



VIGNAN'S

FOUNDATION FOR SCIENCE, TECHNOLOGY & RESEARCH

(Deemed to be University) - Estd. under 3 of UGC Act 1956

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

CIRCULAR

Date:09/09/2024

Department of CSE is planning to conduct Board of Studies(BOS) meeting for the B.Tech & M.Tech CSE programme on 14/09/2024 from 02.00 P.M in the blended mode (Physical meeting:CSE Conference Hall,Third Floor,N-Block,VFSTR and the virtual meeting link : <https://us06vch.zoom.us/j/85012494325?pwd=QQwxH9cXZrVp7bnGlnbzQufwaB6bKc.1> All the following members are requested to make it convenient to join the meeting.

Members to attend the meeting:

1..Dr. K.V. Krishna Kishore	Professor and Dean SOC&I	Member
2..Dr. S. V. Phani Kumar	HOD, Dept. of CSE, VFSTR.	Chairperson
3.Prof. R.B.V.Subramanyam	Professor, Dept. of CSE, NIT Warangal. rbvs66@gmail.com, rbvs66@nitw.ac.in +91 949 134 6969	External member (Academia)
4. Mr.Bala Prasad Peddigari	Chief Innovation Officer, TCS. bala.peddigari@tcs.org +91 929 508 1188	External member (Industry)
5. Prof. C.R.Rao	Professor, SCIS, University of Hyderabad. crrcs@uohyd.ernet.in +91 924 746 5125	Invited member (Academia)
6. Dr.B.Venkata Ramana	Associate Professor, HoD-CSE, IIT, Tirupathi. ramana@iittp.ac.in +91 963 621 3350	Invited member (Academia)
7. Mr.Sai Kumar Jadam	Quality Engineering Manager, DASSAULT SYSTEMES Solutions Lab, saimtech@yahoo.co.in +91 997 201 9901	Invited member (Industry)

8. Dr. M. Umadevi	Associate Professor	Internal member (R&D nominee)
9. Dr. D. Yakobu	Associate Professor	Internal member (School nominee)
10. Dr. S. Deva Kumar	Associate Professor	Programme Coordinator
11. Dr. S. Satish Kumar	Assistant Professor	Internal member
12. Dr. P. Siva Prasad	Associate Professor, (BOA)	Member Secretary

Agenda of the BoS Meeting:

1. Discussion and approval of C-24 curriculum revision for 2024-25 admitted batch.
2. Discussion and approval of R-22 curriculum for M.Tech 2024-25 admitted batch.
3. C24 Structure including electives, honors, minors etc
4. Approval of NPTEL courses for the first semester of academic year 2024-25.
5. Discussion on results announced in the last six months – FA, SA and Grades.
6. Any other point with the permission of chair.



Chairperson

Dr. S.V. Phani Kumar

Professor & Head, Dept. of CSE,

VFSTR Deemed to be University, Vadlamudi

HoD

Dept. of Computer Science & Engineering

VFSTR Deemed to be University

VADLAMUDI - 522 213

Chintur Dist., A.P., India.



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Date: 14.09.2024

Minutes of Board of Studies Meeting

The Board of Studies (BoS) meeting for the B.Tech - CSE & M.Tech- CSE programme was conducted in the blended mode from 2.00 PM to 4.00 PM on 14.09.2024. (Physical meeting: NB - 303, Conference Hall, Third floor, Nagarjuna Block, VFSTR and virtual meeting link: <https://us06web.zoom.us/j/85012994325?pwd=OQowcH9cX2rVp7hnGihnZQufwaE6bKc.1>)

Agenda of the BoS Meeting:

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4. Approval of NPTEL courses for the first semester of academic year 2024-25.
5. Discussion on results announced in the last six months – FA, SA and Grades.
6. Any other point with the permission of chair.

