issues in ethics, governance, and sustainability. By the end, students will be prepared to apply these principles in various contexts, becoming agents of positive change in their communities.

COURSE OUTCOMES

- **Critical Understanding of Satyagraha**: Students will be able to articulate the principles of Satyagraha and evaluate its effectiveness as a nonviolent resistance strategy in historical and contemporary contexts.
- **Empowerment through Swaraj**: Students will demonstrate an understanding of Swaraj and its importance in fostering personal autonomy and community governance, identifying ways to implement these concepts in modern democratic practices.
- **Advocacy for Sarvodaya**: Students will analyze the concept of Sarvodaya and its implications for social justice, assessing its relevance to current movements addressing inequality and marginalization.
- **Application of Ethical Principles**: Students will apply Gandhian ethical principles to contemporary issues in governance and social responsibility, developing frameworks for ethical decision-making.
- **Sustainability and Economic Justice**: Students will evaluate Gandhi's views on sustainable living and economic justice, proposing actionable strategies to promote environmental sustainability and equitable economic practices in today's society.

- **Engagement in Social Change**: Students will be equipped to engage actively in social change initiatives, utilizing Gandhian philosophies to inspire and mobilize communities toward collective action and positive transformation.

VENUE: VPT:12

VALUE ADDED COURSE

On

"Gandhian Principles: Life, Thought, and Legacy Humanities Division"

Date: 1/08/2023 to 7/08/2023

Aevin Thomas

organised by

Department of Social Science and Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE INSTITUTE

Vignan's Foundation for Science, Technology and Research (VFSTR), established in 1997, is a leading educational institution located in Vadlamudi, near Guntur. Surrounded by greenery, VFSTR promotes high standards in technical education, focusing on career development for students. With a diverse curriculum, industry exposure, and hands-on training, the institution prepares students to be competitive professionals with ethical and social awareness. Its strong faculty, comprising both experienced and young educators, along with advanced laboratories and research centers. makes VFSTR a preferred choice for aspiring engineers.

ABOUT SCHOOL & DEPARTMENT

The Department of Social Sciences and Humanities at Vignan's University, located in Vadlamudi, Guntur, plays a pivotal role in the School of Applied Sciences and Humanities. This department aims to provide students with a well-rounded education that integrates the social sciences and humanities with technical and scientific knowledge.

COURSE CONTENT

Date	Theme	Hours
01-08-23	Non-Violence (Ahmisa)	6
02-08-23	Truth (Satya)	6
03-08-23	Self-Rule (Swaraj)	6
04-08-23	Social Justice and Equality	7
07-08-23	Simplicity and Sustainable Living	6
	Total Hours	31

RESOURCE PERSONS

Dr. Sadananda Sahoo,

Associate Professor,

IGNOU, New Delhi

Ch Ravi Kiran

Assistant professor, Department of Social Science and Humanities

VFSTR, Vadlamudi

COORDINATOR

Dr D Adam Stephen

HoD, **Department of Social Science and Humanities**
VFSTR Vadlamudi
E mail Id: hod_ssh@vignan.ac.in
Mobile Number :9949119167

COURSE OBJECTIVES/METHODOLOGY

Theme based programs and activities with specific objectives to inculcate human values and develop appreciation for Gandhian philosophy and way of life. Gandhian Principles of non-violence, Truth (Satya), Self-Rule (Swaraj), Social Justice and Equality, Simplicity and Sustainable Living were introduced to students.

COURSE OUTCOMES

☐ **Understanding Nonviolence**: Students will analyze the concept of nonviolence, exploring its historical examples and its effectiveness in achieving social and political change today.

☐ **Exploring Truth and Ethics**: Students will explore Gandhi's idea of truth (Satya) and discuss its moral significance, considering how it can guide personal and societal values.

☐ **Examining Self-Rule**: Students will examine Gandhi's idea of Swaraj, discussing its importance for personal freedom and community governance in democratic societies.

☐ **Investigating Social Justice**: Students will investigate Gandhi's views on social justice, looking at how his ideas can contribute to current issues related to caste, gender, and economic inequality.

☐ **Promoting Simplicity and Sustainability**: Students will apply Gandhi's principles of simplicity and sustainable living to modern challenges, creating strategies for environmental care and responsible consumption.

VENUE : VPT:12

Resource Person

Mr. Teju Kumar K S
EXECUTIVE QUALITY
ASSURENCE
UNIBIC FOODS INDIA PVT.
LTD.,
Bangalore,
Karnataka, India.

COURSE CO-ORDINATOR:

Dr. Syed Irshaan
Assistant Professor
Department of Food Technology

.

For Registration: 9776376891
drdsi_ft@vignan.ac.in

Venue
VSF-09 2nd Floor
H-Block
VFSTR

Value-added course On
TECHNIQUES AND STRATEGIES FOR FORTIFICATION TO ADDRESS MALNUTRITION

21ST to 26th Aug, 2023

Organised by

DEPARTMENT OF FOOD TECHNOLOGY
School of Agriculture and Food Technology
Vignan's Foundation for Science, Technology and Research
Vadlamudi, Guntur District. Andhra Pradesh India - 522213

ABOUT VFSTR

VISION

To evolve in to a center of excellence in science & technology through creative and innovative practices in teaching - learning, towards promoting academic achievement and research excellence to produce internationally accepted, competitive and world class professionals who are psychologically strong & emotionally balanced imbued with social consciousness & ethical values.

MISSION

To provide high quality academic programs, training activities, research facilities and opportunities supported by continuous industry - institute interaction aimed at promoting employability, entrepreneurship, leadership and research aptitude among students and contribute to the economic and technological development of the region, state and nation.

ABOUT THE DEPARTMENT

The Department of Chemical Engineering was established under Vignan's Engineering College in the year 1997 to address the phenomenally growing Chemical Industry in India. The department primarily offered Undergraduate (B.Tech) program to fulfill the ever-growing local and global demands in allied chemical engineering streams viz. Textile Technology, Food Technology, Petroleum Engineering etc.,. Various undergraduate, postgraduate degree programs and vocational training programs have been launched since its inception.

ABOUT DIVISION OF FOOD TECHNOLOGY

Food Technology course was started at Vignan's University in the year 2014 to address the above-mentioned problems in food sector. The very aim of this Food Technology course is to import knowledge and skills related to food processing, preservation, storage and development of innovative food products with the help of advanced technologies leading to sustainable growth of food sector.

COURSE OBJECTIVE:

- The objective of this course takes participants through how food are processed safe, its quality control and quality assurance.
- Following the standards for food processing and manufacturing. How food technology helps in production of high quality foods.

COURSE OUTCOMES :

- The main task of this course is to develop skills in students to follow FSSAI standards to manufacture safe and quality foods.
- Help the students to know different hazards and critical points wherever required in the production lines.
- To make them learn how to identify different control points and manufacture safe products for consumers.

PROGRAM SCHEDULE

No. of Days	Topic	No. of Hrs Per Day
Day-1	Introduction to Food Fortification and Nutritional Deficiencies	5
Day-2	Micronutrient Fortification and Bioavailability	5
Day-3	Technological Aspects of Food Fortification	5
Day-4	Regulatory Standards and Quality Assurance in Fortification	5
Day-5	Consumer Acceptance and Sensory Evaluation of Fortified Foods	5
Day-6	Future Trends and Innovations in Food Fortification	5
Total Hours		30

Resource Person

Mr. Sanat Prasanna
UNIBIC FOODS INIDA PVT LTD,
Heggadevanapura, Bengaluru
district in the post of DEPUTY
MANAGER- Quality Assurance.

COURSE CO-ORDINATOR:
Mr. Sumit Gawai
Assistant Professor
Department of Food Technology
.

For Registration: 9776376891
Srg_ft@vignan.ac.in

Venue
VFF – 9 H Block 1st Floor
VFSTR

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-added course
On
**Waste Utilization and By-product
Valorization in Food Industry
9th to 13th Oct, 2023**

Organised by

DEPARTMENT OF FOOD TECHNOLOGY
School of Agriculture and Food Technology
Vignan's Foundation for Science, Technology and Research
Vadlamudi, Guntur District. Andhra Pradesh India - 522213

ABOUT VFSTR

VISION

To evolve in to a center of excellence in science & technology through creative and innovative practices in teaching - learning, towards promoting academic achievement and research excellence to produce internationally accepted, competitive and world class professionals who are psychologically strong & emotionally balanced imbued with social consciousness & ethical values.

MISSION

To provide high quality academic programs, training activities, research facilities and opportunities supported by continuous industry - institute interaction aimed at promoting employability, entrepreneurship, leadership and research aptitude among students and contribute to the economic and technological development of the region, state and nation.

ABOUT THE DEPARTMENT

 The Department of Chemical Engineering was established under Vignan's Engineering College in the year 1997 to address the phenomenally growing Chemical Industry in India. The department primarily offered Undergraduate (B.Tech) program to fulfill the ever-growing local and global demands in allied chemical engineering streams viz. Textile Technology, Food Technology, Petroleum Engineering etc.,. Various undergraduate, postgraduate degree programs and vocational training programs have been launched since its inception.

ABOUT DIVISION OF FOOD TECHNOLOGY

Food Technology course was started at Vignan's University in the year 2014 to address the above-mentioned problems in food sector. The very aim of this Food Technology course is to import knowledge and skills related to food processing, preservation, storage and development of innovative food products with the help of advanced technologies leading to sustainable growth of food sector.

COURSE OBJECTIVE:

- The objective of this course takes participants through how food are processed safe, its quality control and quality assurance.
- Following the standards for food processing and manufacturing. How food technology helps in production of high quality foods.

COURSE OUTCOMES :

- The main task of this course is to develop skills in students to follow FSSAI standards to manufacture safe and quality foods.
- Help the students to know different hazards and critical points wherever required in the production lines.
- To make them learn how to identify different control points and manufacture safe products for consumers.

PROGRAM SCHEDULE

No. of Days	Topic	No. of Hrs Per Day
Day-1	Introduction to Waste Utilization in the Food Industry	6
Day-2	Techniques for Food Waste Reduction and Prevention	6
Day-3	By-product Valorization: Concepts and Methods	6
Day-4	Bioconversion Processes: From Waste to Value	6
Day-5	Case Studies: Successful Waste Valorization Practices	6
	Total Hours	30

Resource Person

DR. VANITA SHRIKANT BHAT

ICMR-Research Associate, Center of Excellence in Molecular Biology and Regenerative Medicine, Department of Biochemistry JSS Medical College, JSS Academy of Higher Education & Research Mysore – 570015, India.

Organizer:

Mr. Sumit Gawai
Assistant Professor
Department of Food Technology

.

For Registration: 9776376891
drdk@vignan.ac.in

Venue
VFF 9 H block 1st Floor
VFSTR

VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be University)

-Estd. u/s 3 of UGC Act 1956

Value-added course
On
Packaging Innovation for Sustainability
5th to 9th Feb, 2024

Organised by

DEPARTMENT OF FOOD TECHNOLOGY
School of Agriculture and Food Technology
Vignan's Foundation for Science, Technology and Research
Vadlamudi, Guntur District. Andhra Pradesh India - 522213

ABOUT VFSTR

VISION

To evolve in to a center of excellence in science & technology through creative and innovative practices in teaching - learning, towards promoting academic achievement and research excellence to produce internationally accepted, competitive and world class professionals who are psychologically strong & emotionally balanced imbued with social consciousness & ethical values.

MISSION

To provide high quality academic programs, training activities, research facilities and opportunities supported by continuous industry - institute interaction aimed at promoting employability, entrepreneurship, leadership and research aptitude among students and contribute to the economic and technological development of the region, state and nation.

ABOUT THE DEPARTMENT

 The Department of Chemical Engineering was established under Vignan's Engineering College in the year 1997 to address the phenomenally growing Chemical Industry in India. The department primarily offered Undergraduate (B.Tech) program to fulfill the ever-growing local and global demands in allied chemical engineering streams viz. Textile Technology, Food Technology, Petroleum Engineering etc.,. Various undergraduate, postgraduate degree programs and vocational training programs have been launched since its inception.

ABOUT DIVISION OF FOOD TECHNOLOGY

Food Technology course was started at Vignan's University in the year 2014 to address the above-mentioned problems in food sector. The very aim of this Food Technology course is to import knowledge and skills related to food processing, preservation, storage and development of innovative food products with the help of advanced technologies leading to sustainable growth of food sector.

COURSE OBJECTIVE:
- The objective of this course takes participants through sustainability and food production.
- Different aspects on sustainability development related to industries
- To take actions to make food production sustainable and eco friendly.

COURSE OUTCOMES :
- The main task of this course is to change the resources to sustainable.
- Production of foods ethically and within the standards prescribed.
- Changes in environmental impact of food processing after sustainable production of food products.

PROGRAM SCHEDULE

No. of Days	Topic	No. of Hrs Per Day
Day-1	Overview of sustainable packaging concepts and trends in the food industry	6
Day-2	Exploration of biodegradable, compostable, and recyclable materials.	6
Day-3	Best practices in designing packaging that minimizes environmental impact	6
Day-4	Understanding smart packaging technologies and their benefits	6
Day-5	Review of regulations and certifications related to sustainable packaging.	6
Total Hours		30

Resource Person

Mr. Teju Kumar K S
EXECUTIVE QUALITY
ASSURENCE
UNIBIC FOODS INDIA PVT. LTD.,
Bangalore,
Karnataka, India.

Organizer:
Dr. S. Karthikeyan
Assistant Professor
Department of Food technology
.

For Registration: 9776376891
drsk_ft@vignan.ac.in

Venue
Online
VFSTR

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-added course
On
Food Safety and Quality Assurance Systems
18th to 22th March, 2024

Organised by

DEPARTMENT OF FOOD TECHNOLOGY
Vignan's Foundation for Science, Technology and Research
Vadlamudi, Guntur District. Andhra Pradesh India - 522213

ABOUT VFSTR

VISION

To evolve in to a center of excellence in science & technology through creative and innovative practices in teaching - learning, towards promoting academic achievement and research excellence to produce internationally accepted, competitive and world class professionals who are psychologically strong & emotionally balanced imbued with social consciousness & ethical values.

MISSION

To provide high quality academic programs, training activities, research facilities and opportunities supported by continuous industry - institute interaction aimed at promoting employability, entrepreneurship, leadership and research aptitude among students and contribute to the economic and technological development of the region, state and nation.

ABOUT THE DEPARTMENT

The Department of Chemical Engineering was established under Vignan's Engineering College in the year 1997 to address the phenomenally growing Chemical Industry in India. The department primarily offered Undergraduate (B.Tech) program to fulfill the ever-growing local and global demands in allied chemical engineering streams viz. Textile Technology, Food Technology, Petroleum Engineering etc.,. Various undergraduate, postgraduate degree programs and vocational training programs have been launched since its inception.

ABOUT DIVISION OF FOOD TECHNOLOGY

Food Technology course was started at Vignan's University in the year 2014 to address the above-mentioned problems in food sector. The very aim of this Food Technology course is to import knowledge and skills related to food processing, preservation, storage and development of innovative food products with the help of advanced technologies leading to sustainable growth of food sector.

COURSE OBJECTIVE:

- The objective of this course takes participants through how food are processed safe, its quality control and quality assurance.
- Following the standards for food processing and manufacturing. How food technology helps in production of high quality foods.

COURSE OUTCOMES :

- The main task of this course is to develop skills in students to follow FSSAI standards to manufacture safe and quality foods.
- Help the students to know different hazards and critical points wherever required in the production lines.
- To make them learn how to identify different control points and manufacture safe products for consumers.

PROGRAM SCHEDULE

No. of Days	Topic	No. of Hrs Per Day
Day-1	Introduction to Food Safety and Quality Assurance	6
Day-2	Principles of HACCP and Risk Assessment	6
Day-3	Food Safety Regulations and Compliance Standards	6
Day-4	Quality Control Techniques and Statistical Process Control	6
Day-5	Implementing and Auditing Food Safety Management Systems	6
Total Hours		30

Resource Person

Mr. Teju Kumar K S
EXECUTIVE QUALITY
ASSURENCE
UNIBIC FOODS INDIA PVT.
LTD.,
Bangalore,
Karnataka, India.

Organizer:

Dr. Mrinmoy Roy
Assistant Professor
Department of Food Technology

.

For Registration: 9776376891
drdsi_ft@vignan.ac.in

Venue
VFF-09 3rd Floor
H-Block
VFSTR

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-added course On
FOOD QUALITY & FOSTAC IN FOOD PROCESSING INDUSTRIES
22nd to 27th April, 2024

Organised by

DEPARTMENT OF FOOD TECHNOLOGY
Vignan's Foundation for Science, Technology and Research
Vadlamudi, Guntur District. Andhra Pradesh India - 522213

ABOUT VFSTR

VISION

To evolve in to a center of excellence in science & technology through creative and innovative practices in teaching - learning, towards promoting academic achievement and research excellence to produce internationally accepted, competitive and world class professionals who are psychologically strong & emotionally balanced imbued with social consciousness & ethical values.

MISSION

To provide high quality academic programs, training activities, research facilities and opportunities supported by continuous industry - institute interaction aimed at promoting employability, entrepreneurship, leadership and research aptitude among students and contribute to the economic and technological development of the region, state and nation.

ABOUT THE DEPARTMENT

The Department of Chemical Engineering was established under Vignan's Engineering College in the year 1997 to address the phenomenally growing Chemical Industry in India. The department primarily offered Undergraduate (B.Tech) program to fulfill the ever-growing local and global demands in allied chemical engineering streams viz. Textile Technology, Food Technology, Petroleum Engineering etc.,. Various undergraduate, postgraduate degree programs and vocational training programs have been launched since its inception.

ABOUT DIVISION OF FOOD TECHNOLOGY

Food Technology course was started at Vignan's University in the year 2014 to address the above-mentioned problems in food sector. The very aim of this Food Technology course is to import knowledge and skills related to food processing, preservation, storage and development of innovative food products with the help of advanced technologies leading to sustainable growth of food sector.

COURSE OBJECTIVE:

- The objective of this course takes participants through how food are processed safe, its quality control and quality assurance.
- Following the standards for food processing and manufacturing. How food technology helps in production of high quality foods.

COURSE OUTCOMES :

- The main task of this course is to develop skills in students to follow FSSAI standards to manufacture safe and quality foods.
- Help the students to know different hazards and critical points wherever required in the production lines.
- To make them learn how to identify different control points and manufacture safe products for consumers.

PROGRAM SCHEDULE

No. of Days	Topic	No. of Hrs Per Day
Day-1	Food industry safety standards in India and European countries	5
Day-2	HACCP implementation	5
Day-3	Food industry CCP	5
Day-4	HACCP principle and correct procedure	5
Day-5	FOSTAC: Training and certification	5
Day-6	Practice exercise	5
Total Hours		30

Value Added Course

on

Application of Drones in Agriculture

Venue: Sravanthi Seminar Hall, H-Block,

VFSTRU

Organized by

Department of

Agricultural and Horticultural Sciences

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC "A$^+$" accredited institution. Located in serene environs of Vadlamudi on the Guntur Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of studies.

ABOUT THE DEPARTMENT

The Department of Agricultural and Horticultural Sciences offers UG programme in B.Sc. (Hons.) Agriculture under Agricultural and Horticultural Sciences department from 2021. This department is mainly concentrating on the areas of Agronomy, entomology, pathology, breeding, horticulture, physiology, soil science, economics, extension, statistics, mathematics, etc. It has been focusing on quality teaching as well as advanced laboratory practices. Priority of this department is effectively connecting the agriculture education to research activities, industry problems and societal needs. Availability of modern infrastructure in the department provides an opportunity to faculty to impart higher standards of teaching, research and development activities for the benefit of students.

COURSE OBJECTIVES

- Learn techniques for aerial data gathering and interpretation.
- Explore how drones enhance crop management and resource efficiency.
- Understand legal and ethical aspects of drone usage in agriculture.
- Learn to combine drones with GPS, IoT, and AI for improved farming.
- Assess cost-benefit analyses of drone implementation in farming.
- Gain practical skills in piloting drones and conducting surveys.

COURSE OUTCOMES

- Analyze and interpret data collected from drone imagery for informed decision-making.
- Comprehend legal and ethical guidelines for drone usage.
- Utilize drones alongside other technologies (GPS, IoT, AI) for comprehensive farming solutions.
- Demonstrate the ability to pilot drones effectively in agricultural settings.
- Understand different applications of drones in agriculture

COURSE CONTENTS

Topics	Hours
Introduction to drones in agriculture	2
Drone operation and safety protocols	5
Data collection methods	5
Data analysis and interpretation	6
Application of Drone in Agriculture	8
Precision agriculture applications	3
Case studies and future trends	3
Total duration	32

RESOURCE PERSON

Shri. S. V. S. Anjaneyulu,

Pavaman aviation pvt. ltd.