The following members were present either through offline or online

S.No	Name of the Member	Designation	Role	Signature
1.	Dr.S.V Phani Kumar	Professor & HOD	Chairperson	
2.	Dr.K.V.Krishna Kishore	Dean SoC&I	Member	
3.	Dr.P.Siva Prasad	Associate Professor	Member Secretary	
Internal Experts				
1.	Dr.S.Deva Kumar	Associate Professor	Member	
2.	Dr.M.Umadevi	Associate Professor	Member(R&D nominee)	
3.	Dr.D.Yakobu	Associate Professor	Member(School nominee)	
4.	Dr. S. Satish Kumar	Assistant Professor	Internal Member	
External Experts				
1.	Prof. R.B.V.Subramanyam	Professor, Dept. of CSE, NIT Warangal. rbvs66@gmail.com, rbvs66@nitw.ac.in +91 949 134 6969	External member (Academia)	on-line
2.	Mr.Bala Prasad Peddigari	Chief Innovation Officer, TCS. bala.peddigari@ieee.org	External member (Industry)	on-line

		+91 929 508 1188		
3.	Prof. C.R.Rao	Prof. C.R.Rao Professor, SCIS, University of Hyderabad. crrcs@uohyd.ernet.in +91 924 746 5125	Invited member (Academia)	
4.	Dr.B.Venkata Ramana	Associate Professor, HoD-CSE, IIT, Tirupathi. ramana@iittp.ac.in +91 963 621 3350	Invited member (Academia)	
5.	Mr.Sai Kumar Jadam	Quality Engineering Manager, DASSAULT SYSTEMES Solutions Lab, saimtech@yahoo.co.in +91 997 201 9901	Invited member (Industry)	

Minutes of the meeting:

- Dr.S.V Phani Kumar, BoS Chairperson, initiated the meeting with his opening remarks, hearty welcomed all the internal and external members of the B.Tech for C24 Regulations & for M.Tech R22 regulations. CSE BoS and presented the glimpses of the respective Regulations.
- Prof. R.B.V. Subramanyam's inquiry about the choice-based credit system (CBCS) likely pertains to a system of education adopted by many universities worldwide, including in India. He suggested that CBCS allows students to choose from a wide range of elective courses from the department as well as other departments and provides flexibility in the place of learning. He suggested to compare the AICTE and VFSTR credits.

As per suggestion, verified AICTE mandate, C24 is compliance with AICTE mandate.

- Mr.Sai Kumar Jadam asked about the contents of IT Tools and Cyber Security and he suggested to include practical session on assembling and de-assembling the computer components.

As per suggestion, include practical session and marks will be awarded in Target 5.

- Mr.Bala Prasad Peddigari suggested to ask the students to give a presentation about any topic to improve the students communication skills as a part of English Proficiency & Communication Skills (PET) course.

As per suggestion, the presentation marks will be awarded in Target 5.

- Prof. R.B.V. Subramanyam's suggestion to move the engineering graphics course to an elective course instead of a core course.
- Prof. R.B.V. Subramanyam inquiry about the contents of Indian Knowledge Systems course and he suggested to compare the contents available in IIT Guwahati and IIT Kharagpur.

As per suggestion, the department of CSE may change the components.

- Mr.Sai Kumar Jadam asked about the contents of Front-End Applications and he suggested implementing the programs in tools, so that the students can learn the online tools and store the data itself or upload into GitHub instead of local storage/hard disk.

As per suggestion, all members agreed to store all the applications in GitHub.

- Prof. C.R.Rao asked about the contents of Optimization Techniques and he suggested to verify the SS Rao textbook for adding practical components instead of transactions.

As per suggestion, adding practical component instead of transaction.

- Prof. C.R.Rao asked us about the department electives and he suggested giving a pool wise department electives so that the students gain a knowledge about a particular area instead of giving a list of courses.

As per suggestion, stream-wise department electives are formed.

- Mr.Sai Kumar Jadam asked about the contents of Software Engineering and Project Management. He suggested that to remove project management components because the course is having 3 credits, so it is difficult to complete the syllabus within the time.

As per suggestion, all members agreed to increase one more credit.