Venue: Sravanthi seminar Hall, H-Block, VFSTRU

For registration please contact coordinator on or before 18-05-2024

COORDINATOR

Mr. Md. Rahaman Khan

Assistant Professor, Agronomy.

Dept. of Agricultural and Horticultural Sciences

Mobile No.: 9489840373, Email Id: rk_ahs@vignan.ac.in

VIGNAN'S

FOUNDATION FOR SCIENCE, TECHNOLOGY & RESEARCH

(Deemed to be University) - Estd. u/s 3 of UGC Act 1956

Value added course

on

"STINGLESS BEE FARMING"

Venue: Sravanthi Seminar Hall, H-Block,

VFSTRU

Organized by

Department of

Agricultural and Horticultural Sciences

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A" accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of studies.

ABOUT THE DEPARTMENT

The Department of Agricultural and Horticultural Sciences offers UG programme in B.Sc. (Hons.) Agriculture under Agricultural and Horticultural Sciences department from 2021. This department is mainly concentrating on the areas of Agronomy, entomology, pathology, breeding, horticulture, physiology, soil science, economics, extension, statistics, mathematics, etc. It has been focusing on quality teaching as well as advanced laboratory practices. Priority of this department is effectively connecting the agriculture education to research activities, industry problems and societal needs. Availability of modern infrastructure in the department provides an opportunity to faculty to impart higher standards of teaching, research and development activities for the benefit of students.

COURSE OBJECTIVES

- Understand stingless bee biology, behavior, and social structure.
- Improve problem-solving skills to address common issues in stingless bee farming.
- Develop skills in value-added product development

COURSE OUTCOMES

- Establish and manage stingless bee colonies.
- Develop sustainable beekeeping practices.
- Contribute to pollination and ecosystem services through sustainable stingless bee farming practices.

COURSE CONTENTS

The following topics will be covered

Topics	Hours
Introduction to Stingless Bees	4
Hive Management and Construction	8
Bee Health and Nutrition	6
Honey and Product Production	6
Business and Marketing Strategies	4
Sustainable Beekeeping Practices	4
Total Hours	32

RESOURCE PERSON

Dr. G. Shaliraju,

Scientist-Entomology,

Dr. YSRHU-Venkataramannagudem,

West Godavari-Andhra Pradesh.

Venue: Sravanthi Seminar Hall, H-Block, VFSTRU

For registration, please contact coordinator on or before

COORDINATOR

Dr. T. Naresh

Assistant Professor, Entomology

Dept. of Agricultural and Horticultural Sciences

Mobile No.:9493462948 : Email Id: drtn_ahs@vignan.ac.in

**Value added course
on**

"Vermiculture for Sustainable Crop Production"

10th to 14h June 2024
Venue: Sravanthi Seminar Hall, H-Block, VFSTRU

**Organized by
Department of
Agricultural and Horticultural Sciences**

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A'' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of studies

ABOUT THE DEPARTMENT

The Department of Agricultural and Horticultural Sciences offers UG programme in B.Sc. (Hons.) Agriculture under Agricultural and Horticultural Sciences department from 2021. This department is mainly concentrating on the areas of Agronomy, entomology, pathology, breeding, horticulture, physiology, soil science, economics, extension, statistics, mathematics, etc. It has been focusing on quality teaching as well as advanced laboratory practices. Priority of this department is effectively connecting the agriculture education to research activities, industry problems and societal needs. Availability of modern infrastructure in the department provides an opportunity to faculty to impart higher standards of teaching, research and development activities for the benefit of students.

COURSE OBJECTIVES

- ✓ To Design and Set Up Vermiculture Systems.
- ✓ Application of Vermiculture in Sustainable Agriculture
- ✓ To know the harvesting techniques in Vermi Compost and Vermiwash

COURSE OUTCOMES

By the end of this course, participants will be able to:

- ✓ **Identify Key Principles of Vermiculture and Vermi Composting**
- ✓ Establish and Manage Vermiculture Systems.
- ✓ Stay Updated with Emerging Trends in Vermiculture

COURSE CONTENT

Topics	Hours
Introduction to Vermiculture and Vermi Composting	2
Biology and Behavior of Earthworms	3
The Vermi Composting Process	8
Vermiculture for Sustainable Agriculture	5
Economic and Environmental Impact of Vermiculture	7
Legal, Ethical, and Market Considerations	3
Innovations and Future of Vermiculture	4
Total Hours	**32**

RESOURCE PERSON

Dr. Lorelyn B. Celosa, Knowledge Transfer Specialist
Venue: Sravanthi Seminar Hall, H-Block, VFSTRU
For registration please contact coordinator on or before 8th June.

COORDINATOR

Dr. Pandu U
Assistant Professor, Agronomy
Dept. of Agricultural and Horticultural Sciences
Mobile No: 89711375798, Email id: drpsu_ahs@vignan.ac.in

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

**Value added course
on**

"IoT in Agriculture"

24th to 28th June 2024
Venue: Sravanthi Seminar Hall, H-Block, VFSTRU

Organized by
Department of
Agricultural and Horticultural Sciences

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A'' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centres make it one of the most preferred institutions for the aspirants of studies

ABOUT THE DEPARTMENT

The Department of Agricultural and Horticultural Sciences offers UG programme in B.Sc. (Hons.) Agriculture under Agricultural and Horticultural Sciences department from 2021. This department is mainly concentrating on the areas of Agronomy, entomology, pathology, breeding, horticulture, physiology, soil science, economics, extension, statistics, mathematics, etc. It has been focusing on quality teaching as well as advanced laboratory practices. Priority of this department is effectively connecting the agriculture education to research activities, industry problems and societal needs. Availability of modern infrastructure in the department provides an opportunity to faculty to impart higher standards of teaching, research and development activities for the benefit of students.

COURSE OBJECTIVES

- ✓ To integrate of the Internet of Things (IoT) in agriculture.
- ✓ To assess crop monitoring overall conditions.

COURSE OUTCOMES

On successful completion of course the student will be able to:
- ✓ Assessed crop monitoring overall conditions.
- ✓ Integrated of the Internet of Things (IoT) in agriculture.

COURSE CONTENT

Topics	Hours
Precision Farming	3
Livestock Monitoring	4
Sensors for Smart Agriculture	6
IoT-enabled Farm Equipment	4
Data Analytics for Decision Support	7
Devices used in green house	5
Integration with Farm Management Systems	3
Total Hours	**32**

RESOURCE PERSON

Ms. Divya Nemuri, Senior IoT Developer, Smartbridge Educational Services Pvt. Ltd
Venue: Sravanthi Seminar Hall, H-Block, VFSTRU
For registration please contact coordinator on or before 21th June.

COORDINATOR

Dr. Rajanand Hiremath
Assistant Professor, Agronomy
Dept. of Agricultural and Horticultural Sciences
Mobile No: 9241076428, Email id: rajanandagri4296@gmail.com

VIGNAN'S
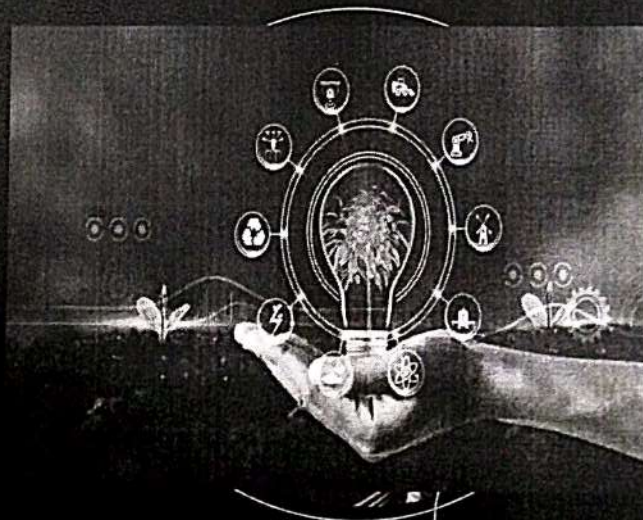### Foundation for Science, Technology & Research
UNIVERSITY
(Estd u/s 3 of UGC Act of 1956)

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A" accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals.

VALUE ADDEDD COURSE
ON "HYDROPONICS"

20th -24th November 2023
Venue: Sravanthi Seminar Hall, H-Block, VFSTRU

Organized BY:

Dept. of Agricultural & Horticultural Sciences

COURSE CONTENT

Topics	Hours
Hydroponic basis	3
Hydroponic systems	4
System maintenance	6
Cost Analysis	4
Nutrient solutions	7
Pest and Diseases	5
Temperature	
Intercropping	3
Total Hours	**32**

ABOUT THE DEPARTMENT

The Department of Agricultural and Horticultural Sciences offers UG programme in B.Sc. (Hons.) Agriculture under Agricultural and Horticultural Sciences department from 2021. This department is mainly concentrating on the areas of Agronomy, entomology, pathology, breeding, horticulture, physiology, soil science, economics, extension, statistics, mathematics, etc. It has been focusing on quality teaching as well as advanced laboratory practices. Priority of this department is effectively connecting the agriculture education to research activities, industry problems and societal needs. Availability of modern infrastructure in the department provides an opportunity to faculty to impart higher standards of teaching, research and development activities for the benefit of students.

COURSE OBJECTIVES

»To make the learners how to grow plants without soil using nutrient rich solutions.

»To produce optimal conditions for plant growth.

COURSE OUTCOMES

On successful completion of course the student will be able to:

▶ Students can know growing conditions within green houses, plant nutrition and maintenance.

▶ Students can start a hydroponic set up.

RESOURCE PERSON

Dr.G. Subba Rao

Associate Director of Research

ANGRAU, Guntur.

Venue: Sravanthi Seminar Hall, H-Block, VFSTRU

For registration please contact coordinator on or before 4th November.

COORDINATOR

Mr. Yousuf
Assistant Professor, Agronomy
Dept. of Agricultural and Horticultural Sciences
Mobile No: 8790725687,
Email id: my_ahs@vignan.ac.in

course. Co-ordinator
M.Yousuf.
Asitr.Prof

Dr. T. Naresh
Coordinator
Agricultural & Horticultural Scienc
VFSTR (Deemed to be Universit;
Vadlamudi - 522 213.

3. Application in Sustainable Farming Participated and begn to interest to Learn

VIGNAN'S

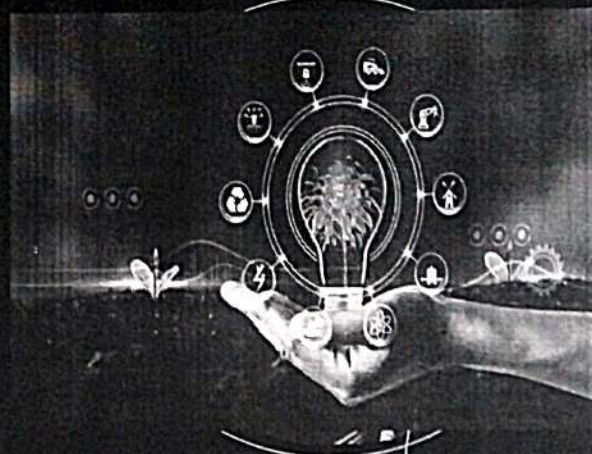**Foundation for Science, Technology & Research**

UNIVERSITY

(Estd u/s 3 of UGC Act of 1956)

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A" accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains its students into competitive and global professionals.

VALUE ADDED COURSE ON "MUSHROOM PRODUCTION"

6th -10th November 2023
Venue: Sravanthi Seminar Hall, H-Block, VFSTRU

Organized BY:

Dept. of Agricultural & Horticultural Sciences

COURSE CONTENT

Topics	Hours
Mushroom Biology	3
Cultivation techniques	4
Harvesting & Storage	6
Marketing	4
Health benefits	7
Infrastructure	5
Safety	3
Total Hours	32

ABOUT THE DEPARTMENT

The Department of Agricultural and Horticultural Sciences offers UG programme in B.Sc. (Hons.) Agriculture under Agricultural and Horticultural Sciences department from 2021. This department is mainly concentrating on the areas of Agronomy, entomology, pathology, breeding, horticulture, physiology, soil science, economics, extension, statistics, mathematics, etc. It has been focusing on quality teaching as well as advanced laboratory practices. Priority of this department is effectively connecting the agriculture education to research activities, industry problems and societal needs. Availability of modern infrastructure in the department provides an opportunity to faculty to impart higher standards of teaching, research and development activities for the benefit of students.

mushroom to be cultivated

COURSE OBJECTIVES

»To make the learners self-reliant to identify several kind of mushrooms.
»To develop a business plan on mushroom cultivation

COURSE OUTCOMES

On successful completion of course the student will be able to:
► Students can know morphology and types of mushrooms.
► Students can start small scale industry of mushroom cultivation.

RESOURCE PERSON

Dr.K. Arun Kumar
Assistant Professor
Dr. YSRHU COH, Anantharajupeta.
Venue: Sravanthi Seminar Hall, H-Block, VFSTRU

For registration please contact coordinator on or before 4th November.

COORDINATOR

Mr. Yousuf
Assistant Professor, Agronomy
Dept. of Agricultural and Horticultural Sciences Mobile No: 8790725687.
Email – my_ahs@vignan.ac.in

Course Co-ordinator
Mr. M.Yousuf
Asst. Prof.

Dr. T. Naresh
Coordinator
Agricultural & Horticultural Sciences
VFSTR (Deemed to be U
Vadlamudi - 522 21

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
On
Linux System Administration

22.01.2024 – 11.03.2024
Venue: N-308

Organized
by

Department of Computer Science & Engineering
Vadlamudi,
Guntur - 522213, A.P., India
www.vignan.ac.in

About Course

Linux is the most popular operating system used in running huge web servers that run the internet. These systems need to be maintained. Linux administration is the act of setting up, configuring, and managing a computer system running a Linux distribution. This includes the creation of user accounts, installation of the required software, configuring the said software as well as creating and restoring backups.

Course Objevtives

The objective of the Linux System Administration course is to equip participants with the essential skills and knowledge required to effectively manage and maintain Linux-based systems. Through a comprehensive curriculum, learners will gain hands-on experience in system installation, configuration, and troubleshooting, as well as understanding user and group management, file permissions, and network configurations.

Course Outcomes

Upon the completion of the Course, Students will be able to:
- ➤ Understand the architecture of a Linux system.
- ➤ Install and maintain a Linux workstation, setup it up as a network client .
- ➤ Work at the Linux command line, including common GNU and Unix commands .
- ➤ Handle files and access permissions as well as system security

Perform easy maintenance tasks: help users, add users to a larger system, backup and restore, shutdown and reboot.

Day	Contents	No. of Hours
Day 1	Introduction and OS installation Basic Commands	3
	User & Group management File permissions & ACL	2
	Package & Disk Management	2
Day 2	Networking & Remote installation, Configure network interfaces and settings.	3
	Kernel Virtualization	2
	Linux process & controlling services	2
Day 3	Configure remote access using the web console and SSH.	2
	Manage users, groups and user security policies.	2
	Manage, organize, and secure files.	3
Day 4	Database configuration	2
	File System Security and Management	2
	User Administration	3
Day 5	System Services	3
	Troubleshooting the System	3
	Total	34

Resource Person

Dr. M.M. Naidu,
Former VC,
SV University

Co-Ordinator

Mrs. G. Parimala,
Asst. Prof, Dept of CSE,
VFSTR Deemed to be University

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.

VIGNAN'S

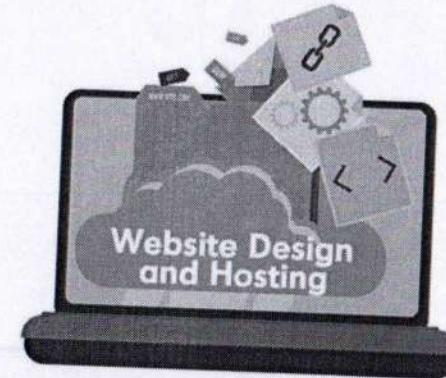Foundation for Science, Technology & Research

(Deemed to be University)

Estd. u/s 3 of UGC Act 1956

Value-Added Course
On
Web Designing & Hosting

22.01.2024– 11.03.2024
Venue: N-307

Website Design and Hosting

Organized
by
Department of Computer Science & Engineering
Vadlamudi,
Guntur - 522213, A.P., India
www.vignan.ac.in

About Course

Web designing and hosting are two crucial components of creating a successful online presence. Web design involves crafting the visual aesthetics and user experience of a website, focusing on layout, color schemes, typography, and navigation to ensure it is both appealing and functional. It encompasses both front-end development, which deals with what users see, and back-end development, which manages the server, application, and database interactions. On the other hand, web hosting refers to the service that provides the infrastructure and technologies necessary to store, manage, and serve websites on the internet.

Course Objevtives

The objective of a course in Web Designing and Hosting is to equip students with the essential skills and knowledge needed to create, deploy, and maintain effective websites. Participants will learn the principles of web design, including layout, color theory, and user experience, as well as the fundamentals of HTML, CSS, and JavaScript for front-end development.

Course Outcomes

Upon the completion of the Course, Students will be able to:

➤ Create visually appealing and user-friendly website layouts that enhance user experience and engagement.

➤ Utilize HTML, CSS, and JavaScript to build and style functional websites, demonstrating a solid understanding of front-end development.

➤ Create websites that are fully responsive, ensuring compatibility across various devices and screen sizes.

➤ Assess different web hosting services, understanding their features and limitations to select the most suitable solution for various projects.

➤ Optimize websites for speed and performance, employing best practices in coding, image compression, and caching.

Resource Person

V Santosh Kumar,
Assistant Consultant, TCS, Hyderabad.

Day	Contents	No. of Hours
Day 1	Overview of web design principles, Tools and software for web design	3
	Understanding user experience (UX) and user interface (UI)	2
	Structure of HTML documents, Common HTML tags, Creating a simple web page	2
Day 2	Introduction to CSS and styling	3
	Selectors, properties, and values	2
	Box model and layout techniques (margin, padding, borders)	2
Day 3	Responsive design principles (media queries)	2
	Flexbox and Grid for layout	2
	CSS transitions and animations	3
Day 4	Introduction to JavaScript	2
	Variables, functions, and events	2
	DOM manipulation and interactivity	3
Day 5	Overview of web hosting and its importance, Domain names and DNS basics	3
	Techniques for optimizing website performance (caching, compression), Tools for tracking performance	3
Total		34

Co-Ordinator

Mr.P.Vijaya Babu,
Asst. Prof, Dept of CSE,
VFSTR Deemed to be University

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
Estd. u/s 3 of UGC Act 1956
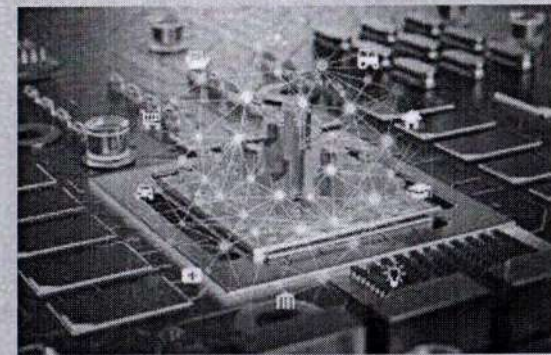
Value-Added Course
on
Embedded C with RTOS and IoT

22.01.2024 to 11.03.2024
Venue:N-203

Organized by
Department of Computer Science and Engineering
Vadlamudi, Guntur - 522213,
Andhra Pradesh., India
www.vignan.ac.in

About Course

This course offers an in-depth exploration of Embedded C programming in conjunction with Real-Time Operating Systems (RTOS) and Internet of Things (IoT) applications. Students will learn how to develop efficient embedded software, manage resources in real-time environments, and integrate IoT technologies to create smart, connected systems.

Course Objectives

The objectives of the Embedded C with RTOS and IoT course are designed to provide students with a comprehensive understanding of embedded systems and their applications. By the end of the course, students will be able to develop efficient and optimized code in Embedded C specifically tailored for micro controllers. They will gain a solid grasp of Real-Time Operating Systems (RTOS), including task scheduling, inter-task communication, and resource management. Students will learn to design and implement real-time applications that effectively manage multiple tasks and ensure timely execution.

Course Outcomes

Upon the Completion of the Course, Students will be to:
- ➢ Proficiently Write Embedded C Code
- ➢ Understand RTOS Concepts.
- ➢ Design Real-Time Applications
- ➢ Describe IoT Architecture
- ➢ Integrate RTOS with IoT Solutions
- ➢ Implement Networking Protocols
- ➢ Apply Security Practices
- ➢ Complete Hands-On Projects

Day	Contents	No. of Hours
Day 1	Introduction to Embedded Systems	2
	Definition and characteristics of embedded systems	2
	Overview of embedded hardware components	2
Day 2	Differences between embedded systems and general-purpose computing	3
	Basics of C programming and its applications in embedded systems	3
	Data types, control structures, and functions	2
Day 3	Memory management and optimization techniques	2
	Understanding microcontroller architecture and features	3
	Interfacing with common peripherals	2
Day4	Practical exercises in reading sensors and controlling actuators	2
	Introduction to RTOS concepts and benefits	2
	Task management: creation, scheduling, and termination	2
Day 5 & Day 6	Inter-task communication: queues, semaphores, and mutexes	3
	Overview of IoT architecture and components	2
	Types of IoT devices and their applications	2
	Total:	**34**

Resource Person

Sai Vinod Konakanchi,
Senior Software Developer,
Actifio Technologies Pvt. Ltd., Hyderabad

Coordinator

Mr. Sourav Mondal
Assistant Professor
Department of CSE, VFSTR

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.

VIGNAN'S
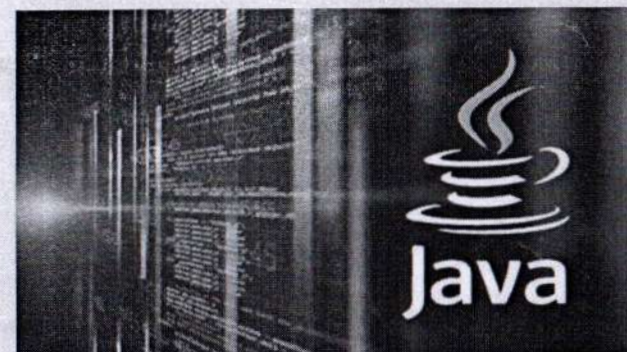Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
On
Java Programs and Java Collections & Web Service Deployment

22.01.2024 – 11.03.2024
Venue: N-408

Organized
by
Department of Computer Science & Engineering
Vadlamudi,
Guntur - 522213, A.P., India
www.vignan.ac.in

About Course

Java Collections and Web Service Deployment are essential components in modern software development. The Java Collections Framework provides a set of data structures and algorithms for managing groups of objects efficiently, enabling developers to handle data in various formats, such as lists, sets, and maps. On the other hand, Web Service Deployment involves creating and deploying services that allow different applications to communicate over the internet, typically using protocols like REST or SOAP.

Course Objevtives

The objective of the Java Collections and Web Service Deployment course is to equip students with a comprehensive understanding of data management and service-oriented architecture using Java. By the end of the course, students will be proficient in utilizing the Java Collections Framework to effectively manage and manipulate data structures, optimizing performance through the appropriate use of lists, sets, maps, and other collection types.

Course Outcomes

Upon the completion of the Course, Students will be able to:

➤ Demonstrate proficiency in using various collection types (lists, sets, maps) to effectively store, retrieve, and manipulate data.

➤ Apply common algorithms such as sorting, searching, and iteration on collections, optimizing performance based on use cases.

➤ Develop and deploy RESTful web services using Java frameworks (e.g., Spring Boot), ensuring proper adherence to REST principles.

➤ Analyze and optimize the performance of collections and web services, identifying bottlenecks and implementing effective solutions.

Day	Contents	No. of Hours
Day 1	Interfaces and Abstract Classes, Defining and implementing interfaces, Abstract classes and methods.	3
	Collections Framework Introduction, Overview of Java Collections Framewor.	2
	List, Set, and Map interfaces	2
Day 2	Common implementations (ArrayList, HashSet, HashMap)	3
	Working with Collections, Iterating over collections, Sorting and searching (using Collections class),	2
	Advanced Collections, Working with Queue and Deque, Overview of concurrent collections.	2
Day 3	Overview of JSON and XML, Tools and technologies for web services.	2
	Building a RESTful Web Service, Creating REST endpoints	2
	Handling requests and responses.	3
Day 4	Consuming a RESTful Web Service, Using RestTemplate in Spring.	2
	Security in Web Services, Overview of authentication and authorization, Securing RESTful services.	2
	Hands-on: Developing an application using inter-task communication	3
Day 5 & Day 6	SOAP Web Services, Introduction to SOAP, Creating a SOAP web service.	3
	Performance and Optimization, Performance considerations in web services, Caching strategies, Monitoring and logging.	3
	Total	34

Resource Person
Dr. G.Akhil
Adjunct Faculty.

Co-Ordinator
Mr.Ch.Ravikishore Reddy,
Asst. Prof, Dept of CSE,
VFSTR Deemed to be University.

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.

VIGNAN'S
Foundation for Science, Technology & Research

(Deemed to be University)

-Estd. u/s 3 of UGC Act 1956

Value-Added Course
On
Database using SQL

22.01.2024–11.03.2024
Venue: N-506

Organized
by
Department of Computer Science & Engineering
Vadlamudi,
Guntur - 522213, A.P., India
www.vignan.ac.in

About Course

A database using SQL (Structured Query Language) is a powerful tool for managing and organizing data efficiently. SQL is the standard language for querying and manipulating relational databases, allowing users to create, read, update, and delete data through a series of structured commands. Relational databases store information in tables, where each table consists of rows and columns, making it easy to maintain relationships between different data sets.

Course Objevtives

The objective of a course on Database using SQL is to equip learners with the fundamental skills and knowledge required to design, implement, and manage relational databases effectively. Participants will gain a solid understanding of database concepts, including data modeling, normalization, and the relational model. The course will focus on mastering SQL for querying, manipulating, and maintaining data, enabling students to perform operations such as data retrieval, aggregation, and transaction management.

Course Outcomes

Upon the completion of the Course, Students will be able to:

- ➤ Describe fundamental concepts of relational databases, including tables, relationships, normalization, and data integrity.
- ➤ Write complex SQL queries to retrieve, manipulate, and analyze data effectively, using commands such as SELECT, INSERT, UPDATE, and DELETE.
- ➤ Design and create database schemas that accurately represent real-world entities and their relationships.
- ➤ Utilize aggregate functions and grouping to summarize data, enabling insightful reporting and analysis.
- ➤ Implement indexing strategies to optimize query performance and improve data retrieval efficiency.

Day	Contents	No. of Hours
Day 1	Introduction to SQL, Set up a local SQL environment, Write basic SQL commands.	3
	Basic Data Retrieval, Basic SELECT queries, Filtering results with WHERE, Using AND, OR, and NOT.	2
	Practice queries.	2
Day2	Aggregate Functions and Grouping, Aggregate functions (COUNT, SUM, AVG, MAX, MIN).	3
	Grouping data with GROUP BY, Filtering grouped data with HAVING.	2
	Practice queries that aggregate data.	2
Day 3	Sorting and Limiting Results, Sorting results with ORDER BY, Limiting results with LIMIT.	2
	Write queries to retrieve sorted and limited datasets.	2
	Joins and Relationships, Understanding primary and foreign keys.	3
Day4	Types of joins: INNER JOIN, LEFT JOIN, RIGHT JOIN, FULL JOIN.	2
	Create tables with relationships and practice joining them.	2
	Subqueries and Nested Queries, Using subqueries in SELECT, FROM, and WHERE clauses.	3
Day 5 & Day 6	Data Manipulation Language (DML), Data Definition Language (DDL)	3
	Indexes and Views, Understanding indexes and their benefits, Creating and using views.	3
	Total	34

Co-Ordinator
Mrs.G.Navya,
Asst. Prof. Dept of CSE.

Resource Person
Sai Ranganath Dattu,
IT Analyst, TCS, Hyderabad.

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling playgrounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also.

The Department encourages students to participate in numerous symposiums and to present papers in them. Students are also made to undergo in-plant training programs, where they hone their technical skill in the realm of computers.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
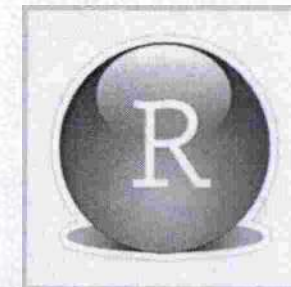-Estd. u/s 3 of UGC Act 1956

Value-Added Course
on
R - Programming

22.01.2024 to 11.03.2024
Venue: N-507

Organized by
Department of Computer Science and Engineering

Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

In this course you will learn how to program in R and how to use R for effective data analysis. You will learn how to install and configure software necessary for a statistical programming environment, discuss generic programming language concepts as they are implemented in a high-level statistical language. The course covers practical issues in statistical computing which includes programming in R, reading data into R, accessing R packages, writing R functions, debugging, and organizing and commenting R code. Topics in statistical data analysis and optimization will provide working examples.

Course Objectives

This course is meant to Learn R Programming and to introduce students to the basic concepts and R studio and R Environment. To develop skills of using R programming to crate Data frames and apply Reproducible Research. To gain experience of doing independent study and research.

Course Outcomes

Upon the Completion of the Course, Students will be able to

- ➤ Gain knowledge about basic concepts of R Programming
- ➤ Understand the different data structures in R
- ➤ Use the apply family of functions to iterate functions across data
- ➤ Understanding Graphics packages in R Programming.
- ➤ Design application using R Programming.

Day	Topic to be Covered	No. of Hours
Day 1	✓ Introduction to R Programming and R Data Structures, Common Vector Operations	4
	✓ Matrices, Arrays and Lists	3
Day2	✓ Creating Data Frames	3
	✓ Working with Tables	3
Day3	✓ OOP concepts	4
Day 4	Graphics in R Programming	3
Day-5	✓ Descriptive Statics	7
Day 6	✓ Reproducible Research using R and R studio	5
	Total	32

Resource Person
Mr. Kuldeep,
Technical Trainer,
Fin Lands Pvt Ltd, Hyderabad

Coordinator
Dr.P.Sivaprasad,
Assistant Professor Department of CSE,
VFSTR Deemed to be University

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.

VIGNAN'S
Foundation for Science, Technology & Research

(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956
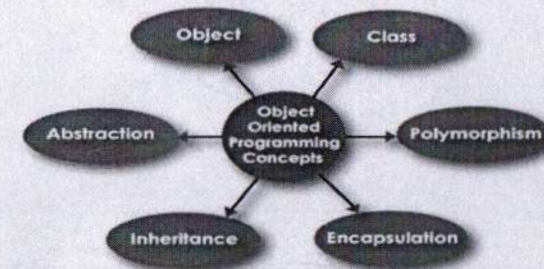
Value-Added Course
On
Object Oriented Programming Principles

22.01.2024 – 11.03.2024
Veneu: 508

Organized
by
Department of Computer Science & Engineering
Vadlamudi,
Guntur - 522213, A.P., India
www.vignan.ac.in

About Course

Learn to code in Java and improve your programming and problem-solving skills. You will learn to design algorithms as well as develop and debug programs. Using custom open-source classes, you will write programs that access and transform images, websites, and other types of data. At the end of the course you will build a program that determines the popularity of different baby names in the US over time by analyzing comma separated value (CSV) files.

Course Objevtives

The course is designed to provide complete knowledge of Object Oriented Programming, through Java and to enhance the programming skills of the students by giving practical assignments to be done in labs.

Course Outcomes

Upon the completion of the Course, Students will be able to:
- Edit, compile, and run a Java program.
- Use conditionals and loops in a Java program.
- Use Java API documentation in writing programs.
- Debug a Java program using the scientific method.
- Develop a set of test cases as part of developing a program.
- Create a class with multiple methods that work together to solve a problem.
- Use divide-and-conquer design techniques for a program that uses multiple methods.

Day	Contents	No. of Hours
Day 1	Encapsulation, Data Hiding, Abstraction	3
	Inheritance , Polymorphism	2
	Classes, object , instance, Instantiation	2
Day 2	Attributes, Member variables and Methods	3
	Operation, Interaction, Messages	2
	Link , Method, context, sequencing	2
Day 3	Transient Object, Multiplicity, Coupling	2
	Object Copying and Cloning, Access Modifiers	2
	constructors and Destructors	3
Day 4	User Defined Classes, Default Attributes	2
	Inheritance - Extending existing classes	2
	Overloading and overriding methods.	3
Day 5	class method , static method and Descriptors	3
	Properties to control Attribute Access	3
	Total	34

Resource Person
Mr. Satya Prasad V,
Consultant, Wipro Technologies, Hyderabad

Co-Ordinator
Mrs.Sk.Sajida Sultana,
Asst. Prof, Dept of CSE,
VFSTR Deemed to be University

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956
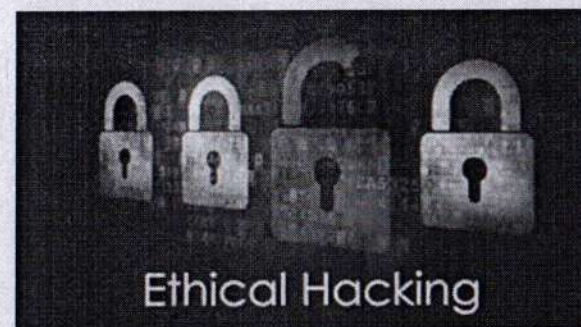
Value-Added Course
On
Ethical Hacking

28.01.2023 – 11.03.2023
Venue: N-201

Ethical Hacking

Organized
by
Department of Computer Science & Engineering
Vadlamudi,
Guntur - 522213, A.P., India
www.vignan.ac.in

About Course

This class demonstrates the ethical use of various "white hat" cyber penetration testing tools and techniques consistent with Ethical Hacking training. Network tools and techniques take place in an enclosed "sandbox" environment. Students are exposed to various computer hacking skills and analyze various protective measures and their effectiveness.

Course Objevtives

The purpose of ethical hacking is to evaluate the security of and identify vulnerabilities in systems, networks or system infrastructure. It includes finding and attempting to exploit any vulnerabilities to determine whether unauthorized access or other malicious activities are possible.

Course Outcomes

Upon the completion of the Course, Students will be able to:

➤ Edit, compile, and run a Java program.
➤ Critically analyze various recon techniques and their effectiveness
➤ Demonstrate the use of tools to escalate privileges on a remote device
➤ Demonstrate the placement of a Remote Access Trojan using either an insider placement or phishing attack
➤ Demonstrate password cracking using different tools
➤ Compare and contrast various techniques for launching server attacks
➤ Demonstrate various web based attacks

Day	Contents	No. of Hours
Day 1	Key issues plaguing the information security world	3
	Incident management process and penetration testing	2
	Various types of footprinting, footprinting tools, and countermeasures	2
Day 2	Network scanning techniques and scanning countermeasures	3
	Enumeration techniques	2
	System hacking methodology, steganography, steganalysis attacks	2
Day 3	Dierent types of Trojans, Trojan analysis, and Trojan countermeasures	2
	Working of viruses, virus analysis	2
	Computer worms, malware analysis procedure	3
Day 4	Packet sni-ng techniques	2
	Social Engineering techniques, identify thef	2
	Social engineering countermeasures	3
Day 5	DoS/DDoS attack techniques, botnets	3
	DDoS attack tools, and DoS/DDoS countermeasures	3
	Total	34

Resource Person

Ch. Sai Pavan,
Senior Infra Developer, CTS,
Hyderabad

Co-Ordinator

Dr.T.R.Rajesh,
Assoc. Prof, Dept of CSE,
VFSTR Deemed to be University

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
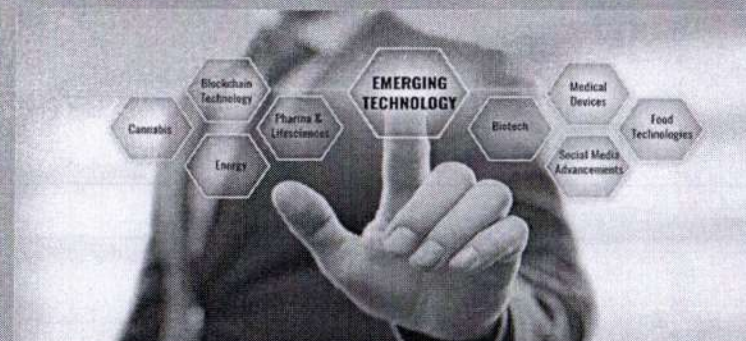First under Sub UGC Act 1956

Value-Added Course
on
Emerging Technologies

22.01.2024 to 11.03.2024
Venue: N-202

Organized
by
Department of Computer Science & Engineering
Vadlamudi,
Guntur - 522213, A.P., India
www.vignan.ac.in

About Course

This course explores the current and potential future impacts of new, emerging, and rapidly evolving technologies on organizations and their operations across a range of industries and sectors. Students will gain insights into these technologies and how these organizations are coping (or not) with the resulting disruption. In addition to tools and best practices, students examine the challenges and opportunities in designing projects that implement new and emerging technologies. Other topics include managing change in organizations as a result of disruption, the benefits and challenges of adapting new technologies, and legal and privacy issues. A case study project throughout the course investigates how to identify and implement a new technology that will solve a problem in an organization.

Course Objectives

The course is aimed to provide Basic knowledge to understand the tremendous historical impact of emerging technologies, the business and government settings and frameworks for them, and how some examples of technologies have been and are being thought up, developed, marketed, and implemented in the real world.

Course Outcomes

Upon the Completion of the Course, Students will be able to
- ✓ Discuss the impact of disruptive technologies on project design, implementation, and transformation.
- ✓ Identify major areas where technologies can be applied and their implications for organizational change.
- ✓ Recognize current and emerging disruptive technologies and their potential to impact social conditions, the economy, and daily life.
- ✓ Review current literature on the selection, implementation, and evaluation of new and emerging technologies and their impacts.Conduct and present a project on a technologies analysis that incorporates audio, video, and images.
- ✓ Compare and contrast current and emerging technologies and

Day	Contents	No. of Hours
Day 1	Discussion on the role of state-of-the-art digital technology on changing society	3
	Examine and evaluate emerging technologies, such as advanced broadband, nanotechnology, visualization, internet of things, mobile communications, data mining, analytics, social media, robotics, wearables, and online education	5
Day 2	Understand the effects of design on development of emerging technologies	6
Day 3	appraise the importance of ethical and socio-cultural impacts and geographical inequalities of the digital revolution	6
Day 4	Synthesize the most important overall trends in digital technologies and the economic and social consequences of them	6
Day 5	Discussion onn Social media lab	3
	Design for emerging technologies	2
	Small group project: realtime sound and video mixing performance.	3
	Total	**34**

Resource Person

Mr. Mahesh Rakheja, CTO,
APPSTHENTIC, Pvt Ltd

Co-Ordinator

Mr.Saiyed Faiyaz waris,
Assistant Professor Department of CSE,
VFSTR Deemed to be University

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.

VIGNAN'S

Foundation for Science, Technology & Research
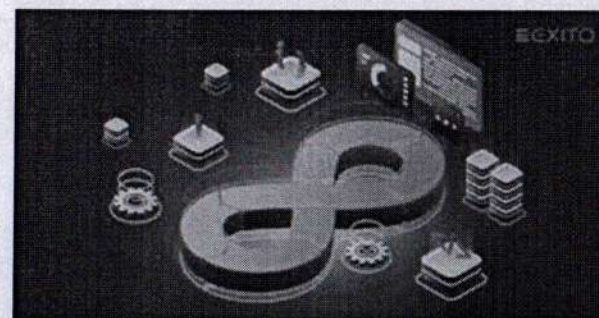
(Deemed to be University)

-Estd. u/s 3 of UGC Act 1956

Value-Added Course
On
Automating with DevOps-Tools and Techniques

22.01.2024– 11.03.2024
Venue: N-304

Organized
by

Department of Computer Science & Engineering

Vadlamudi,
Guntur - 522213, A.P., India
www.vignan.ac.in

About Course

Automating with DevOps tools and techniques is essential for streamlining software development and deployment processes. By integrating practices like Continuous Integration (CI) and Continuous Deployment (CD), teams can ensure that code changes are automatically tested and deployed, reducing the time between development and production.

Course Objevtives

The objective of the course "Automating with DevOps Tools and Techniques" is to equip participants with the knowledge and skills needed to effectively implement automation throughout the software development lifecycle. By exploring key DevOps principles and methodologies, learners will gain hands-on experience with popular tools such as Jenkins, Docker, and Terraform.

Course Outcomes

Upon the completion of the Course, Students will be able to:

- ➢ Articulate the core principles and practices of DevOps, including collaboration, continuous integration, and continuous deployment.
- ➢ Design and implement efficient CI/CD pipelines using tools like Jenkins, GitLab CI, or CircleCI, ensuring automated testing and deployment.
- ➢ Utilize IaC tools such as Terraform and Ansible to automate infrastructure provisioning and management, promoting consistency and scalability.
- ➢ Integrate automated testing frameworks to enhance software quality, enabling faster feedback loops during development.
- ➢ Analyze and improve existing workflows, identifying bottlenecks and applying automation strategies to increase efficiency.