- The curriculum encompasses the courses that enable employability or entrepreneurship or skill development, provided in Appendix- II.
- The significant changes are made in the content of all courses and hence the courses are considered as new courses provided in Appendix- III.
- The total average percentage of syllabus revised was 20% compared to previous curriculum.
- The Member secretary presented the list of SWAYAM-NPTEL courses for III/IV B. Tech CSE students. These courses could be chosen as additional courses under Open elective/ Department elective. It was noted that this is a regular practice to encourage students towards self-learning and life-long learning. After discussing the matter, the members approved the list of SWAYAM-NPTEL courses and appreciated the efforts of Students and Faculty Community. The list is attached in the Annexure-IV.

- The chairperson of the meeting presented the formative and summative results of the B.Tech previous semester i.e 2023-24 II Sem. The correlation between formative and summative results was also presented along with action taking report.
- The chairperson of the meeting presented the formative and summative results of the M.Tech previous semester i.e 2023-24 II Sem. The correlation between formative and summative results was also presented along with action taking report.
- Further Chairperson has presented the attainments of CO/PO/PSO and SO values of 2019-23 B.Tech admitted batch for ratification. Prof. C.R.Rao has enquired about the procedures adopted for the computation. Chairperson elaborated the procedures and presented the Web Application for the computation of above. Members have suggested the department to undertake proper actions for non-attained CO/PO/PSO and SO values.
- Further Chairperson has presented the attainments of CO/PO/PSO and SO values of 2022-24 M.Tech admitted batch for ratification. Prof. C.R.Rao has enquired about the procedures adopted for the computation. Chairperson elaborated the procedures and presented the Web Application for the computation of above. Members have suggested the department to undertake proper actions for non-attained CO/PO/PSO and SO values.
- Based on the feedback from various stakeholders and suggestions given by the members, the Chairperson of BoS told that, those fruitful suggestions would be incorporated appropriately in the curriculum and syllabi of the regulation C24 and this will be recommended to the Academic Council of VFSTR for the approval.

There being no further points for discussion, the Chairperson thanks all the external, internal, invited members and announced that the meeting was adjourned.

Summary of the Board of Studies meeting:

1. Discussion and approval of C-24 curriculum revision for 2024-'25 admitted batch for both B.Tech & R-22 curriculum for M.Tech programmes.
2. Approval of NPTEL courses for the first semester of academic year 2024-25.
3. Discussion on results announced in the last six months – FA, SA and Grades.
4. Approval of attainment of CO/PO/PSO and SO values, and PEOs.
5. Any other point with the permission of chair.


Member Secretary

Dr. P.Siva Prasad
Associate . Professor, Department of CSE,
VFSTR Deemed to be University.


Chairperson

Dr. S.V.Phani Kumar
Professor & Head, Dept. of CSE,
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

B.Tech., CSE Programme: Curriculum Structure (w.e.f 2024-25 onwards)

Induction Programme

Sl. No.	Course Code	Course Title	L	T	P	C
1	24SA101	Orientation Session	0	2	0	1

I Year I Semester

Sl. No.	Course Code	Course Title	L	T	P	C
1	24MT101	Linear Algebra and Ordinary Differential Equations	3	2	0	4
2	24CT101	Engineering Chemistry	3	0	2	4
3	24EE101	Basics of Electrical and Electronics Engineering	2	0	2	3
4	24CS101	Programming in C	2	0	4	4
5	24MS101	Management Science	2	2	0	3
6	24CY101	It Tools and Cyber Security	0	2	2	2
7	24EN101	English Proficiency and Communication Skills (PET)	0	0	2	1
8	24SA103	Physical Fitness, Sports and Games	0	0	2	1
9	24SS101	Constitution of India	0	2	0	1
		Sub-Total	12	8	14	23
		Total	34			23

I Year II Semester

Sl. No.	Course Code	Course Title	L	T	P	C
1	24MT102	Calculus	3	2	0	4
2	24PY102	Engineering Physics	3	0	2	4
3	24ME101	Engineering Graphics	2	0	2	3
4	24CS102	Problem Solving through Python	2	0	2	3
5	24EN102	Technical English Communication	2	0	2	3
6	24CT103	Environmental Studies	2	2	0	3
7	24SA102	Self-empowerment & Gender Sensitization	0	0	2	1
8		Universal Human Values	0	2	0	1
9	24SS102	Indian Knowledge Systems – Dept. specific	0	2	0	1
		Sub-Total	14	8	10	23
		Total	32			23

II Year I Semester

Sl. No.	Course Code	Course Title	L	T	P	C
1	New Code	Discrete Mathematical Structures	3	2	0	4
2	22TP201	Data Structures	2	2	2	4
3	22CS201	Database Management Systems	2	2	2	4
4	22CS203	Object-Oriented Programming through JAVA	2	2	2	4
5	New Code	Computer Architecture	3	2	0	4
6	22CS207	Operating Systems	2	0	2	3
7	New Code	Design Thinking & Engineering Orientation	0	0	2	1
8		Life skills	0	0	1	1
		Sub-Total	14	10	11	25
		Total	35			25

II Year II Semester

Sl. No.	Course Code	Course Title	L	T	P	C
1	22ST202	Probability and Statistics	3	2	0	4
2	22CS206	Design and Analysis of Algorithms	2	2	2	4
3	22CS301	Introduction to Artificial Intelligence	2	2	0	3
4	New Code	Theory of Computation	2	2	0	3
5	New Code	Full Stack Development	0	2	2	2
6		Open Elective – 1 (NPTEL)	2	2	0	3
7		Field projects	0	0	2	1
8		Industry interface course (Modular course) *	0	0	2	1
		Sub-Total	11	12	6	21
9		Minor / Honours – 1	3	0	2	4
		Sub-Total	14	12	8	25
		Total	34			25

III Year I Semester Sl. No.	Course Code	Course Title	L	T	P	C
1	22TP301	Soft Skills Laboratory	0	0	2	1
2	New Code	Optimization Techniques	2	2	0	3
3	New Code	Software Engineering & Project Management	3	0	2	4
4	22CS204	Computer Networks	2	0	2	3
5	New Code	Mobile App Development	0	2	2	2
6		Department Elective – 1	3	0	2	4
7		Open Elective – 2	2	2	0	3
8		BEC Certification	0	0	2	1
		Total	12	6	12	21
9		Minor / Honours – 2	3	0	2	4
		Total	15	6	14	25
		Total	35			25

III Year II Semester

Sl. No.	Course Code	Course Title	L	T	P	C
1	22CS310	Computing Ethics	1	2	0	2
2	22TP302	Quantitative aptitude & Logical reasoning	0	2	2	2
3	New Code	Machine Learning	2	0	2	3
4	22CS407	Cryptography and Network Security	2	0	2	3
5		Department Elective – 2	2	0	2	3
6		Department Elective – 3	3	0	2	4
7		Open Elective – 3	2	2	0	3
8		Field projects	0	0	2	1
		Sub-Total	12	6	12	21
9		Minor / Honours – 3	3	0	2	4
		Sub-Total	15	6	14	25
		Total	35			25

IV Year I Semester

Sl. No.	Course Code	Course Title	L	T	P	C
1	New Code	Parallel & Distributed Computing	3	2	0	4
2	New Code	Privacy and Intrusion Detection	3	2	0	4
3		Department Elective – 4	3	0	2	4
4		Department Elective – 5	3	0	2	4
5		Department elective – 6	3	0	2	4
		Sub-Total	15	4	6	20
7		Minor / Honours – 4	3	0	2	4
		Sub-Total	18	4	8	24
		Total	30			24

IV Year II Semester

Sl. No.	Course Code	Course Title	L	T	P	C
1	22CS404	Project Work	0	0	24	12
		Total	0	0	24	12
2		Minor / Honours – 5	0	0	6	4
		Total	0	0	30	16
		Total	30			16

Department Electives

Sl. No.	Course Code	Course Title	L	T	P	C
1	22CS801	Advanced Data Structures	2	2	2	4
2	22CS802	Advanced JAVA Programming	2	2	2	4
3	New Code	Computer Graphics	2	0	2	3
4	22CS804	Deep Learning	3	0	2	4
5	New Code	Digital Forensics	2	0	2	3
6	22CS806	Digital Image Processing	2	2	2	4
7	22CS807	Web and Database Security	3	0	2	4
8	New Code	Mobile Ad-hoc Networks	2	0	2	3
9	22CS811	Text Mining	3	0	2	4
10	22CS812	Numerical Algorithms	3	2	0	4
11	22CS813	Operating System Design	3	0	2	4
12	22CS816	Simulation and Modeling	3	0	2	4