Day	Contents	No. of Hours
Day 1	Overview of DevOps principles and practices, The DevOps lifecycle: From development to deployment.	3
	Version Control Systems, Introduction to Git and Git workflows, Using GitHub/GitLab for collaboration.	2
	Understanding CI concepts and benefits, Understanding CD and its importance.	2
Day 2	Setting up a CI pipeline with Jenkins or GitLab CI	3
	Integrating automated testing in the CI process	3
	Implementing deployment pipelines	2
Day 3	Introduction to Docker and container concepts	2
	Creating and managing Docker containers	2
	Building and deploying applications with Docker	3
Day 4	Types of automated tests: Unit, Integration, and End-to-End	2
	Setting up automated testing frameworks	2
	Best practices for writing and managing tests	3
Day 5	Introduction to DevSecOps principles, Integrating security into the CI/CD pipeline.	3
	Best practices for secure coding and infrastructure management	3
	Total	35

Co-Ordinator
Dr.K.B.Manikandan,
Asst. Prof, Dept of CSE,
VFSTR Deemed to be University

Resource Person
Mr.Venkatesh.S ,Senior product Engineer ,
Consensus Acadamy,Coimbatore..

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also.

VIGNAN'S
Foundation for Science, Technology & Research

(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
on
Cyber forensics and Ethical hacking

22.01.2024 to 11.03.2024
Venue: N-305

shutterstock.com · 2157536639

Organized by
Department of Computer Science and Engineering

Vadlamudi, Guntur - 522213,
Andhra Pradesh., India
www.vignan.ac.in

About Course

This course provides an in-depth exploration of cyber forensics and ethical hacking, equipping participants with the skills to investigate cyber incidents and safeguard systems against potential threats. Students will learn the principles of digital forensics, including evidence collection, analysis, and reporting, alongside the ethical considerations and technical skills required for ethical hacking.

Course Objectives

The objectives of the Cyber Forensics and Ethical Hacking course are designed to equip participants with a comprehensive understanding of the principles and practices essential for investigating cyber incidents and safeguarding digital environments. By the end of the course, students will be able to explain the fundamentals of cyber forensics and ethical hacking, distinguishing between ethical practices and malicious activities.

Couse Outcomes

Upon the Completion of the Course, Students will be to:
- ➤ Explain Core Concepts
- ➤ Conduct Digital Evidence Collection.
- ➤ Utilize Forensic Tools
- ➤ Perform Penetration Testing
- ➤ Develop Incident Response Plans

Day	Contents	No. of Hours
Day1	Introduction to Cyber Forensics	2
	Definition and significance of cyber forensics	2
	Key terms and concepts in digital forensics	2
Day 2	Principles of ethical hacking	2
	Differences between ethical and malicious hacking	2
	Legal and ethical responsibilities of ethical hackers	2
Day 3	Digital Evidence Collection	2
	Methods for acquiring digital evidence	2
	Tools for data recovery and evidence preservation	2
Day 4	Chain of custody and documentation practices	2
	Analyzing various data sources: file systems, memory, and network traffic	2
	Introduction to forensic software tools (e.g., EnCase, FTK, Sleuth Kit)	2
Day 5	Malware analysis techniques and tools	2
	Phases of penetration testing	2
	Common tools for penetration testing	2
	Search Engine Evaluation, Logging	2
	Total	**32**

Resource Person
Mr.K,Surya Teja,Founder and Ceo,
ST7,Surveillance Solutions.

Coordinator
Mrs.Ch.Pushya,Asst. Prof,
Dept of CSE, VFSTR

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also.

VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be University)

-Estd. u/s 3 of UGC Act 1956

Value-Added Course
on
Cloud Computing Using AWS

22.01.2024 to 11.03.2024
Venue:N-306

Organized by

Department of Computer Science and Engineering
Vadlamudi, Guntur - 522213,
Andhra Pradesh., India
www.vignan.ac.in

About Course

A cloud computing course in AWS provides comprehensive training on Amazon Web Services (AWS), one of the leading cloud computing platforms. The course covers a range of topics including compute, storage, networking, databases, security.

Course Objectives

The objectives of the Cloud Computing Using AWS course are designed to provide participants with a comprehensive understanding of cloud computing principles and practical skills in utilizing AWS services. By the end of the course, students will be able to explain fundamental cloud concepts and benefits, navigate the AWS ecosystem, and deploy and manage cloud applications using key services such as EC2, S3, RDS, and Lambda. They will learn to configure networking and security settings, implement AWS management and monitoring tools, and design scalable architectures that ensure high availability.

Couse Outcomes

Upon the Completion of the Course, Students will be to:
➢ Explain Cloud Computing Fundamentals Translate the algorithms to programs (in C language).
➢ Navigate AWS Services
➢ Deploy Cloud Applications
➢ Utilize Management and Monitoring Tools.

Day	Contents	No. of Hours
Day 1	Introduction to Cloud Computing	2
	Types of cloud models: Public, Private, Hybrid	2
	Benefits of cloud computing	2
Day 2	Overview of AWS	3
	Introduction to Amazon Web Services	3
	AWS global infrastructure: Regions and Availability Zones	2
Day 3	ervice categories: Compute, Storage, Database, Networking	2
	Core AWS Services	3
	Amazon EC2: Instance types, launching, and management	2
Day 4	AWS Lambda: Serverless architecture and event-driven computing	2
	Elastic Beanstalk: Deploying applications easily	3
	Amazon S3: Buckets, objects, and storage classes	2
Day 5	Amazon EBS: Block storage for EC2 instances	3
	Amazon Glacier: Archival storage	2
	Amazon RDS: Managed relational databases	2
	Total:	**35**

Resource Person

Mr.Samar,Data solution Engineer,
YOLO tech Pvt Ltd, Hyderabad.

Coordinator

Mrs.V.Anusha,Assistant Professor
Department of CSE, VFSTR

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling playgrounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also.

The Department encourages students to participate in numerous symposiums and to present papers in them. Students are also made to undergo in-plant training programs, where they hone their technical skill in the realm of computers.
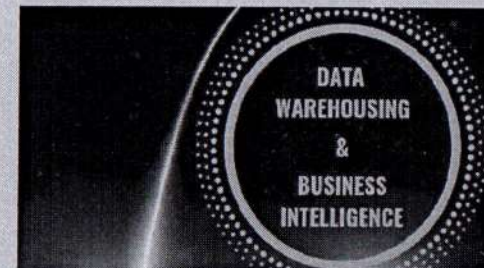
VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be University)

-Estd. u/s 3 of UGC Act 1956

Value-Added Course
on
Data Warehousing & Business Intelligence TOOLS

22.01.2024 to 11.03.2024
Venue:N-404

Organized by
Department of Computer Science and Engineering

Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

This course provides a comprehensive introduction to data warehousing and business intelligence (BI) tools, focusing on their role in transforming raw data into actionable insights. Students will learn the principles of data warehousing, data modeling, ETL (Extract, Transform, Load) processes, and the use of various BI tools to analyze and visualize data.

Course Objectives

The objectives of the Data Warehousing & Business Intelligence Tools course are designed to equip participants with a comprehensive understanding of key concepts and practices in the field. By the end of the course, students will be able to explain the fundamental principles of data warehousing and business intelligence, design effective data models using star and snowflake schemas, and implement ETL processes to extract, transform, and load data. They will gain hands-on experience with popular BI tools like Tableau and Power BI, enabling them to analyze and visualize data effectively

Course Outcomes

Upon the Completion of the Course, Students will be able to

- ➢ Articulate Fundamental Concepts
- ➢ Design Effective Data Models
- ➢ Conduct Data Analysis
- ➢ Create Dashboards and Reports
- ➢ Implement Best Practices
- ➢ Evaluate Emerging Trends

Day	Topic to be Covered	No. of Hours
Day 1	✓ Introduction to Data Warehousing	4
	✓ Definition and purpose of data warehousing	3
Day 2	✓ Differences between operational databases and data warehouses	4
	✓ Overview of data warehouse architecture	4
Day 3	✓ Data Modeling Techniques	4
	✓ Overview of Extract, Transform, Load (ETL) processes	4
Day 4	✓ Introduction to business intelligence concepts	7
Day-5	✓ Key performance indicators (KPIs) and metrics	5
	Total	**35**

Resource Person
Mr.Ch.Naresh & Mr.Venkata Rajesh Babu .M ,
Business Consultant,Accenture & Wipro.

Coordinator
Dr.M.SunilBabu, Assistant Professor
Department of CSE, VFSTR

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling playgrounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also.

The Department encourages students to participate in numerous symposiums and to present papers in them. Students are also made to undergo in-plant training programs, where they hone their technical skill in the realm of computers.
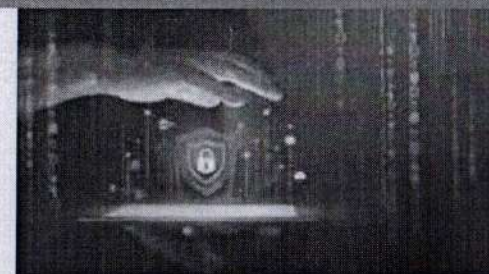
VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
on
Design Issues in Enterprise Security Applications

22.01.2024 to 11.03.2024

Venue: N-405

Organized by
Department of Computer Science and Engineering

Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

In an increasingly interconnected world, ensuring the security of enterprise applications is paramount. The "Design Issues in Enterprise Security Applications" course delves into the critical considerations and best practices for designing secure applications in enterprise environments.

Course Objectives

- Articulate the core principles of security, including confidentiality, integrity, and availability, and how they apply to enterprise applications.
- Identify Vulnerabilities
- Implement Secure Design Practices
- Utilize Secure Software Development Lifecycle (SDLC)

Course Outcomes

Upon the Completion of the Course, Students will be able to
- Articulate Security Concepts
- Identify Security Risks.
- Apply Secure Design Principles.
- Implement Access Controls.

Day	Topic to be Covered	No. of Hours
Day 1	An introduction to Enterprise Architecture (EA) from a developer's perspective.	2
	Overview of ADOIT, a tool essential for representing, managing, and analyzing organizational architecture	
	Introduction to ArchiMate, referred to as "animate," for describing, analyzing, and visualizing.	3
Day 2	Discussion on the development plan's flow towards architecture	2
	Emphasis on the importance of adhering to established architecture principles.	2
	Exploration of ADOIT's layered approach	3
Day 3	Introduction to the OE Model: Participants were	2
	The course delved into the Disaster Recovery aspect of the OE model	2
	The discussion expanded on how the DR model activates.	3
Day 4	The course provided insights into the workings of a DR system, from detection	2
	A practical session on utilizing ADOIT	3
	Discussed the use of attributes and characteristics	2
Day 5	Introduced specific attributes .	5
	Total	35

Resource Person

Mr.Kousik manikanta Somu,
Senior Business Anlyst Cyber Security Consultant,Allanz Services,Pune.

Coordinator

Dr.J.Vinoj, Assistant Professor
Department of CSE, VFSTR

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling playgrounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also.

The Department encourages students to participate in numerous symposiums and to present papers in them. Students are also made to undergo in-plant training programs, where they hone their technical skill in the realm of computers.

VIGNAN'S
Foundation for Science, Technology & Research
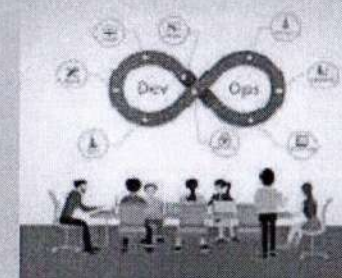## (Deemed to be University)
Estd. u/s 3 of UGC Act 1956

Value-Added Course
On
DevOps essential bridging development and operations

22.01.2024 to 11.03.2024
Venue: N-406

Organized by
Department of Computer Science and Engineering

Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

In today's fast-paced software development landscape, the need for seamless collaboration between development and operations teams has never been more critical. This course, "DevOps Essentials: Bridging Development and Operations," provides a comprehensive introduction to the principles, practices, and tools that enable organizations to adopt a DevOps culture effectively.

Course Objectives

By the end of the "DevOps Essentials: Bridging Development and Operations" course, participants will have a comprehensive understanding of DevOps principles, including collaboration, automation, and continuous improvement. They will be able to design and implement a continuous integration and continuous deployment (CI/CD) pipeline, utilizing containerization technologies like Docker to manage applications in a consistent environment. Additionally, participants will learn to apply Infrastructure as Code (IaC) tools for automating infrastructure management.

Course Outcomes

Upon the Completion of the Course, Students will be able to:

> ➢ Articulate the foundational concepts and cultural shifts that characterize DevOps, recognizing its importance in modern software development.
> ➢ Successfully design, implement, and manage a continuous integration and continuous deployment (CI/CD) pipeline to streamline software delivery processes.
> ➢ Analyze and solve practical DevOps challenges through case studies and simulations.

Day	Topic to be Covered	No. of Hours
Day 1	Introduction to DevOps	2
	Definition and principles of DevOps	2
	Benefits of adopting a DevOps culture	2
Day 2	Key roles and responsibilities in a DevOps environment	2
	Continuous Integration and Continuous Deployment (CI/CD)	3
	Overview of the CI/CD pipeline	2
Day 3	Best practices for integrating code changes	2
	Tools for automating builds and deployments (e.g., Jenkins, GitLab CI)	2
	Version Control Systems	2
Day 4	Introduction to Git and version control concepts	3
	Branching strategies and workflows	3
	Collaborative coding practices	2
Day 5	Understanding containers and their advantages	3
	Introduction to Docker: creating and managing containers	3
	Best practices for containerizing applications	2
	Total	**35**

Resource Person
Mr.Karthikeyan Ravindran,Cloud Consultant , KPMG,Benguluru

Co-Ordinator
Mr.N.Uttej Kumar, Assistant Professor
Department of CSE, VFSTR

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling playgrounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also.

The Department encourages students to participate in numerous symposiums and to present papers in them. Students are also made to undergo in-plant training programs, where they hone their technical skill in the realm of computers.

VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be University)

-Estd. u/s 3 of UGC Act 1956

Value-Added Course
on
Enterprise Resource Planning and SAP

22.01.2024 to 11.03.2024
Venue: N-504

Organized by
Department of Computer Science and Engineering

Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

This course provides an in-depth exploration of Enterprise Resource Planning (ERP) systems, with a specific focus on SAP, one of the leading ERP solutions in the industry. Participants will learn the fundamental concepts of ERP, its significance in integrating core business processes, and how it enhances organizational efficiency and decision-making.

Course Objectives

The course objectives for Enterprise Resource Planning (ERP) and SAP aim to provide participants with a comprehensive understanding of ERP systems, including their purpose, components, and benefits in integrating business processes. Students will explore the various modules of SAP, such as finance, logistics, sales, and human resources, gaining insights into how these modules work together to streamline operations. Hands-on experience with the SAP interface will enable learners to perform key transactions and generate reports effectively. .

Course Outcomes

Upon the Completion of the Course, Student will be able to:

➢ Exhibit a thorough understanding of ERP systems, including their components, benefits, and role in business integration

➢ Navigate the SAP interface effectively, perform key transactions, and generate meaningful reports.Recommend and prescribe which strategies to implement.

➢ Apply methodologies and best practices for the successful implementation of ERP systems, including project management techniques.

Day	Topic to be Covered	No. of Hours
Day 1	✓ Introduction to ERP Systems	3
	✓ Key components and benefits of ERP	4
Day 2	✓ Overview of the ERP market landscape	3
	✓ Introduction to SAP and its significance in ERP	3
Day 3	✓ History and evolution of SAP	3
	✓ SAP system architecture	3
Day 4	✓ SAP Financial Accounting (FI).	3
	✓ Understanding business processes and workflows	4
Day 5	✓ Case studies of integrated business processes	4
	Total	30

Resource Person

Mr.Yaswanth Thota,

Senior Associate Consultant,Infosys Limited,Hyderbad.

Coordinator

Mrs.SD.Shareefunnisa, Assistant Professor
Department of CSE, VFSTR

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling playgrounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also.

The Department encourages students to participate in numerous symposiums and to present papers in them. Students are also made to undergo in-plant training programs, where they hone their technical skill in the realm of computers.

VIGNAN'S
Foundation for Science, Technology & Research
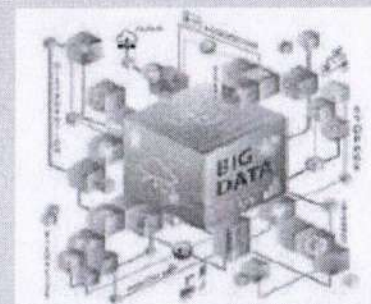(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
on
IBM DB2 and Analytics
22.01.2024 to 11.03.2024
Venue: N-501

Organized by
Department of Computer Science and Engineering
Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

This course provides a comprehensive introduction to IBM DB2, a powerful database management system, along with its analytics capabilities. Participants will learn the fundamentals of DB2, including installation, configuration, and management of databases. The curriculum covers data modeling, SQL query development, and advanced data manipulation techniques.

Course Objectives

The course objectives for IBM DB2 and Analytics aim to equip participants with a comprehensive understanding of IBM DB2 architecture and key features. Learners will gain skills in database design and management, enabling them to create efficient database schemas while ensuring data integrity. Proficiency in SQL will be developed through writing complex queries for data retrieval and manipulation.

Course Outcomes

Upon the Completion of the Course, Students will be able to

- ➤ Exhibit a strong understanding of IBM DB2 architecture, features, and functionalities.
- ➤ Create well-structured database schemas that optimize data organization and ensure integrity..
- ➤ Write and execute complex SQL queries for effective data retrieval, manipulation, and reporting.
- ➤ Manage and administer DB2 databases, including performing backup and recovery, as well as implementing security measures.

Day	Topic to be Covered	No. of Hours
Day 1	Introduction to IBM DB2	2
	Overview of database management systems	3
	Key features and benefits of IBM DB2	3
Day 2	Installation and configuration of DB2	3
	Components of DB2 architecture	4
Day 3	DB2 database structure	3
	Database Design and Data Modeling	2
	SQL Fundamentals	3
Day 4	Introduction to SQL syntax and commands	3
	Writing basic and advanced queries	3
Day5	Data manipulation language (DML) operations	5
	Total	**34**

Resource Person
Mr.Mohammed Shaik,
Senior Database Administrator,IBM

Coordinator
Mrs.Bhargavi, Assistant Professor
Department of CSE, VFSTR

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
on
5G Technology

07.08.2022 to 07.10.2023
Venue: N-301

Organized
by
Department of Computer Science & Engineering

Vadlamudi,
Guntur - 522213, A.P., India
www.vignan.ac.in

About Course

A course on 5G technology typically covers a variety of topics related to the development, deployment, and applications of 5G networks.

Course Objevtives

The course objective for a program on 5G technology is to equip learners with a comprehensive understanding of its fundamentals, including architecture, key components, and operation. Students will analyze various use cases across sectors such as smart cities, IoT, healthcare, and autonomous vehicles, highlighting the transformative potential of 5G.

Course Outcomes

- Demonstrate a comprehensive understanding of 5G architecture and operational principles.
- Analyze and evaluate diverse applications of 5G in sectors like IoT, healthcare, smart cities, and transportation.
- Design and implement 5G network solutions using concepts such as network slicing, virtualization, and edge computing.
- Assess performance metrics of 5G networks, including speed, latency, capacity, and reliability.

Day	Contents	No. of Hours
Day 1	Introduction to 5G Technology	2
	Overview of mobile communication generations (1G to 5G)	3
	5G network architecture components	3
Day 2	Core network and radio access network (RAN)	2
	Key Technologies in 5G	3
	Millimeter wave (mmWave) technology	3
Day 3	Massive MIMO (Multiple Input Multiple Output)	3
	Applications and Use Cases	3
Day 4	Regulatory and Compliance Frameworks	3
	Overview of global regulatory bodies and standards	3
Day 5	Future Trends and Innovations	3
	Predictions for 6G and beyond	3
	Total	34

Resource Person
Chrohan Vhadru, Senior Developer Engineer, Verties Transcend, Hyderabad.

Co-Ordinator
Dr. S. V. Phani Kumar, Prof, Dept of CSE, VFSTR

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.
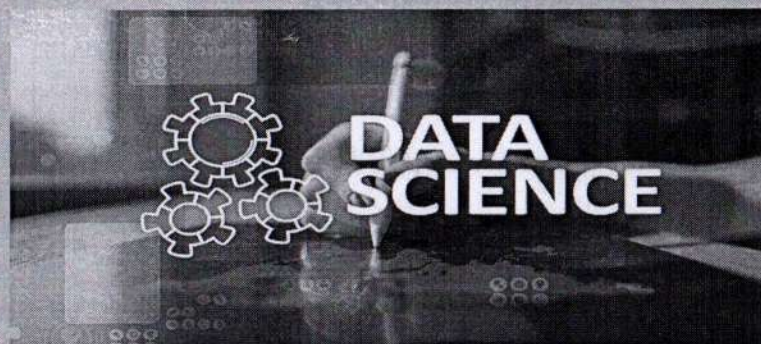
VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
on
Data Science with Applications and Problem Solving

05.11.2022 to 10.12.2022
Venue: N-401

Organized
by
Department ofComputer Science & Engineering

Vadlamudi,
Guntur - 522213, A.P., India
www.vignan.ac.in

About Course

This course provides a comprehensive introduction to data science, focusing on practical applications and problem-solving techniques. Students will learn how to gather, process, and analyze data to derive meaningful insights and make data-driven decisions across various domains.