Honours for CSE

Sl. No.	Course Code	Course Title	L	T	P	C
1	22CS951	Advanced Graph Algorithms	3	0	2	4
2	22CS952	Biometrics	3	0	2	4
3	22CS954	Internet of Things	3	0	2	4
4	22CS955	Wireless Sensor Networks	3	0	2	4
5	22CS956	Capstone Project	0	2	6	4

Open Electives offered to non-computers

SL.No	Course Code	Course Title	L	T	P	C
1	22CS851	Database Systems	2	0	2	3
2	22CS852	Mobile Application Design and Development	2	0	2	3
3	22CS853	Java Programming	2	0	2	3
4	22CS854	Python Programming	2	0	2	3
5	22CS855	Design and Development of Internet Applications	2	0	2	3

CSE – Minor Courses

Computer Science and Engineering

Sl.No	Course Code	Course Title	L	T	P	C
1	22CS901	Introduction to Python Programming	2	2	2	4
2	22CS902	OOPS through JAVA	2	0	4	4
3	22CS903	Database Management Systems	2	2	2	4
4	22CS904	Web Technologies	2	0	4	4
5	22CS905	Mobile Application Development	2	0	4	4
6	22CS906	Design and Analysis of Algorithms	2	2	2	4
7	22CS907	Operating Systems and Shell Programming	2	2	2	4
8	22CS908	Computer Networks	3	0	2	4
9	22CS909	Capstone Project	0	2	6	4


Chairperson

Dr. S.V. Phani Kumar
Professor & Head, Dept. of CSE,
VFSTR Deemed to be University, Vadlamudi



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List of NPTEL Courses

S.No.	COURSE TITLE	RESOURCE PERSON	Institute	Duration in Weeks	PRE-REQUISITES
1	Randomized Methods in Complexity	Prof. Nitin Saxena	IITK	12	Theory of Computation, or Algorithms, or Discrete Mathematics
2	Quantum Algorithms and Cryptography	Prof. Shweta Agrawal	IITM	12	Theory of Computation, Design and Analysis of Algorithms, Foundations of Cryptography
3	Privacy and Security in Online Social Media	Prof. Ponnurangam Kumaraguru	IIITH	12	Basic / Intermediate programming course.
4	GPU Architectures And Programming	Prof. Soumyajit Dey	IITKGP	12	Programming and Data Structure, Digital Logic, Computer architecture
5	Foundations of Cyber Physical Systems	Prof. Soumyajit Dey	IITKGP	12	Basic Programming Knowledge, Discrete Mathematics
6	Discrete Structures	Prof. Dipanwita Roy Chowdhury	IITKGP	12	Mathematics and basics Computer Programming
7	Reinforcement Learning	Prof. Balaraman Ravindran	IITM	12	Basic mathematical foundations
8	Information Security - 5 - Secure Systems Engineering	Prof. Chester Robeiro	IITM	8	C programming must be strong. Minimum understanding of digital logic/ operating systems/computer organization
9	Data Science for Engineers	Prof. Ragunathan Rengasamy Prof. Shankar Narasimhan	IITM	8	10 hrs of pre-course material will be provided, learners need to practice this to be ready to take the course
10	Introduction to parallel programming with OpenMP and MPI	Prof. Yogish Sabharwal	IITD	8	Comfortable with programming in C
11	Foundation of Cloud IoT Edge ML	Prof. Rajiv Misra	IITP	8	Basics of Computer Architecture and Organization, Networking

P. S. Prasad

Member Secretary

Dr. P.Siva Prasad

Associate . Professor,

Department of CSE,

VFSTR Deemed to be University.