Course Objevtives

The main objective of a "Data Science with Applications and Problem Solving" course is to equip students with the knowledge and skills to apply data science techniques to real-world problems.

Course Outcomes

➤ Collect, clean, and preprocess data from various sources, ensuring data quality and readiness for analysis.
➤ Conduct thorough exploratory data analysis to identify trends, patterns, and anomalies, using statistical techniques and visualization tools.

Day	Contents	No. of Hours
Day 1	Introduction to Data Science	3
	Overview of Data Science	3
	Importance and Applications of Data Science	3
Day 2	Data Collection and Preparation	2
	Data Sources: APIs, Databases, Web Scrapin	2
	Data Cleaning and Preprocessing	3
Day 3	Exploratory Data Analysis (EDA)	3
	Data Visualization Techniques	3
Day 4	Statistical Foundations	3
	Confidence Intervals	3
Day 5	Statistical Significance and P-Values	3
	Overview of Machine Learning Concepts	3
	Total	**32**

Resource Person
Mr. Shriram Cris Vasudevan
Software Engineer, L&T,
Adjunct Faculty

Co-Ordinator
Mr. D. Yakobu,
Asst. Prof, Dept of CSE,
VFSTR Deemed to be University

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.
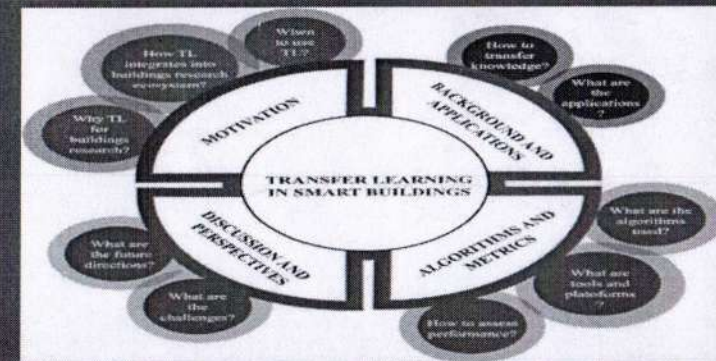
VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
on
Transfer Learning Frame works

07.08.2023 to 07.10.2023
Venue: N-402

Organized
by

Department of Computer Science & Engineering

Vadlamudi,
Guntur - 522213, A.P., India
www.vignan.ac.in

About Course

Transfer learning is a powerful machine learning technique where a model developed for a specific task is reused as the starting point for a model on a second task. Here are some popular frameworks and libraries that support transfer learning.

Course Objevtives

During this course the students should be well-equipped to apply transfer learning techniques to various machine learning tasks, fostering both theoretical knowledge and practical skills.

Course Outcomes

Upon the completion of the Course, Students will be able to:

- Demonstrate a clear understanding of the principles and objectives of transfer learning and its relevance in machine learning.
- Effectively utilize popular transfer learning frameworks (e.g., TensorFlow, PyTorch, Hugging Face) for implementing models.
- Successfully load and apply pre-trained models to various tasks, such as image classification and natural language processing.
- Prepare datasets for training, including applying data augmentation and pre-processing techniques to enhance model training.

Day	Contents	No. of Hours
Day 1	**Introduction to Transfer Learning**	2
	Definition and Importance	2
	Historical Context and Evolution and applications	3
Day 2	Key Terminology (e.g., source and target domains, fine-tuning, feature extraction)	3
	Types of Transfer Learning (e.g., inductive, transductive, unsupervised)	3
	Challenges and Limitations	3
Day 3	Introduction to Popular Frameworks	3
	TensorFlow and Keras	3
Day 4	Hugging Face Transformers	3
	Comparison of Framework Features and Usability	3
Day 5	Image Classification Models (e.g., VGG, ResNet, Inception)	3
	Understanding Model Architectures and Their Applications	3
	Total	34

Resource Person
K. Sai Latha, Sr. Mobile Application Developer, Coign Consultants Pvt. Ltd, Hyderabad.

Co-Ordinator
Mrs. B.Suvarna,
Assistant Professor Department of CSE, VFSTR

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling playgrounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also.

The Department encourages students to participate in numerous symposiums and to present papers in them. Students are also made to undergo in-plant training programs, where they hone their technical skill in the realm of computers.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
on
Cloud App Development
07-08-2023 to 07-10-2023
Venue: N-208

Organized by
Department of Computer Science and Engineering
Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

This course provides a comprehensive introduction to cloud application development, focusing on designing, building, and deploying applications in cloud environments. Students will explore various cloud services, tools, and frameworks while learning best practices for scalability, security, and performance optimization.

Course Objectives

The objectives of this course in Cloud App Development are to equip students with a thorough understanding of cloud computing fundamentals, including key service and deployment models. Students will learn to effectively utilize major cloud platforms such as AWS, Azure, and Google Cloud for application deployment and management. They will explore best practices for designing scalable, cloud-native architectures, focusing on microservices and serverless approaches. The course will provide hands-on experience with essential development tools like Docker and Kubernetes, enabling students to streamline their application development and deployment processes.

Course Outcomes

Upon the Completion of the Course, Students will be able to
- ➤ Clearly articulate the principles of cloud computing, including service models.
- ➤ Effectively navigate and utilize major cloud service providers such as AWS, Azure, and Google Cloud for deploying and managing applications.
- ➤ Create and implement cloud-native architectures that incorporate microservices and serverless models, ensuring scalability and resilience.
- ➤ Select and implement appropriate cloud database solutions.

Day	Topic to be Covered	No. of Hours
Day 1	Introduction to Cloud Computing	2
	Definition and benefits of cloud computing	3
	Overview of service models: IaaS, PaaS, SaaS	2
Day 2	Comparison of AWS, Azure, and Google Cloud	3
	Key services offered by each provider	4
Day 3	Cloud Application Architecture	3
	Principles of cloud-native design	3
	Microservices architecture	3
Day 4	Serverless computing and its advantages	3
	Development Tools and Frameworks	3
Day5	Overview of cloud databases: SQL vs. NoSQL	5
	Total	**34**

Resource Person
Mr. Sekhar K,
Software Developer,
Cognizant, Hyderabad

Coordinator
Mr.Sk.Badarsha saheb,
Assistant Professor
Department of CSE, VFSTR

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is located in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling play grounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
Estd u/s 3 of UGC Act 1956

Value-Added Course
on
Embedded C with RTOS and IoT

07-08-2023 to07-10-2023
Venue:N-203

Organized by
Department of Computer Science and Engineering
Vadlamudi, Guntur- 522213,
Andhra Pradesh., India
www.vignan.ac.in

About Course

This course offers an in-depth exploration of Embedded C programming in conjunction with Real-Time Operating Systems (RTOS) and Internet of Things (IoT) applications. Students will learn how to develop efficient embedded software, manage resources in real-time environments, and integrate IoT technologies to create smart, connected systems.

Course Objectives

The objectives of the Embedded C with RTOS and IoT course are designed to provide students with a comprehensive understanding of embedded systems and their applications. By the end of the course, students will be able to develop efficient and optimized code in Embedded C specifically tailored for micro controllers. They will gain a solid grasp of Real-Time Operating Systems (RTOS), including task scheduling, inter-task communication, and resource management. Students will learn to design and implement real-time applications that effectively manage multiple tasks and ensure timely execution.

Course Outcomes

Upon the Completion of the Course, Students will be to:
- Proficiently Write Embedded C Code
- Understand RTOS Concepts.
- Design Real-Time Applications
- Describe IoT Architecture
- Integrate RTOS with IoT Solutions
- Implement Networking Protocols
- Apply Security Practices
- Complete Hands-On Projects

Day	Contents	No. of Hours
Day 1	Introduction to Embedded Systems	2
	Definition and characteristics of embedded systems	2
	Overview of embedded hardware components	2
Day 2	Differences between embedded systems and general-purpose computing	3
	Basics of C programming and its applications in embedded systems	3
	Data types, control structures, and functions	2
Day 3	Memory management and optimization techniques	2
	Understanding microcontroller architecture and features	3
	Interfacing with common peripherals	2
Day 4	Practical exercises in reading sensors and controlling actuators	2
	Introduction to RTOS concepts and benefits	2
	Task management: creation, scheduling, and termination	2
Day 4	Inter-task communication: queues, semaphores, and mutexes	3
Day 5	Overview of IoT architecture and components	2
	Types of IoT devices and their applications	2
	Total:	**34**

Resource Person
Sai Vinod Konakanchi,
Senior Software Developer,
Actifio Technologies Pvt. Ltd., Hyderabad

Coordinator
Mr. Sourav Mondal
Assistant Professor
Department of CSE, VFSTR

About the Institution

Vignan's Foundation for Science, Technology & Research Deemed to be University is in the serene environs of Vadlamudi on the Guntur-Tenali highway, about 14km from Guntur and 11km from Tenali. The college is a virtual heaven of rural quiet and idyllic beauty. The splendid avenue, imposing buildings and sprawling playgrounds, and the verdure in and around the campus make it one of the most preferred choices for the aspirants of Engineering studies. Since its inception in 1997, this institution has been striving to promote high standards in technical education to aid in the career building of the many students who step into its portals. Vignan's impressive academic credentials stand a testimony to its commitment to offer quality education. The University campus is Wi-Fi enabled and connected to external world through National Knowledge Network (NKN).

About the Department

Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. Computer Science & Engineering (CSE) course was started in the year 1997 in this institution Department of CSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer Architecture, Operating Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also.

The Department encourages students to participate in numerous symposiums and to present papers in them. Students are also made to undergo in-plant training programs, where they hone their technical skill in the realm of computers.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
on
Policies for Information Security
22.01.2024 to 11.03.2024
Venue: N-302

shutterstock.com · 1957804308

Organized by
Department of Computer Science and Engineering
Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

This course provides a comprehensive overview of the principles, practices, and policies essential for establishing and maintaining robust information security within organizations. Students will explore the critical components of information security policies, including risk assessment, compliance, and incident response.

Course Objectives

The main objective of the "Policies for Information Security" course is to equip students with the knowledge and skills necessary to develop, implement, and manage effective information security policies that protect organizational assets, ensure compliance with legal standards, and promote a culture of security awareness within the organization.

Course Outcomes

Upon the Completion of the Course, Students will be able to

> Demonstrate knowledge of key information security frameworks and standards, explaining their relevance to policy development.
> Develop comprehensive information security policies that address organizational risks and align with best practices.
> Perform risk assessments to identify vulnerabilities and recommend appropriate mitigation strategies.
> Apply knowledge of legal and regulatory requirements to ensure organizational compliance with information security standards.

Day	Topic to be Covered	No. of Hours
Day 1	Introduction to Information Security	2
	Overview of information security concepts	3
	Importance of policies in information security	3
Day 2	Best practices for policy alignment	3
	Steps for creating effective information security policies	4
Day 3	Components of a security policy	3
	Policy communication and enforcement	3
	Identifying and assessing risks	3
Day 4	Risk analysis methodologies	3
	Mitigation strategies and risk acceptance	3
Day5	Overview of relevant laws and regulations (GDPR, HIPAA, PCI-DSS)	5
	Total	35

Resource Person

Mr.Anch Rajendra,
Senior Information Security Engineer,
Infosys,Bengalore.

Coordinator

Mr.S.Deva Kumar,
Assistant Professor
Department of CSE, VFSTR

Resource Person
Mr. Shahid Hussain
Senior Engineer
H Labs,
Hyderabad

COURSE CO-ORDINATOR:
Ms.K.Hima Bindu
Assistant professor,
Department .of Biomedical Engineering,
VFSTR, Vadlamudi, Guntur.

Venue: VTF-09 H-BLOCK
For Registration:
Contact : 9885216846
Mail Id: katikala.himabindu@gmail.com

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
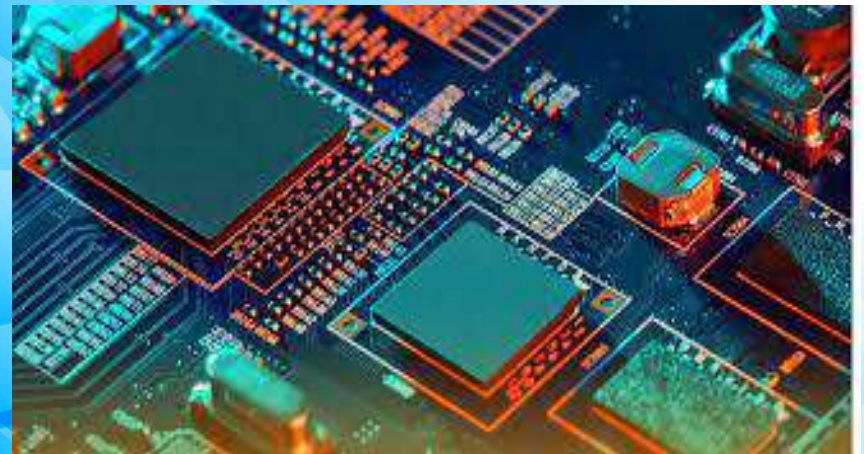-Estd. u/s 3 of UGC Act 1956

VALUE ADDED COURSE
On
Printed Circuit Board and its application in Biomedical Engineering
20th to 23rd September, 2023
by
Mr. Shahid Hussain

Organised by
DEPARTMENT OF BIOMEDICAL ENGINEERING
Vignan's Foundation for Science, Technology and Research
Vadlamudi, Guntur District. Andhra Pradesh India – 522213.

ABOUT UNIVERSITY

VISION :

To evolve into a Centre of Excellence in Science & Technology through creative and innovative practices in teaching – learning, towards promoting academic achievement and research excellence to produce internationally accepted, competitive and world class professionals who are psychologically strong & emotionally balanced, imbued with social consciousness & ethical values..

MISSION:

To provide high quality academic programs, training activities, research facilities and opportunities supported by continuous industry - institute interaction aimed at promoting employability, entrepreneurship, leadership and research aptitude among students and contribute to the economic and technological development of the region, state and nation.

ABOUT THE DEPARTMENT

 Biomedical Engineering is very bold and unique discipline. As we advance from one century to another, we realize the clear need for integration of biology and engineering. BME is the application of engineering principles and gives scope for solving problems associated with the medicine and biological aspects of our needs. We discover and evolvements in field associated with it. B. Tech in Biomedical Engineering fuses expertise in biology, medicine, physics, mathematics, engineering science and communication to make the world healthier place.

The practice of medicine, biomedical research and development is becoming increasingly multi-disciplinary in its disposition, with a particular emphasis on the wide applications such as, designing electronic circuits, computer software for medical instruments ranging from imaging systems to small ear implants. This program imparts students with critical understanding of how biological knowledge interacts with engineering aspects to produce engineering solutions to healthcare problems. Curriculum has been designed to impact required skills along with knowledge to tackle real time challenges by frequent hospitals visits which cater the needs of industries and research centers.

COURSE OBJECTIVE:

This course is designed with an aim to make participants familiar with printed circuit board (PCB) design and fundamentals of electronic circuits. Participants will have the capability to examine and build fundamental analog and digital circuits, in addition to creating printed circuit boards, assembling them, and ensuring their proper functionality. Participants will have the opportunity to utilize various CAD and design tools, including schematic entry, PCB layout and routing, circuit simulators, Circuit Maker, and other related software. Participants will gain practical skills in activities such as circuit construction, exporting circuits to PCB layout, working with through holes and vias, and performing routing, among other techniques.
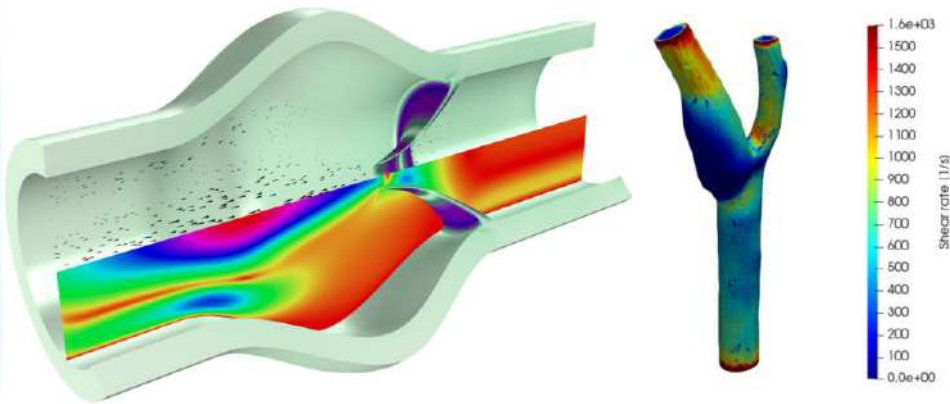
COURSE OUTCOMES :

• Define the common PCB terminology.
• Identify the different active and passive components.
• Explain the various raw materials used in making a single-sided PCB and a multilayer PCB.
• Understand the process of a PCB stackup and the need for a PCB stackup.

PROGRAM SCHEDULE

Date	Topic	No. Of Hours
20/09/2023	Explore different aspect of Printed Circuit Board	08
21/09/2023	Study of various types of PCBs and process of schematic design	08
22/09/2023	Post Processing of design and Fabrication	08
23/09/2023	Hands on experience on Medical Image system designed using PCB	06
Total		30 Hrs

Resource Persons

Venkata Karthik & Kavitha K

COMSOL Multiphysics Pvt. Ltd.

Phoenix Pinnacle,

 3rd Floor, No. 46,

Ulsoor Road,

Bengaluru 560042

COURSE CO-ORDINATOR:

Dr. Sitaramanjaneya Reddy

HoD & Professor

Department .of Biomedical Engineering,

VFSTR, Vadlamudi, Guntur.

Venue: VTF-09 H-BLOCK

For Registration:

Contact : 9044405204

Mail Id: snjtmaddheshiya@gmail.com

VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be University)

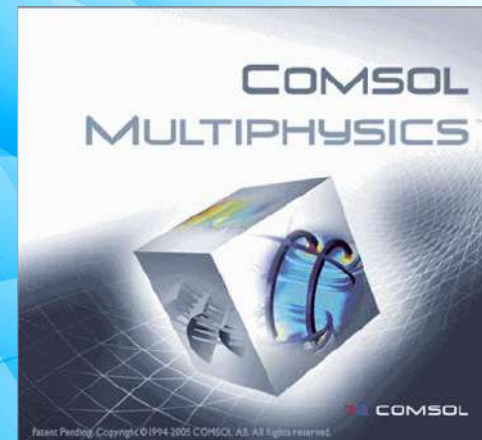-Estd. u/s 3 of UGC Act 1956

VALUE ADDED COURSE
On

Hands on training in COMSOL Multiphysics for Biomedical Applications

11th to 14th September, 2023

by

Venkata Karthik & Kavitha K

Organised by

DEPARTMENT OF BIOMEDICAL ENGINEERING

Vignan's Foundation for Science, Technology and Research

Vadlamudi, Guntur District. Andhra Pradesh India – 522213.

ABOUT UNIVERSITY

VISION :

To evolve into a Centre of Excellence in Science & Technology through creative and innovative practices in teaching – learning, towards promoting academic achievement and research excellence to produce internationally accepted, competitive and world class professionals who are psychologically strong & emotionally balanced, imbued with social consciousness & ethical values..

MISSION:

To provide high quality academic programs, training activities, research facilities and opportunities supported by continuous industry - institute interaction aimed at promoting employability, entrepreneurship, leadership and research aptitude among students and contribute to the economic and technological development of the region, state and nation.

ABOUT THE DEPARTMENT

Biomedical Engineering is very bold and unique discipline. As we advance from one century to another, we realize the clear need for integration of biology and engineering. BME is the application of engineering principles and gives scope for solving problems associated with the medicine and biological aspects of our needs. We discover and evolvements in field associated with it. B. Tech in Biomedical Engineering fuses expertise in biology, medicine, physics, mathematics, engineering science and communication to make the world healthier place.

The practice of medicine, biomedical research and development is becoming increasingly multi-disciplinary in its disposition, with a particular emphasis on the wide applications such as, designing electronic circuits, computer software for medical instruments ranging from imaging systems to small ear implants. This program imparts students with critical understanding of how biological knowledge interacts with engineering aspects to produce engineering solutions to healthcare problems. Curriculum has been designed to impact required skills along with knowledge to tackle real time challenges by frequent hospitals visits which cater the needs of industries and research centers.

COURSE OBJECTIVE:

In this **course**, COMSOL Multiphysics plays a pivotal role in biomedical applications, offering a versatile platform for simulating complex biological and physiological phenomena. Researchers and engineers leverage its capabilities to model processes such as fluid flow in blood vessels, drug delivery systems, tissue mechanics, and heat transfer in thermal therapies. The software's ability to couple multiple physics domains enables accurate representation of interactions within the human body, such as combining fluid-structure interaction to study blood flow and vessel elasticity or modeling electrical stimulation in neural tissues. Additionally, COMSOL supports the design and optimization of medical devices, including stents, prosthetics, and biosensors. Its user-friendly interface and customizable modules facilitate innovation in personalized medicine, biomechanics, and bioengineering, helping advance research and development in healthcare and life sciences.

COURSE OUTCOMES :

1: Proficient Multiphysics Modeling
2: Develop skills to customize simulations, optimize designs, and automate workflows using COMSOL's
3. Apply theoretical knowledge to real-world problems by creating and validating simulation models, enabling better decision-making in research, design, and engineering applications.

PROGRAM SCHEDULE

Date	Topic	No. Of Hours
DATE	Topic	Hours
11/09/2023	Introduction to COMSOL multiphysics and its benefits in health care	08
12/09/2023	Modeling of cantilever using COMSOL multiphysics	08
13/09/2023	Modeling of blood pressure sensor and its studies using COMSOL multiphysics	08
14/09/2023	Modelling of bone structure and its related studies using Comsol Multiphyics	06
Total		30 Hrs

Resource Person

Dr. M. Marieswaran
Assistant Professor **,**
Department of Biomedical Engineering **,**
NIT Raipur**,** 492010.

COURSE CO-ORDINATOR:

Dr. Amit Kumar Singh
Assistant professor,
Department .of Biomedical Engineering,
VFSTR, Vadlamudi, Guntur.

Venue: VTF-09 H-BLOCK

For Registration:
Contact : 9989481805
Mail Id: jp_ece@vignan.ac.in

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

VALUE ADDED COURSE
On
Hands On training on Additive manufacturing in Biomedical Applications
5th to 8th February, 2024
by
Dr. M. Marieswaran

Organised by
DEPARTMENT OF BIOMEDICAL ENGINEERING
Vignan's Foundation for Science, Technology and Research
Vadlamudi, Guntur District. Andhra Pradesh India - 522213

ABOUT UNIVERSITY

VISION

To evolve into a Centre of Excellence in Science & Technology through creative and innovative practices in teaching – learning, towards promoting academic achievement and research excellence to produce internationally accepted, competitive and world class professionals who are psychologically strong & emotionally balanced, imbued with social consciousness & ethical values..

MISSION

To provide high quality academic programs, training activities, research facilities and opportunities supported by continuous industry - institute interaction aimed at promoting employability, entrepreneurship, leadership and research aptitude among students and contribute to the economic and technological development of the region, state and nation.

ABOUT THE DEPARTMENT

Biomedical Engineering is very bold and unique discipline. As we advance from one century to another, we realize the clear need for integration of biology and engineering. BME is the application of engineering principles and gives scope for solving problems associated with the medicine and biological aspects of our needs. We discover and evolvements in field associated with it. B. Tech in Biomedical Engineering fuses expertise in biology, medicine, physics, mathematics, engineering science and communication to make the world healthier place.

The practice of medicine, biomedical research and development is becoming increasingly multi-disciplinary in its disposition, with a particular emphasis on the wide applications such as, designing electronic circuits, computer software for medical instruments ranging from imaging systems to small ear implants. This program imparts students with critical understanding of how biological knowledge interacts with engineering aspects to produce engineering solutions to healthcare problems. Curriculum has been designed to impact required skills along with knowledge to tackle real time challenges by frequent hospitals visits which cater the needs of industries and research centers.

COURSE OBJECTIVE:

In this **course**, you will learn scientific methods, Additive manufacturing (AM), or 3D printing, is transforming the biomedical field by enabling the creation of customized and complex solutions for healthcare. It facilitates the production of patient-specific implants, prosthetics, and anatomical models, enhancing precision and personalization. In tissue engineering, AM is used to fabricate scaffolds and bio printed tissues for regeneration. The technology also supports rapid prototyping of medical devices and the development of drug delivery systems with controlled release properties. While challenges like material biocompatibility and regulatory hurdles remain, AM continues to advance, offering innovative pathways for improving patient care and medical innovation.

COURSE OUTCOMES :

• Apply Additive manufacturing principles to create optimized 3D models for manufacturing.
• Operate 3D printing equipment and manage post-processing techniques
•.Implement maintenance protocols and quality assurance practices. Able to build algorithms
• Explore the future trends and challenges in additive manufacturing technologies.

PROGRAM SCHEDULE

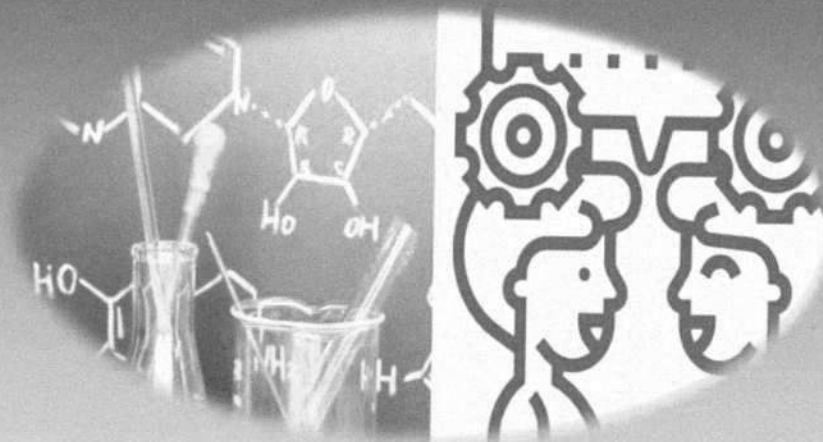| Date	Topic	No. Of Hours
DATE	Topic	Hours
5/02/2024	Explain the principles, processes, and technologies of additive manufacturing (AM).	08
6/02/2024	Identify suitable materials for different AM methods, including polymers, metals, ceramics, and bio-compatible materials.	08
7/02/2024	Operate 3D printing equipment and manage post-processing techniques	08
8/02/2024	Explore the future trends and challenges in additive manufacturing technologiess	06
Total		30 Hrs

ABOUT VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

The Art of Scientific Dialogue: Communication Skills for Chemistry Students

04-05-2024 to 26-05-2024

Organized by

Department of Chemistry
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications. research output has been progressively increasing.

COURSE CONTENTS

The following topics will be covered:

S. No.	Topics	No of hours
1	Communication Skills	6
2	SWOC	6
3	GOAL	6
4	Resume/SOP	6
5	Interview Skills	6
	Total Hours	30

COURSE OBJECTIVES

- To help youth build their communication skills simple speaking opportunities.
- Create a positive impression.
- To make them develop the skill of writing and evaluation techniques of writing skill.

COURSE OUTCOME

- strong communication skills allow us to advance in our careers

RESOURCE PERSON

Mr. Raghav Rao
Training & Placement Cell, VFSTR

VENUE

VBS01A, A-Block, VFSTR

COURSE COORDINATOR

Dr. K. Ravi Kumar
Associate Professor
Department of Chemistry, VFSTR
Mobile: 9100685531
Email: drkrk_sh@vignan.ac.in

ABOUT VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

Value Add Course

Sustainable Solutions: Innovations in Environemental Management

16-11-2023 to 20-11-2023

Organized by

Department of Chemistry
School of Applied Sciences & Humanities
Venue: ATF-02, Biofortification Lab

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Day	Content	Nos. of hours
1	**Circular Economy Practices**: Exploring waste reduction, recycling, and resource recovery to create sustainable models.	6
2	**Renewable Energy Technologies**: Analyzing advancements in solar, wind, and bioenergy systems for sustainable power generation.	6
3	**Sustainable Agriculture Techniques**: Investigating practices like permaculture, agroecology, and organic farming to enhance food security and minimize environmental impact.	6
4	**Green Urban Planning**: Examining strategies for developing sustainable cities, including smart growth, green infrastructure, and sustainable transportation systems.	6
5	**Green Technologies and Smart Solutions**: Investigating the role of emerging technologies, such as IoT and AI, in promoting environmental sustainability and efficiency.	6

Resource Persons

Dr. Mastan Vali Rajavarapu

Technical Officer –D.
Atomic Minerals and Directorate for Exploration & Research, Bangalore.

Course Coordinator

Dr. M.V. K. Srinvani

Associate Professor
Department of Chemistry, VFSTR
Mobile: 9985188676 Email: sriani77@gmail.com

Course Objectives:

The primary objectives of the training is to:

- Develop Critical Understanding: Equip students with a comprehensive understanding of key concepts and principles related to sustainability and environmental management.
- Foster Innovative Thinking: Encourage creative problem-solving and innovation in developing sustainable solutions to real-world environmental challenges.
- Enhance Practical Skills: Provide hands-on experience with tools, technologies, and methodologies that promote sustainable practices across various sectors.
- Promote Collaborative Approaches: Cultivate teamwork and communication skills necessary for engaging stakeholders and implementing effective environmental management strategies in diverse contexts.

Course Outcome:

Upon completion of the training, the participants will :

- **Implementation of Sustainable Practices**: Students will be able to design and propose actionable sustainability initiatives that can be implemented in various organizational or community contexts, demonstrating their ability to apply course concepts to real-world challenges.
- **Critical Analysis of Environmental Issues**: Students will develop the ability to critically evaluate environmental policies and management strategies, assessing their effectiveness and sustainability, and recommending improvements based on best practices and innovative solutions.
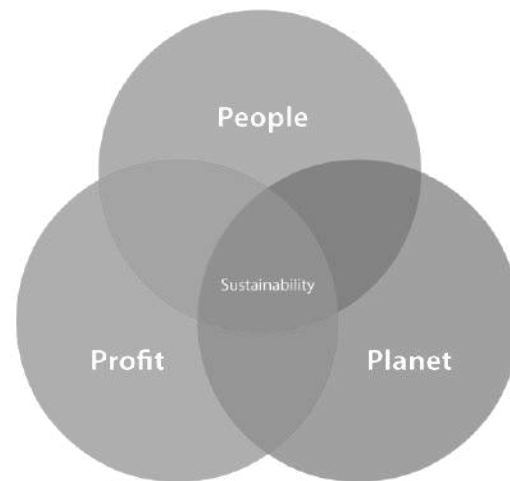
ABOUT VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

Value Add Course

Eco-Entrepreneurship: Building Green Businesses for a Better Future

1-11-2023 to 5-11-2023

Organized by

**Department of Chemistry
School of Applied Sciences & Humanities
Venue:Spurthi Seminar hall ,
Biofortification Lab**

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Day	Content	Nos. of hours
1	**Sustainable Business Models**: Explore circular economy and social enterprises prioritizing environmental impact while ensuring profitability.	6
2	**Renewable Energy Innovations**: Discuss advancements in solar and wind technologies for sustainable energy solutions.	6
3	**Waste Management**: Highlight upcycling and innovative waste solutions by eco-entrepreneurs.	6
4	**Sustainable Agriculture**: Examine organic farming and local food systems promoting eco-friendly practices.	6
5	**Green Technology**: Investigate smart solutions that enhance energy efficiency and reduce carbon footprints.	6

Resource Persons
Dr. Kiran K. Chakrahari
Senior Research Officer
Indian Oil Corporation Limited
R&D centre, Faridabad – 121007
Course Coordinator
Dr. Ravi Kumar Kottalanka
Associate Professor
Department of Chemistry, VFSTR
Mobile: 9100685531 Email: drkrk_sh@vignan.ac.in

Course Objectives:

The primary objectives of the training is to:

- Promote Sustainability: Encourage the development of businesses that prioritize environmental responsibility and sustainable practices.
- Foster Innovation: Support innovative solutions that address ecological challenges through green technologies and sustainable business models.
- Educate Stakeholders: Raise awareness among consumers and businesses about eco-friendly practices and their benefits.
- Encourage Collaboration: Facilitate partnerships between eco-entrepreneurs, governments, and communities for shared sustainability goals.

Course Outcome:

Upon completion of the training, the participants will :

- **Sustainable Economic Growth: Increased development of eco-friendly businesses leads to job creation, reduced environmental impact, and a transition to a circular economy.**
- **Enhanced Environmental Awareness: Greater public understanding of sustainability fosters responsible consumer behavior, encouraging demand for green products and supporting eco-entrepreneurial initiatives.**
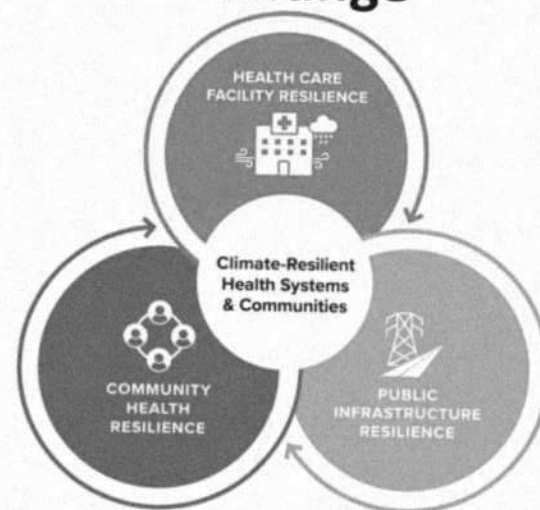
ABOUT VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

Value Add Course

Climate Resilience: Strategies for Adapting to Environmental Change

6-11-2023 to 10-11-2023

Organized by

Department of Chemistry
School of Applied Sciences & Humanities
Venue: ATF-02, Biofortification Lab

Day	Content	Nos. of hours
1	**Community-Based Adaptation**: Engage local communities in developing strategies that enhance resilience to climate impacts while considering cultural and social factors.	6
2	**Ecosystem Restoration**: Promote the restoration of natural ecosystems to buffer against climate change effects and enhance biodiversity.	6
3	**Sustainable Agriculture**: Implement climate-smart agricultural practices that increase productivity while reducing vulnerability to environmental changes.	6
4	**Urban Planning**: Design resilient urban infrastructure that incorporates green spaces and sustainable drainage systems to manage extreme weather events.	6
5	**Disaster Risk Reduction**: Develop proactive strategies to minimize risks from climate-related disasters, including early warning systems and emergency preparedness plans.	6

Resource Persons

Dr. M. V. Raju
Assistant Professor, Deputy HOD,
Department of Civil Engineering,
VFSTR Deemed to University.

Course Coordinator

Dr. Shubhalaksmi Sengupta
Assistant Professor
Department of Chemistry, VFSTR
Mobile: 9830723520 Email: sengupta.shubha@gmail.com

Course Objectives:

The primary objectives of the training is to:

- Enhance Community Engagement: Foster active participation of communities in developing and implementing climate resilience strategies.
- Promote Sustainable Practices: Encourage the adoption of sustainable agricultural, urban, and industrial practices that mitigate climate impacts.
- Strengthen Infrastructure: Develop and upgrade infrastructure to withstand climate-related hazards and ensure long-term functionality.
- Integrate Ecosystem Services: Utilize natural ecosystems and their services as buffers against climate change effects, promoting biodiversity and sustainability.

Course Outcome:

Upon completion of the training, the participants will :

- **Increased Community Preparedness: Enhanced awareness and involvement in climate resilience initiatives lead to communities better equipped to respond to environmental changes and disasters.**
- **Sustainable Resource Management: Improved practices result in effective use of resources, promoting long-term ecological health and minimizing vulnerabilities to climate impacts while supporting economic stability.**

About the Institution

Vignan's Foundation for Science, Technology and Research (VFSTR) Deemed to be University provides quality education in a diverse and intellectually stimulating environment. The institute is well known for its dedicated faculty, state-of-the art infrastructure and excellent placement record. As a Deemed to be University, it is in the process of improving its standards to the level of a global technical institution. The latest curriculum has been prepared after consulting the institute's illustrious alumni working across the world, veterans from industry and distinguished academicians possessing a rich teaching and research background.

About the Department

Advanced Computer science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it today. The Advanced Computer Science & Engineering was started in the year 2022 in this institution. Department of ACSE, as well qualified faculty from premiere institutions, who are specialist in the areas of Database, Data Mining, wireless networks ,operating systems and programming languages. The faculty members are actively involved in research activities in the field of their specialization. The department attributes its success to the creative and and innovative outlook of its students. The department encourages students to participate in numerous symposiums, guest lectures, workshops and training programs.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
On
Hands on Business Analytics Tools
11th – 15th March 2024
Venue : NB 501

Organized by
Department of Advanced Computer Science and Engineering
Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

The "Hands on Business Analytics Tools" course provides a practical introduction to essential tools used in data analysis and business intelligence. Students will learn how to use popular software such as Excel, Power BI, Tableau, and SQL for organizing, analyzing, and visualizing data. The course covers data cleaning, advanced analytics, and predictive modeling to support data-driven decision-making. Emphasis is placed on hands-on projects, allowing students to apply analytics techniques to real-world business scenarios.

Course Objectives

The objective of the "Hands on Business Analytics Tools" course is to equip students with practical skills in data analysis and visualization using industry-standard tools, empowering them to make data-driven business decisions effectively.

Course Outcomes

This course is aimed at enabling students to:

- Efficiently clean and organize data using Excel and SQL for accurate analysis.
- Perform data analysis using statistical functions and advanced formulas in Excel.
- Create dynamic dashboards and reports with Power BI and Tableau for effective data visualization.
- Use predictive analytics techniques to forecast business trends and outcomes.

Day	Topic to be Covered	No. of Hours
Day 1	✓ Introduction to Business Analytics Tools ✓ Overview of Excel for Data Analytics	6
Day 2	✓ Data Cleaning and Organization in Excel ✓ Using Excel Functions and Formulas for Data Analysis	6
Day 3	✓ Introduction to SQL for Data Extraction and Manipulation ✓ Performing Queries and Joins in SQL	6
Day 4	✓ Introduction to Power BI: Creating Dashboards ✓ Data Visualization Techniques in Power BI and Tableau	6
Day 5	✓ Advanced Analytics: Predictive Modeling ✓ Presenting Insights with Business Analytics Tools	6
	Total:	30

Resource Person

Dr M V P Chandra Sekhara Rao,

Professor & Head, Dept of CSBS & DS , RVR & JC college of Engineering

Contact No:9849403801

mvpc@rvrjc.ac.in

Coordinator

Dr. Jawad Ahmad Dar , Assistant Professor
Department of ACSE,
VFSTR Deemed to be University.
Contact No :9668112717
drjad_acse@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research (VFSTR) Deemed to be University provides quality education in a diverse and intellectually stimulating environment. The institute is well known for its dedicated faculty, state-of-the art infrastructure and excellent placement record. As a Deemed to be University, it is in the process of improving its standards to the level of a global technical institution. The latest curriculum has been prepared after consulting the institute's illustrious alumni working across the world, veterans from industry and distinguished academicians possessing a rich teaching and research background.

About the Department

Advanced Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. The Advanced Computer Science & Engineering (ACSE) course was started in the year 2022 in this institution.

Department of ACSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer security, Artificial Intelligence, Machine Learning, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

**Value-Added Course
On
Automated Machine Learning
18th – 22nd December 2023
Venue: NB 604**

Organized by
Department of Advanced Computer Science and Engineering
**Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in**

Course Description

The Automated Machine Learning (Auto ML) course introduces the principles of automating the machine learning workflow, focusing on data preprocessing, model selection, and hyper parameter tuning. Participants gain hands-on experience with popular Auto ML frameworks, enabling them to efficiently streamline their machine learning processes and enhance model performance.

Course Objectives

The objective of the " Automated Machine Learning " course is to provide participants with the skills to automate the machine learning workflow, including data preprocessing, model selection, and hyper parameter tuning. Learners will gain hands-on experience with popular Auto ML frameworks, enabling them to streamline their machine learning processes and improve model performance effectively.

Course Outcomes

This course is aimed at enabling the students to:

- Participants will learn to automate the machine learning workflow, covering data preprocessing, model selection, hyper parameter tuning, and evaluation using frameworks like Auto-sk learn and Google Cloud Auto ML.
- The course highlights the efficiency and scalability of Auto ML in applications such as supervised learning, deep learning, time series forecasting, and natural language processing.
- Learners will be equipped to use Auto ML tools to streamline processes and improve model performance.

Day	Topic to be Covered	No. of Hours
Day 1	✓ Overview of Auto ML ✓ Key Concepts and Frameworks	6
Day 2	✓ Automated Data Preprocessing ✓ Automated Model Selection and ✓ Hyper parameter Tuning	6
Day 3	✓ Using Auto-sk learn ✓ Using Google Cloud Auto ML	6
Day 4	✓ Automating Deep Learning with Auto ML ✓ Hands-On: Auto Keras for Deep Learning	6
Day 5	✓ Auto ML for Time Series and NLP ✓ Future Trends in Auto ML	6
	Total :	**30**

Resource Person

Dr. Vinay Kumar, Senior Data Scientist
NIT, Data Services
Contact No: 9632454934
Email : vinaykumar.natraj@gmail.com

Coordinator

Sajja Radha Rani , Assistant Professor
Department of ACSE
VFSTR Deemed to be University
Contact No: 9493670612
Email : srr_acse@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research (VFSTR) Deemed to be University provides quality education in a diverse and intellectually stimulating environment. The institute is well known for its dedicated faculty, state-of-the art infrastructure and excellent placement record. As a Deemed to be University, it is in the process of improving its standards to the level of a global technical institution. The latest curriculum has been prepared after consulting the institute's illustrious alumni working across the world, veterans from industry and distinguished academicians possessing a rich teaching and research background.