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S. V. Phani Kumar

Chairperson

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

APPENDIX II

List of Courses that Enables Employability or Entrepreneurship or Skill Development

S. No.	Year and Semester	Course Title	Employability / Entrepreneurship / Skill development
1.	I Year I Semester	Linear Algebra and Ordinary Differential Equations	Skill development
2.	I Year I Semester	Engineering Chemistry	Skill development
3.	I Year I Semester	Basic of Electrical & Electronics Engineering	Skill development
4.	I Year I Semester	Programming in C	Employability
5.	I Year I Semester	Management Science	Entrepreneurship
6.	I Year I Semester	IT Tools & Cyber security	Skill development
7.	I Year I Semester	English Proficiency and Communication Skills (PET)	Skill development
8.	I Year I Semester	Orientation session - I	Skill development
9.	I Year I Semester	Constitution of India	Skill development
10.	I Year I Semester	Physical fitness	Skill development
11.	I Year II Semester	Calculus	Skill development
12.	I Year II Semester	Engineering Physics	Skill development
13.	I Year II Semester	Engineering Graphics	Skill development
14.	I Year II Semester	Problem Solving through Python	Skill development
15.	I Year II Semester	Technical English Communication	Skill development
16.	I Year II Semester	Environmental Studies	Skill development
17.	I Year II Semester	Self-empowerment & Gender Sensitization	Skill development
18.	I Year II Semester	Universal Human Values	Skill development
19.	I Year II Semester	Indian Knowledge Systems – Dept. specific	Skill development
20.	II Year I Semester	Discrete Mathematical Structures	Skill development
21.	II Year I Semester	Data Structures	Employability
22.	II Year I Semester	Database Management Systems	Employability
23.	II Year I Semester	Object-Oriented Programming through JAVA	Employability

24.	II Year I Semester	Computer Architecture	Entrepreneurship
25.	II Year I Semester	Operating Systems	Employability
26.	II Year I Semester	Life skills	Skill development
27.	II Year I Semester	Design Thinking & Engineering Orientation	Skill development
28.	II Year II Semester	Probability and Statistics	Skill development
29.	II Year II Semester	Design and Analysis of Algorithms	Employability
30.	II Year II Semester	Introduction to Artificial Intelligence	Employability
31.	II Year II Semester	Theory of Computation	Skill development
32.	II Year II Semester	Full Stack Development	Employability
33.	II Year II Semester	Field projects	Employability
34.	II Year II Semester	Industry interface course (Modular course)	Skill development
35.	III Year I Semester	Soft Skills Laboratory	Skill development
36.	III Year I Semester	Optimization Techniques	Skill development
37.	III Year I Semester	Software Engineering & Project Management	Employability
38.	III Year I Semester	Computer Networks	Employability
39.	III Year I Semester	Mobile App Development	Employability
40.	III Year I Semester	BEC Certification	Skill development
41.	III Year II Semester	Computing Ethics	Entrepreneurship
42.	III Year II Semester	Quantitative aptitude & Logical reasoning	Skill development
43.	III Year II Semester	Machine Learning	Employability
44.	III Year II Semester	Cryptography and Network Security	Employability
45.	III Year II Semester	Field projects	Employability
46.	IV Year I Semester	Parallel & Distributed Computing	Entrepreneurship
47.	IV Year I Semester	Privacy and Intrusion Detection	Employability
48.	IV Year II Semester	Project Work	Employability

Department Electives	
Advanced Data Structures	Employability
Advanced JAVA Programming	Employability
Computer Graphics	Skill development
Deep Learning	Skill development
Digital Image Processing	Skill development
Mobile Ad-hoc Networks	Skill development
Mobile Application Development	Employability
Text Mining	Skill development
Numerical Algorithms	Skill development
Operating System Design	Skill development

Optimization Techniques	Skill development
Simulation and Modeling	Skill development
Honours for CSE	
Advanced Graph Algorithms	Employability
Biometrics	Skill development
Parallel and Distributed Computing	Skill development
Internet of Things	Skill development
Wireless Sensor Networks	Employability
Capstone Project	Employability
Open Electives offered to non-computers	
Database Systems	Employability
Mobile Application Design and Development	Employability
Java Programming	Employability
Python Programming	Employability
Design and Development of Internet Applications	Skill development
CSE – Minor Courses	
Introduction to Python Programming	Employability
OOPS through JAVA	Employability
Database Management Systems	Employability
Web Technologies	Employability
Mobile Application Development	Employability
Design and Analysis of Algorithms	Employability
Operating Systems and Shell Programming	Skill development
Computer Networks	Skill development
Capstone Project	Employability


Chairperson

Dr. S.V. Phani Kumar
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APPENDIX III

List of New Courses in the C-24 Curriculum

S. No.	Year and Semester	Course Title	Employability / Entrepreneurship / Skill development
1.	II Year I Semester	Discrete Mathematical structures	Skill development
2.	II Year I Semester	Computer Architecture	Skill development
3.	II Year I Semester	Design Thinking & Engineering Orientation	Skill development
4.	II Year II Semester	Theory of Computation	Skill development
5.	II Year II Semester	Full Stack Development	Employability
6.	III Year I Semester	Optimization Techniques	Skill development
7.	III Year I Semester	Software Engineering & Project Management	Entrepreneurship
8.	III Year I Semester	Mobile App Development	Employability
9.	III Year II Semester	Machine Learning	Employability
10.	IV Year I Semester	Parallel & Distributed Computing	Employability
11.	IV Year I Semester	Privacy and Intrusion Detection	Employability

Chairperson

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Professor & Head, Dept. of CSE,

VFSTR Deemed to be University, Vadlamudi

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING****Program: M. Tech., CSE Programme: Curriculum Structure****Regulation: R-22****COURSE STRUCTURE****I Year I Semester**

S. No.	Course Title	L	T	P	C
1	Data Structures and Algorithms	2	2	2	4
2	Machine Learning	2	2	2	4
3	Internet of Things	2	2	2	4
4	Department Elective – 1	2	0	2	3
5	Department Elective – 2	2	0	2	3
6	Cyber Security	1	2	0	2
7	Employment Orientation Program	0	2	2	2
Grand Total		11	10	12	22
		33		22	

I Year II Semester

S. No.	Course Title	L	T	P	C
1	Cloud Computing	2	2	2	4
2	Big Data and Analytics	2	2	2	4
3	Department Elective – 3	2	0	2	3
4	Department Elective – 4	2	0	2	3
5	Research Methodology & IPR	1	2	0	2
6	Inter-Departmental Project	0	1	3	2
7	Teaching Activity	0	0	4	2
Total		9	7	15	20
8	Add-on certification course - 1	3	0	2	4
Grand Total		12	7	17	24
		36		24	

II Year I Semester

S. No.	Course Title	L	T	P	C
1	Project / Internship	0	2	24	13
2	Add-on certification course – 2 (MOOCs / Self-Study Course)	4	0	0	4
Grand Total		4	2	24	17

II Year II Semester

S. No.	Course Title	L	T	P	C
1	Project / Internship	0	2	24	13
2	Add-on certification course – 3 (MOOCs / Self-Study Course)	4	0	0	4
Grand Total		4	2	24	17

Department Electives – Stream-wise

Artificial Intelligence and Machine Learning

S. No.	Course Title	L	T	P	C
1	Artificial Intelligence	2	0	2	3
2	Artificial Neural Networks	2	2	0	3
3	Deep Learning	2	0	2	3
4	Computer Vision	2	0	2	3
5	Pattern Recognition	2	2	0	3
6	Digital Image Processing	2	0	2	3

Data Science

S. No.	Course Title	L	T	P	C
1	Data Handling and Visualization	2	0	2	3
2	Statistical Foundations of Data Science	2	0	2	3
3	Natural Language Processing	2	2	0	3
4	Deep Learning	2	0	2	3
5	Time Series Analysis and Forecasting	2	0	2	3
6	Kernel Methods for Pattern Analysis	2	0	2	3

Cyber Security

S. No.	Course Title	L	T	P	C
1	Wireless Sensor Networks	2	0	2	3
2	Mobile Adhoc Networks	2	0	2	3
3	Blockchain Technologies	2	0	2	3
4	Mobile and Wireless Security	2	0	2	3
5	Advanced Cryptography	2	0	2	3
6	Digital Forensics	2	0	2	3

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Member Secretary

Dr. P.Siva Prasad

Associate , Professor,

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S. V. Phani Kumar

Chairperson

Dr. S.V.Phani Kumar

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