About the Department

Advanced Computer science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it today. The Advanced Computer Science & Engineering was started in the year 2022 in this institution. Department of ACSE, as well qualified faculty from premiere institutions, who are specialist in the areas of Database, Data Mining, wireless networks ,operating systems and programming languages. The faculty members are actively involved in research activities in the field of their specialization. The department attributes its success to the creative and and innovative outlook of its students. The department encourages students to participate in numerous symposiums, guest lectures, workshops and training programs.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

**Value-Added Course
On
AWS Cloud Practitioners Essentials
11th – 15th March 2024
Venue : NB 606**

Organized by
Department of Advanced Computer Science and Engineering
Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

The AWS Certified Cloud Practitioner course provides a foundational understanding of the AWS Cloud, its services, and terminology. It is suitable for individuals new to cloud computing or those seeking a general overview of AWS. The course covers core AWS services, cloud concepts, the Well-Architected Framework, migration strategies, and pricing. It offers career advancement, cloud literacy, enhanced communication, and a foundation for further learning. The target audience includes individuals with no prior IT or cloud experience, line-of-business employees, and IT professionals

Course Objectives

This AWS course aims to provide a strong foundation in cloud computing, covering core AWS services such as compute (EC2, Lambda), storage (S3, EBS), and databases.. The course covers cloud migration strategies (rehosting, replatforming) and cost management techniques, including pricing models and billing methods.

Course Outcomes

This course is aimed at enabling students to:

Understand emerging cyber threats and advanced attack techniques.

- **Implement cutting-edge defensive strategies, including AI-driven and automated security systems.**
- **Analyze the implications of quantum computing for cryptography and cybersecurity.**
- **Apply ethical hacking techniques to identify vulnerabilities in networks and systems. Develop an understanding of zero-trust architecture and its importance in modern security.**

Day	Topic to be Covered	No. of Hours
Day 1	•Introduction to cloud computing and its benefits. •Overview of AWS, its global infrastructure, and core services.	6
Day 2	• Explore compute services like EC2, Lambda, and Far gate • Learn about storage options such as S3, EBS, and EFS.	6
Day 3	• Understand networking concepts with VPC, subnets, and security groups. •Discuss security services like IAM, KMS, WAF, and Guard Duty.	6
Day 4	• Explore the AWS Well-Architected Framework and its five pillars. • Understand AWS pricing models and cost management techniques.	6
Day 5	• Learn about billing and payment methods • Review course material and practice exam questions. • Discuss exam tips and strategies	6
	Total:	30

Resource Person

Dr. Digambar Pawar

Associate professor

University of Hyderabad, Hyderabad

Contact No :7601010528

Email: drp@uohyd.ac.in

Coordinator

Mr. J Amar, Assistant professor
Department of ACSE, VFSTR Deemed to be University
Contact No :8790166779
Email: ja_acse@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research (VFSTR) Deemed to be University provides quality education in a diverse and intellectually stimulating environment. The institute is well known for its dedicated faculty, state-of-the art infrastructure and excellent placement record. As a Deemed to be University, it is in the process of improving its standards to the level of a global technical institution. The latest curriculum has been prepared after consulting the institute's illustrious alumni working across the world, veterans from industry and distinguished academicians possessing a rich teaching and research background.

About the Department

Advanced Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. The Advanced Computer Science & Engineering (ACSE) course was started in the year 2022 in this institution.

Department of ACSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer security, Artifical Intelligence, Machine Learning, Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

**Value-Added Course
On
Blended Learning Model - Emerging Technology
5th – 9th February 2024
Venue : NB 604**

Organized by
Department of Advanced Computer Science and Engineering
**Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in**

Course Description

The "Blended Learning Model – Emerging Technology" course explores the integration of traditional instruction with digital tools like LMS, AI, and AR/VR to create hybrid learning environments. It covers strategies to enhance learner engagement, collaboration, and personalized learning using emerging technologies.

Course Objectives

The objective of the "Blended Learning Model – Emerging Technology" course is to equip educators with the skills to integrate traditional teaching methods with modern digital technologies. Participants will learn to create engaging and interactive learning experiences using tools like Learning Management Systems (LMS), artificial intelligence, and immersive technologies, enhancing student engagement and personalizing learning pathways.

Course Outcomes

This course is aimed at enabling the students to:

- **Participants will design blended learning curricula that enhance student engagement and integrate online and in-person methods.**
- **The course will teach effective use of digital tools, LMS, and emerging technologies to enrich learning experiences.**
- **Participants will develop assessment strategies and personalized pathways while fostering collaboration among students.**
- **Students exhibit initiative and accountability in completing online coursework.**
- **Students effectively demonstrate understanding through diverse assessment methods, including online quizzes, in-person presentations, and collaborative projects.**

Day	Topic to be Covered	No. of Hours
Day 1	✔ Introduction to Blended Learning ✔ Educational Technologies for Blended Learning	6
Day 2	✔ Exploring LMS Platforms ✔ Hands-On: Using LMS for Course Design	6
Day 3	✔ Artificial Intelligence and Adaptive Learning ✔ Immersive Learning with AR/VR	6
Day 4	✔ Gamification and Interactive Learning ✔ Collaborative Learning Tools	6
Day 5	✔ Blended Learning Program Design ✔ Evaluation and Continuous Improvement	6
	Total:	30

Resource Person

Dr.D.S Guru, Associate Professor

Mysore University

Contact No :9620228005

Email: dsguruji@yahoo.com

Coordinator

Arul Elango, Associate Professor,
Department of ACSE
VFSTR Deemed to be University
Contact No: 6379772780
Email :drae_acse@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research (VFSTR) Deemed to be University provides quality education in a diverse and intellectually stimulating environment. The institute is well known for its dedicated faculty, state-of-the art infrastructure and excellent placement record. As a Deemed to be University, it is in the process of improving its standards to the level of a global technical institution. The latest curriculum has been prepared after consulting the institute's illustrious alumni working across the world, veterans from industry and distinguished academicians possessing a rich teaching and research background.

About the Department

Advanced Computer science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it today. The Advanced Computer Science & Engineering was started in the year 2022 in this institution. Department of ACSE, as well qualified faculty from premiere institutions, who are specialist in the areas of Database, Data Mining, wireless networks ,operating systems and programming languages. The faculty members are actively involved in research activities in the field of their specialization. The department attributes its success to the creative and and innovative outlook of its students. The department encourages students to participate in numerous symposiums, guest lectures, workshops and training programs.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
On
Emerging Trends and Techniques in Cyber Security
11th – 16th December 2023
Venue :NB 606

Organized by
Department of Advanced Computer Science and Engineering
Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

The "Emerging Trends and Techniques in Cyber Security" course provides an in-depth understanding of the latest advancements and challenges in the field of cyber security. It covers emerging threats, defensive techniques, and evolving security protocols. Students will learn about advanced cryptography, AI-driven security measures, threat detection systems, and the impact of quantum computing on cybersecurity. The course also addresses ethical hacking, zero-trust architecture, and regulatory frameworks for data protection.

Course Objectives

The objective of the "Emerging Trends and Techniques in Cyber Security" course is to equip students with the knowledge of cutting-edge cyber threats and defense strategies, preparing them to safeguard digital assets and infrastructures in a rapidly evolving threat landscape.

Course Outcomes

This course is aimed at enabling students to:

- Understand emerging cyber threats and advanced attack techniques.
- Implement cutting-edge defensive strategies, including AI-driven and automated security systems.
- Analyze the implications of quantum computing for cryptography and cybersecurity.
- Apply ethical hacking techniques to identify vulnerabilities in networks and systems.
- Develop an understanding of zero-trust architecture and its importance in modern security.

Day	Topic to be Covered	No. of Hours
Day 1	✓ Introduction to Emerging Trends in Cyber Security	5
	✓ Overview of Modern Cyber Threats	
Day 2	✓ Advanced Cryptography ✓ The Impact of Quantum Computing	5
Day 3	✓ AI and Machine Learning in Cyber Security ✓ Automated Threat Detection and Response Systems	5
Day 4	✓ Zero-Trust Architecture: ✓ SecuringNetworks and CloudInfrastructure	5
Day 5	✓ Ethical Hacking and Penetration Testing ✓ Identifying and Mitigating Vulnerabilities	5
Day 6	✓ Case Studies: Real-World Cyber Attacks ✓ Regulatory Frameworks and Compliance in Cyber Security	5
	Total:	30

Resource Person

Dr. Deepak Singh Tomar,

Professor & Head, NIT, Bhopal

Contact No: 9827225851

Email : deepaktomarmanit@gmail.com

Coordinator

Dr Benson Mansingh Assistant Professor,

Department of ACSE,

VFSTR Deemed to be University

Contact No : 9994476533

drbm_acse@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research (VFSTR) Deemed to be University provides quality education in a diverse and intellectually stimulating environment. The institute is well known for its dedicated faculty, state-of-the art infrastructure and excellent placement record. As a Deemed to be University, it is in the process of improving its standards to the level of a global technical institution. The latest curriculum has been prepared after consulting the institute's illustrious alumni working across the world, veterans from industry and distinguished academicians possessing a rich teaching and research background.

About the Department

Advanced Computer Science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it is today. The Advanced Computer Science & Engineering (ACSE) course was started in the year 2022 in this institution.

Department of ACSE has well-qualified and experienced faculty who are specialists in the areas of Databases, Data Mining, Computer security, Artifical Intelligence, Machine Learning, Systems, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security and Programming Languages. The faculty members are actively involved in research activities in the field of their specialization. They have published very good number of papers in journals and Conferences of National and International repute. The Department attributes its success to the creative and innovative outlook of its students also. The Department encourages students to participate in numerous symposiums and to present papers in them.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

**Value-Added Course
On
Emerging Trends in Machine Learning
18th – 23rd December 2023
Venue :NB 605**

Organized by
Department of Computer Science and Engineering
**Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in**

Course Description

This course provides an in-depth exploration of the latest trends and advancements in machine learning (ML), including state-of-the-art techniques and their applications. Students will explore the foundational concepts of supervised and unsupervised learning, delve into advanced deep learning models, and investigate the role of neural networks. The course blends theory with practical applications to prepare students for the rapidly evolving landscape of ML.

Course Objectives

The course aims to equip students with an in-depth understanding of the latest advancements, techniques, and applications in the field. Students will explore cutting-edge models such as transformers, deep learning architectures, reinforcement learning, and transfer learning, gaining insights into how these are shaping real-world applications in industries like healthcare, finance, and autonomous systems. The course emphasizes the ethical and societal implications of machine learning, addressing issues like bias, fairness, and the importance of model interpretability and transparency. Additionally, students will be encouraged to critically evaluate recent research papers, fostering an understanding of the field's future directions..

Course Outcomes

Upon successful completion of the course, students will be able to:

- **Explain core machine learning principles and differentiate between various learning models (supervised, unsupervised, reinforcement).**
- **Design and implement ML models using popular machine learning libraries and frameworks such as TensorFlow, Kera's, or PyTorch.**
- **Analyze complex datasets and extract meaningful patterns using deep learning models, with an emphasis on neural networks and natural language processing.**

Day	Topic to be Covered	No. of Hours
Day 1	✓ Introduction to Machine Learning	5
Day 2	✓ Supervised and Unsupervised Learning	5
Day 3	✓ Neural Networks and Deep Learning	5
Day 4	✓ Natural Language Processing (NLP)	5
Day 5	✓ Reinforcement Learning and Applications	5
Day 6	✓ Emerging Trends: Auto ML, Transfer Learning, and AI Ethics	5
	Total:	30

Resource Person

Dr. Mohammed Javed , Associate professor
IIIT Allahabad
Contact No :9741161929
javed@iiit.ac.in

Coordinator

Dr. S Bala Krishna, Associate Professor
Department of ACSE
VFSTR Deemed to be University
Contact No : 94415400580
drsbk_acse@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research (VFSTR) Deemed to be University provides quality education in a diverse and intellectually stimulating environment. The institute is well known for its dedicated faculty, state-of-the art infrastructure and excellent placement record. As a Deemed to be University, it is in the process of improving its standards to the level of a global technical institution. The latest curriculum has been prepared after consulting the institute's illustrious alumni working across the world, veterans from industry and distinguished academicians possessing a rich teaching and research background.

About the Department

Advanced Computer science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it today. The Advanced Computer Science & Engineering was started in the year 2022 in this institution. Department of ACSE, as well qualified faculty from premiere institutions, who are specialist in the areas of Database, Data Mining, wireless networks ,operating systems and programming languages. The faculty members are actively involved in research activities in the field of their specialization. The department attributes its success to the creative and and innovative outlook of its students. The department encourages students to participate in numerous symposiums, guest lectures, workshops and training programs.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
On
Ethical and Social Issues in Business technology
06th – 10th February 2024
Venue : NB 606

Ethics in Technology: The Need of the Hour!

www.teamleasedigital.com

Organized by
Department of Advanced Computer Science and Engineering
Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

The "Ethical and Social Issues in Business Technology" course explores

the intersection of technology, business practices, and societal values. It focuses on understanding the ethical implications of emerging technologies in the corporate world, including privacy, data security, AI, automation, and intellectual property. Students will evaluate the impact of technology on employment, equity, and corporate responsibility. The course includes case studies on ethical dilemmas faced by businesses, such as the misuse of data and the ethical challenges of AI and automation. Students will learn to develop frameworks for ethical decision-making in technology-driven environments.

Course Objectives

The objective of the "Ethical and Social Issues in Business Technology" course is to provide students with an understanding of the ethical challenges and societal impacts of emerging technologies in business, and to develop strategies for addressing these challenges responsibly.

Course Outcomes

This course is aimed at enabling students to:

- Understand the ethical challenges posed by emerging technologies in business.
- Analyze issues of data privacy, security, and intellectual property in the digital age.
- Evaluate the social impact of automation, AI, and other technological innovations on employment and equity.
- Develop ethical decision-making frameworks for addressing technology-related dilemmas in business.

Day	Topic to be Covered	No. of Hours
Day 1	✓ Introduction to Ethics in Business Technology ✓ Understanding Ethical Theories	6
Day 2	✓ Privacy, Data Security Issues ✓ Ethical Implications of Big Data and AI	6
Day 3	✓ Social Impacts of Automation and AI on Employment ✓ Equity and Access in the Digital Economy	6
Day 4	✓ Corporate Social Responsibility in the Age of Technology ✓ Case Studies on Ethical Dilemmas in Business Technology	6
Day 5	✓ Ethical Decision-Making in Technological Innovation ✓ Developing Ethical Policies and Frameworks for Businesses	6
	Total:	30

Resource Person

Dr M M Naidu,

Former Principal,

SVU college of Engineering,Tirupathi

Contact No: 9848348473

Email : mmnaidu@yahoo.com

Coordinator

Mr D S Bhupal Naik ,Assistant Professor,

Department of ACSE , VFSTR

Contact No :9550367172

dsbn_acse@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research (VFSTR) Deemed to be University provides quality education in a diverse and intellectually stimulating environment. The institute is well known for its dedicated faculty, state-of-the art infrastructure and excellent placement record. As a Deemed to be University, it is in the process of improving its standards to the level of a global technical institution. The latest curriculum has been prepared after consulting the institute's illustrious alumni working across the world, veterans from industry and distinguished academicians possessing a rich teaching and research background.

About the Department

Advanced Computer science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it today. The Advanced Computer Science & Engineering was started in the year 2022 in this institution. Department of ACSE, as well qualified faculty from premiere institutions, who are specialist in the areas of Database, Data Mining, wireless networks ,operating systems and programming languages. The faculty members are actively involved in research activities in the field of their specialization. The department attributes its success to the creative and and innovative outlook of its students. The department encourages students to participate in numerous symposiums, guest lectures, workshops and training programs.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
On
Excel for Data Analysis
11th – 16th December 2023
Venue :NB 604

Data Analysis with Excel

Organized by
Department of Advanced Computer Science and Engineering
Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

This hands-on course empowers participants to analyze and visualize data effectively using Microsoft Excel. Key topics include data organization, essential formulas, PivotTables, and advanced visualization techniques. Learners will explore real-world applications and best practices for presenting insights. Ideal for beginners and intermediates, this course requires no prior experience but benefits from basic computer skills. By the end, participants will confidently make data-driven decisions and enhance their professional toolkit. Join us to elevate your Excel capabilities!

Course Objectives

Equip participants with essential skills to organize, analyze, and visualize data using Excel. Enable confident data-driven decision-making through practical application of formulas, PivotTables, and effective visualization techniques.

Course Outcomes

This course is aimed at enabling students to:

- Efficiently organize and clean data in Excel for effective analysis.
- Use essential functions and create PivotTables to derive insights from large datasets.
- Develop compelling visualizations to present data insights clearly and make informed decisions.
- Apply advanced filtering, sorting, and conditional formatting techniques to enhance data analysis capabilities.

Day	Topic to be Covered	No. of Hours
Day 1	✓ Introduction to Excel for Data Analysis ✓ Data Organization and Cleaning	5
Day 2	✓ Essential Excel Functions and Formulas ✓ Using Tables and Ranges	5
Day 3	✓ PivotTables and Pivot Charts ✓ Data Analysis Toolpak	5
Day 4	✓ Data Visualization Techniques ✓ Creating and Customizing Charts	5
Day 5	✓ Advanced Filtering and Sorting ✓ Conditional Formatting	5
Day 6	✓ Real-World Applications and Case Studies ✓ Presenting Data Insights	5
	Total:	30

Resource Person

Dr Venu Gopal

Senior Infra Developer

CTS Hyderabad

Contact No :9866633975

venugopal@gmail.com

Coordinator

Dr. C Sateesh Kumar Reddy

Assistant Professor,

Department of ACSE,

VFSTR Deemed to be University

Contact No :9848052474

drcs_acse@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research (VFSTR) Deemed to be University provides quality education in a diverse and intellectually stimulating environment. The institute is well known for its dedicated faculty, state-of-the art infrastructure and excellent placement record. As a Deemed to be University, it is in the process of improving its standards to the level of a global technical institution. The latest curriculum has been prepared after consulting the institute's illustrious alumni working across the world, veterans from industry and distinguished academicians possessing a rich teaching and research background.

About the Department

Advanced Computer science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it today. The Advanced Computer Science & Engineering was started in the year 2022 in this institution. Department of ACSE, as well qualified faculty from premiere institutions, who are specialist in the areas of Database, Data Mining, wireless networks ,operating systems and programming languages. The faculty members are actively involved in research activities in the field of their specialization. The department attributes its success to the creative and and innovative outlook of its students. The department encourages students to participate in numerous symposiums, guest lectures, workshops and training programs.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course
On
Financial Technology
11th – 16th December 2023
Venue : NB 605

FINTECH
Financial Technology

Organized by
Department of Advanced Computer Science and Engineering
Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

The Financial Technology (FinTech) course explores the intersection of finance and technology, covering innovations that reshape the financial services industry. Students will gain an understanding of blockchain, cryptocurrencies, digital payments, peer-to-peer lending, and robo-advisors. The course delves into regulatory challenges, data security, and the role of artificial intelligence and machine learning in finance. Practical applications include digital banking, fintech startups, and the future of investment management. Through case studies and projects, students will develop the skills to assess the impact of technology on financial systems and services.

Course Objectives

The objective of the Financial Technology (FinTech) course is to equip students with the knowledge and skills to understand, analyze, and apply technological innovations in the financial industry, focusing on digital transformation, regulatory frameworks, and emerging trends.

Course Outcomes

This course is aimed at enabling students to:

- Understand the key technologies driving financial innovation, including blockchain, AI, and digital payments.
- Analyze the impact of FinTech on traditional financial services, including banking, lending, and investment. •
- Evaluate regulatory and security challenges faced by financial technology platforms and startups.

Day	Topic to be Covered	No. of Hours
Day 1	✓ Introduction to Financial Technology ✓ Overview of the Financial Services	5
Day 2	✓ Blockchain Technology in Finance ✓ Introduction to Cryptocurrencies	5
Day 3	✓ Digital Payments and Mobile Banking ✓ Peer-to-Peer Lending, Crowdfunding	5
Day 4	✓ AI and Machine Learning in Finance ✓ Robo-Advisors and Automated Investment Management	5
Day 5	✓ Regulatory Challenges in FinTech ✓ Data Security and Privacy in Financial Services	5
Day 6	✓ Emerging Trends: Digital Currencies ✓ Case Studies on FinTech Startups	5
	Total:	30

Resource Person

Dr Chalam,

Professor (Rtd), Department of Management,

Acharya Nagarjuna University, AP

Contact No : 9440613822

chalam.goriparthi@gmail.com

Coordinator

Dr. B Sudha Rani

Senior Assistant Professor,

Department of ACSE, VFSTR Deemed to be University

Contact No :7981738522

Email : drbs_acse@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research (VFSTR) Deemed to be University provides quality education in a diverse and intellectually stimulating environment. The institute is well known for its dedicated faculty, state-of-the art infrastructure and excellent placement record. As a Deemed to be University, it is in the process of improving its standards to the level of a global technical institution. The latest curriculum has been prepared after consulting the institute's illustrious alumni working across the world, veterans from industry and distinguished academicians possessing a rich teaching and research background.

About the Department

The Advanced Computer Science & Engineering (ACSE) course, launched in 2022, serves as a key driver of innovation in engineering. The department has a strong faculty team, with expertise in Databases, Data Mining, Computer Security, Artificial Intelligence, Machine Learning, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security, and Programming Languages. Faculty members are not only educators but also active researchers, contributing to the field through publications in top-tier national and international journals and conferences.The department is equipped with state-of-the-art laboratories and computing facilities, providing a conducive environment for both teaching and research. Cutting-edge projects in areas like AI-driven systems, cybersecurity solutions, and advanced data analytics are a regular part of the curriculum.

Students are encouraged to pursue research opportunities, engage in interdisciplinary projects, and participate in hackathons, coding competitions, and technical symposiums. The department regularly organizes guest lectures, workshops, and seminars with industry experts, fostering a culture of continuous learning and keeping students updated on the latest technological advancements.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course On
Gen AI and Machine Learning
11th – 15th March 2024
Venue :NB 602

Organized by

Department of Advanced Computer Science and Engineering

Vadlamudi, Guntur - 522213,

Andhra Pradesh, India

www.vignan.ac.in

Course Description

Generative AI and Machine Learning (ML) represent transformative fields within artificial intelligence that enable computers to not only learn from data but also to create new, meaningful content based on that learning. These technologies leverage sophisticated algorithms and techniques, including deep learning, neural networks, and probabilistic models, to perform tasks that traditionally required human intelligence, such as pattern recognition, decision-making, and content creation.

Course Objectives

To understand the Core Concepts of Machine Learning and grasp the fundamentals of supervised, unsupervised, and reinforcement learning. Become familiarize with key algorithms and techniques used in ML, such as regression, classification, clustering, and neural networks.Learn about deep learning models, including Convolutional Neural Networks (CNNs) and Recurrent Neural Networks (RNNs).Understand how these models can be applied to various tasks like image recognition, sequence analysis, and natural language processing.

Course Outcomes

This course is aimed at enabling the students to:

- **Machine Learning Fundamentals and Implementation:** Understand core principles of machine learning, including algorithms for classification and regression tasks. Leverage deep learning techniques for complex data analysis.
- **Apply generative models like GANs and VAEs to create new content.**
- **Model Evaluation and Security: Evaluate and optimize model performance using appropriate metrics, and implement the best current security techniques.**

Day	Topic to be Covered	No. of Hours
Day 1	✓ **Introduction to AI & ML Foundations** ✓ **Machine Learning Overview** ✓ **Mathematical Basics**	6
Day 2	✓ **Core Machine Learning Techniques** ✓ **Supervised and Unsupervised Learning**	6
Day 3	✓ **Generative Adversarial Networks(GANs)** ✓ **Introduction to GANs** ✓ **Hands-On: Building a simple GAN**	6
Day 4	✓ **Transformer-Based Generative Models** ✓ **Introduction to Transformers** ✓ **Text Generation with GPT**	6
Day 5	✓ **Ethical considerations and Future Trends**	6
	Total:	30

Resource Person

Dr. P.Viswanath , Associate Professor

Head of Computer Science and Engineering

Indian Institute of Technology ,Sri City AP

Contact No :7337324906

Viswanath.p@iiits.in

Coordinator

Dr. N.Nirupama Bhat , Professor ,
Department of ACSE
VFSTR Deemed to be University
Contact No :9908823834
drmnb_acse@vignan.ac.in

About the Institution

Vignan's Foundation for Science, Technology and Research (VFSTR) Deemed to be University provides quality education in a diverse and intellectually stimulating environment. The institute is well known for its dedicated faculty, state-of-the art infrastructure and excellent placement record. As a Deemed to be University, it is in the process of improving its standards to the level of a global technical institution. The latest curriculum has been prepared after consulting the institute's illustrious alumni working across the world, veterans from industry and distinguished academicians possessing a rich teaching and research background.

About the Department

The Advanced Computer Science & Engineering (ACSE) course, launched in 2022, serves as a key driver of innovation in engineering. The department has a strong faculty team, with expertise in Databases, Data Mining, Computer Security, Artificial Intelligence, Machine Learning, Image Processing, Wireless Networks, Artificial Neural Networks, Information Security, and Programming Languages. Faculty members are not only educators but also active researchers, contributing to the field through publications in top-tier national and international journals and conferences. Cutting-edge projects in areas like AI-driven systems, cybersecurity solutions, and advanced data analytics are a regular part of the curriculum. Students are encouraged to pursue research opportunities, engage in interdisciplinary projects, and participate in hackathons, coding competitions, and technical symposiums. The department regularly organizes guest lectures, workshops, and seminars with industry experts, fostering a culture of continuous learning and keeping students updated on the latest technological advancements.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

Value-Added Course On

Introduction to Generative AI

6th – 10th February 2024

Venue : NB 602

Organized by

Department of Advanced Computer science and Engineering

Vadlamudi, Guntur - 522213,

Andhra Pradesh, India

www.vignan.ac.in

Course Description

The "Introduction to Generative AI" course explores foundational principles and practical applications of generative AI. Participants will learn about key models like Variational Autoencoders (VAEs) and Generative Adversarial Networks (GANs), as well as transformer-based models like GPT for natural language processing. The course combines theoretical insights with hands-on sessions using popular frameworks, equipping learners to effectively harness generative AI in fields such as art, music, gaming, and data synthesis.

Course Objectives

Introduction to Generative AI covers foundational concepts and techniques for generating content like images, text, and music using models such as VAEs and GANs. Participants will gain practical skills to apply generative AI in various real-world applications.

Course Outcomes

Upon completing the Introduction to Generative AI course, participants will be able to:

- Explain foundational concepts and significance of generative AI.
- Understand the architecture of VAEs and GANs.
- Create digital content using generative models.
- Implement practical projects with generative AI techniques.
- Assess strengths and limitations of different generative models.
- Explore real-world applications across various fields.

Day	Topic to be Covered	No. of Hours
Day 1	✓ Introduction to Generative AI ✓ Mathematics for Generative AI	6
Day 2	✓ Basic Generative Models ✓ Variational Autoencoders (VAEs) ✓ Hands-On: Building a VAE	6
Day 3	✓ Generative Adversarial Networks (GANs) ✓ Introduction to GANs ✓ Hands-On: Building a Simple GAN	6
Day 4	✓ Transformer-Based Generative Models ✓ Introduction to Transformers ✓ Hands-On: Text Generation with GPT	6
Day 5	✓ Ethical Considerations and Future Trends	6
	Total:	30

Resource Person

Dr. R.B.V Subramanyam Professor , Department of CSE

NIT Warangal

Contact No :9491346969

Email : rbvs66@gmail.com

Coordinator

Dr. B.Jyostna Devi

Officiating Professor,   Department of ACSE,

VFSTR Deemed to be University

Contact No :8297208489

Email : drbjd_acse@vignan.ac.in
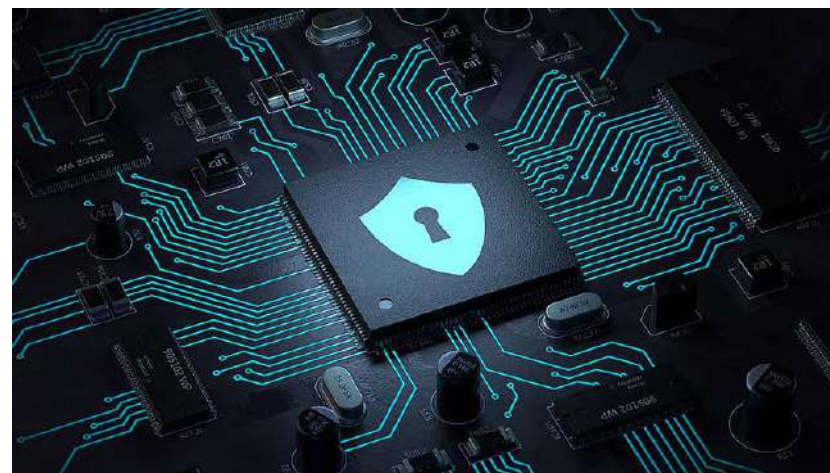
About the Institution

Vignan's Foundation for Science, Technology and Research (VFSTR) Deemed to be University provides quality education in a diverse and intellectually stimulating environment. The institute is well known for its dedicated faculty, state-of-the art infrastructure and excellent placement record. As a Deemed to be University, it is in the process of improving its standards to the level of a global technical institution. The latest curriculum has been prepared after consulting the institute's illustrious alumni working across the world, veterans from industry and distinguished academicians possessing a rich teaching and research background.

About the Department

Advanced Computer science and Engineering is the soul and psyche of many engineering branches. These fields are instrumental in bringing the world to where it today. The Advanced Computer Science & Engineering was started in the year 2022 in this institution. Department of ACSE, as well qualified faculty from premiere institutions, who are specialist in the areas of Database ,Data Mining, wireless networks ,operating systems and programming languages. The faculty members are actively involved in research activities in the field of their specialization. The department attributes its success to the creative and and innovative outlook of its students. The department encourages students to participate in numerous symposiums, guest lectures, workshops and training programs.

VIGNAN'S
Foundation for Science, Technology & Research
UNIVERSITY
(Estd u/s 3 of UGC Act of 1956)

Value-Added Course
On
Security in IOT and Edge Computing
6th – 10th February 2024
Venue : NB 605

Organized by
Department of Advanced Computer Science and Engineering
Vadlamudi, Guntur - 522213,
Andhra Pradesh, India
www.vignan.ac.in

Course Description

This course offers comprehensive insights into the security challenges and solutions for the rapidly growing domains of the Internet of Things (IoT) and Edge Computing. As IoT devices proliferate and edge computing transforms data processing, ensuring the security of these interconnected systems is critical. The course will cover security fundamentals, best practices, and the latest technologies to secure IoT devices, edge nodes, and networks.

Course Objectives

By the end of this course, students will:

1. **Understand the architecture and operational principles of IoT and Edge Computing environments.**

2. **Analyze and identify key security risks, vulnerabilities, and challenges unique to IoT and Edge Computing.**

3. **Learn techniques for secure device authentication, access control, and data protection in IoT systems.**

Course Outcomes

Upon successful completion of the course, students will be able to:

- **Assess IoT and Edge Computing Threats: Identify and assess various types of security threats (e.g., DDoS, data breaches, malware) within IoT ecosystems.**

- **Design Secure IoT Systems: Implement security architectures that ensure the confidentiality, integrity, and availability of IoT devices and edge systems.Apply Cryptographic Techniques: Use encryption, authentication, and secure communication methods to protect data in IoT and edge environments.**

Day	Topic to be Covered	No. of Hours
Day 1	✓ **Introduction to IoT, Edge Computing, and Security Basics**	6
Day 2	✓ **IoT Security Threats, Vulnerabilities, and Risk Assessment**	6
Day 3	✓ **Authentication, Authorization, and Access Control in IoT**	6
Day 4	✓ **Data Encryption, Privacy, and Secure Communication in IoT**	6
Day 5	✓ **Secure Software/Firmware Updates and Incident Response for IoT Devices**	6
	Total:	**30**

Resource Person

Dr. Venkatesan,
Associate professor,
Department of IT, IIIT Allahabad
Contact No : 9695895464
Email : venkat@iiita.ac.in

Coordinator

Dr. Deevi Radha Rani ,
Associate professor,
Department of ACSE
VFSTR Deemed to be University
Contact No :9676354404
drdrr_acse@vignan.ac.in

ABOUT VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

Effective Communication Skills for Chemistry Students

30-03-2024 to 27-04-2024

Organized by
Department of Chemistry
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

ABOUT THE DEPARTMENT

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications. research output has been progressively increasing.

COURSE CONTENTS

The following topics will be covered:

S.No.	Topics	No of hours
1	Communication Skills	6
2	SWOC	6
3	GOAL	6
4	Resume/SOP	6
5	Interview Skills	6
	Total	**30**

COURSE OBJECTIVES

- To help youth build their communication skills simple speaking opportunities.
- Create a positive impression.
- To make them develop the skill of writing and evaluation techniques of writing skill.

COURSE OUTCOME

- Strong communication skills allow us to advance in our careers

RESOURCE PERSON

Mr. Raghav Rao
Training & Placement Cell, VFSTR

VENUE

VBS01A, A-Block, VFSTR

COURSE COORDINATOR

Dr. V. Srinivasadesikan
Associate Professor
Department of Chemistry, VFSTR
Mobile: 7406940340
Email: drvsd_sh@vignan.ac.in

Content

Day	Content	Nos. of hours
1	Introduction to Materials Characterization	6
2	Spectroscopic Techniques	6
3	Microscopy Techniques	6
4	Structural Analysis Techniques	6
5	Case Studies and Research Trends	6
	Total Hours	**30**

Resource Persons

Dr. N. Satya Vijaya Kumar
Centre In-Charge, CoExAMMPC

Mr. Ch. Srinivas Rao
Service Manager, Inkarp Instrument Services
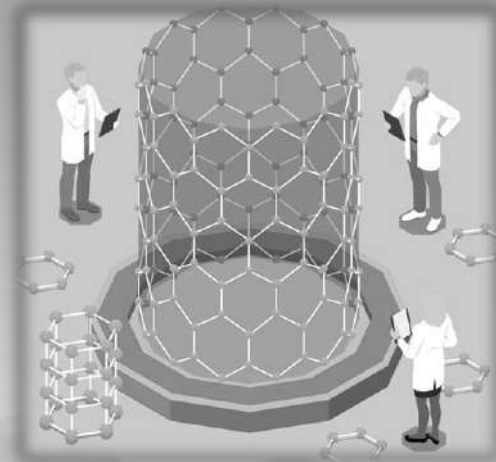
Course Coordinator

Dr. V. Srinivasadesikan
Associate Professor
Department of Chemistry, VFSTR
Mobile: 7406940340
Email: ag_sh@vignan.ac.in

Hands-on Training on Characterization of Materials

02.01.2024 – 06.01.2024

Venue
Centre of Excellence for Advanced Materials,
Manufacturing, Processing and Characterization

Organized by
Department of Chemistry
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

About VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

About Chemistry Department of VFSTR

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications.

Course Objectives:

The primary objectives of the training is to:

1) Offer a comprehensive understanding of the principles, techniques, and applications of materials characterization

2) Provide participants with hands-on training to develop practical skills in utilizing various materials characterization techniques

3) Enable participants to apply materials characterization methods effectively in real-world scenarios, fostering practical problem-solving abilities.

Course Outcome:

Upon completion of the training, the participants will :

1) gain hands-on experience and proficiency in using various materials characterization techniques, enhancing their practical laboratory skills

2) apply the knowledge of materials characterization to analyze and interpret data, contributing to academic and industrial research.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

Content

Day	Content	Nos. of hours
1	**Materials Characterization - An Introduction**	6
2	**Microscopy Techniques**	6
3	**Spectroscopic Techniques**	6
4	**Surface Area Analysis**	6
5	**Case Studies and Research Trends**	6

Resource Persons

Mr. Ch. Srinivas Rao
Service Manager, Inkarp Instrument Services

Dr. M. Bujji Babu
Research Assistant, CoExAMMPC

Course Coordinator

Dr. Ravi Kumar Kottalanka
Associate Professor
Department of Chemistry, VFSTR
Mobile: 9100685531
Email: drkrk_sh@vignan.ac.in

A Practical Workshop on Material Characterization Techniques

04.12.2023 – 08.12.2023

Venue
Centre of Excellence for Advanced Materials, Manufacturing, Processing and Characterization

Organized by
Department of Chemistry
School of Applied Sciences & Humanities

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

About VFSTR

Vignan's Foundation for Science, Technology and Research (VFSTR), the flagship institution of Vignan's Group of Educational Institutions, is a NAAC 'A+' accredited institution. Established in 2008 and located in a serene rural environment, VFSTR is renowned for its commitment to quality education in engineering, technology, and management. Offering a diverse range of undergraduate, postgraduate, and doctoral programs, the university prioritizes research and practical learning. With modern infrastructure and dedicated faculty, VFSTR emphasizes holistic education and industry collaborations to prepare students for real-world challenges.

About Department of Chemistry

The Chemistry Department at VFSTR is a dynamic academic center promoting creativity and scientific exploration. It emphasizes hands-on learning, supports undergraduate education in chemistry and environmental studies, offers postgraduate and PhD programs, and actively engages in interdisciplinary research. Hosting research centers and a Centre of Excellence, the department is actively involved in interdisciplinary research as evident from various externally funded projects and high-quality publications.

Course Objectives:

The primary objectives of the training is to:

- Deliver a thorough grasp of the principles, methods, and practical applications of materials characterization

- Equip participants with practical, hands-on experience to develop adept skills in employing diverse materials characterization techniques

- Empower participants to effectively apply materials characterization methods in real-world situations, cultivating their practical problem-solving capabilities.

Course Outcome:

Upon completion of the training, the participants will :

- Acquire hands-on expertise and proficiency in utilizing a variety of materials characterization techniques, thereby enhancing their practical laboratory skills

- Apply their knowledge of materials characterization to analyze and interpret data, contributing significantly to both academic and industrial research endeavors.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be UNIVERSITY)
-Estd. u/s 3 of UGC Act 1956

RESOURCE PERSON

Dr. Y Ravi Sekhar

Professor & Dean-Technology Development

Department of ECE

VFSTR(Deemed to be University)

COURSE CO-ORDINATOR:

Mr. Satish Kanapala

Assistant professor,

Dept.of Electronics &Communication Engineering,

VFSTR (Deemed to be University)

Vadlamudi, Guntur.

VIGNAN'S
Foundation for Science, Technology & Research
(Deemed to be University)
-Estd. u/s 3 of UGC Act 1956

NAAC A+ Accredited

VALUE ADDED COURSE
On

5G for Everyone

25th - 28th September 2023

Venue : VSF-18, H-Block

Organised by

Department of Electronics &Communication Engineering

Vignan's Foundation for Science, Technology and Research, Vadlamudi, Guntur District. Andhra Pradesh India - 522213

ABOUT THE INSTITUTION

Vignan's Foundation for Science, Technology and Research is the flagship institution of Vignan Group of Educational Institutions, is a NAAC 'A+' accredited institution. Located in serene environs of Vadlamudi on the Guntur-Tenali highway, VFSTR with its sprawling play grounds, campus greenery and imposing academic blocks, is a virtual haven of rural quiet and idyllic beauty. Since its inception in 1997, the institution has been striving to promote high standards in technical education to aid in the career building of many students who step into its portals. Through diverse programs and updated curriculum by imparting industry exposure and hands-on skills, VFSTR trains the students into competitive and global professionals, imbued with ethical consciousness and social awareness. All the departments are supported by a good mix of young and senior faculty with a rich research, teaching and industry background. The sophisticated laboratories and research centers make it one of the most preferred institutions for the aspirants of engineering studies.

ABOUT THE DEPARTMENT

The Department of Electronics &Communication Engineering was established under Vignan's Engineering College in the year 1997 to address the phenomenally growing Electronics Industry in India. The department primarily offered Undergraduate (B.Tech) program to fulfill the ever-growing local and global demands in allied Electronics engineering streams. The Department was accredited by NBA. The objective of the department is to offer state of the art curriculum, along with advanced laboratory facilities and conducive research environment to make the students industry-ready and equip to carryout higher education towards research and consultancy.

Department also offers M.Tech Degree programs in Embedded systems and VLSI Design. Research Scholars are actively pursuing their Ph.D. in many relevant and advanced areas of Electronics and Communication Engineering.

COURSE OBJECTIVE:

The objective of the course is to provide a comprehensive and accessible introduction to 5G technology, its underlying principles, and its transformative potential. The course is designed for individuals from diverse backgrounds who are curious about the impact of 5G on various sectors.

COURSE OUTCOMES :

By the end of the course, participants will be able to

- Explore the evolution of mobile networks from 1G to 5G
- Understand 5G architecture, and key technologies
- Applications of 5G – use cases.

PROGRAM SCHEDULE

Date	Topic	No. of Hours
25.09.2023 9.00 to 5.00	Introduction to Mobile Network: Evolution from 1G to 5G.	8 Hrs
26.09.2023 9.00 to 5.00	Introduction to 5G, 5G Applications and Use Cases, 5G Architecture	8 Hrs
27.09.2023 9.00 to 5.00	5G key Technologies: Small cells, massive MIMO, mmWave, etc.	8 Hrs
28.09.2023 9.00 to 5.00	Key challenges in Rolling Out 5G and research beyond 5G	8 Hrs
Total		32 Hrs