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

VIGNAN'S FOUNDATION FOR SCIENCE, TECHNOLOGY AND RESEARCH
Directorate of Polytechnic Education

Date: 30.10.2024

The Directorate of Polytechnic Education is delighted to invite you to the Department Academic Advisory Committee (DAAC) meeting scheduled to review the Introduction of three new Courses in Diploma – AI & ML, EEE and Mechanical Engineering programs curriculum and Course Structure. The meeting will be held on 05.11.2024, from 10:00 AM onwards. Venue: Diploma Director's Room, Third floor, Pharmacy Block, VFSTR. We request all members to make it convenient to attend, your presence and valuable inputs are essential for the success of this meeting.

The members are:

1. Dr. S. K. Satpathy, Officiating Professor and Director – Chairman
2. Dr. G. Suresh, Officiating Professor, Co-ordinator, Mechanical Engineering– Member
3. Dr. M. Umamaheswara Rao, Assistant Professor, Co-ordinator, Electrical and Electronics Engineering – Member
4. Mr. A. Sureshbabu, Assistant Professor – Member
5. Mr. A. Siva Rao, Assistant Professor - Member

Agenda of the Department Academic Advisory Committee Meeting:

1. Regulation R25
2. Finalization of Course structures of AI & ML, EEE and Mechanical Engineering programs
3. Finalization of Syllabus considering blooms taxonomy aspects
4. Curriculum structure with credits, credits distribution.
5. Detailed Syllabus.

Chairperson

VIGNAN'S
FOUNDATION FOR SCIENCE, TECHNOLOGY & RESEARCH

Directorate of Polytechnic Education
Department of DEEE
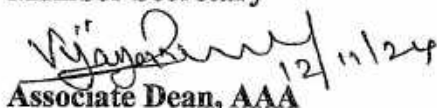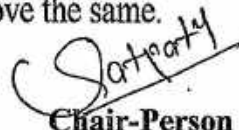## <u>Constitution of Board of Studies (BoS)</u>

12-11-2024

The board of studies is constituted with the following members for the programme Diploma in Electrical and Electronics Engineering
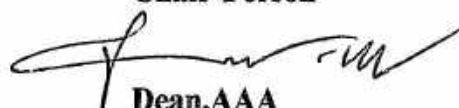
Sl. No	Name of the member	Designation and Address	Role
1	Dr. Susanta Kumar Satpathy	Officiating Professor, Director – Diploma Email: director_dpe@vignan.ac.in Phone:9179087666	Chair person
2	Dr. Kakani Venkata Ramana Rao	HoD, Dept. of EEE, M.B.T.S Govt. Polytechnic College, Guntur, Phone:9866098255, Email: Kvrrao143@gmail.com	External member (Academia)
3	Dr. Myneni Hareesh	Asst. Prof, Dept. of Electrical Engineering, National Institute of Technology Srinagar, Hazratbal, Srinagar, Jammu and Kashmir, Phone:8333976309, Email: hari247.sol@gamil.com	Invited member (Academia)
4	Mr. B. Veeraiah	Senior Control Systems Engineer, Fluence Bess India Pvt. Ltd. Phone:8124225302, Email: veeraiah.boddu@fluenceenergy.com	External member (Industry)
5	Dr. Polamraju V.S. Sobhan	Assoc. Professor & HoD, EEE, VFSTR, Phone:9985752322, Email: hodeee@vignan.ac.in	Internal member
6	Dr. Y. Srinivasa Rao	Assoc. Professor, EEE, VFSTR, Phone:8865042446, Email: drysr_eee@vignan.ac.in	Internal member
7	Dr. M. Umamaheswara Rao	Asst. Professor, EEE, VFSTR, Phone:8501927805, Email: drmumr_eee@vignan.ac.in	Internal member
8	Dr. N. Bharath Kumar	Asst. Professor, EEE, VFSTR, Phone:7586985867, Email: nbk_eee@vignan.ac.in	Internal member
9	Mr. M. Siva JagadishKumar	Asst. Prof, Dept. of Textile Tech, VFSTR Email: msjk_textile@vignan.ac.in Phone:8125773070	Internal member
10	Mr. A. Suresh Babu	Asst. Professor, Directorate of Polytechnic Education, VFSTR, Email: sa_csedip@vignan.ac.in Phone:9989130426	Member Secretary

We request you to consider the above listed members and approve the same.

Member Secretary

Associate Dean, AAA 12/11/24

Chair-Person

Dean,AAA

VIGNAN'S
FOUNDATION FOR SCIENCE, TECHNOLOGY & RESEARCH
(Deemed to be University) Estd. u/s 3 of UGC Act 1956

Directorate of Polytechnic Education

CIRCULAR

Date: 12.11.2024

Directorate of Polytechnic Education going to conduct Board of Studies (BoS) meeting for the Diploma in Electrical and Electronics Engineering **16.11.2024** from 10.30 AM in blended mode At VPTF-02, Pharmacy Block at 10.45AM and virtual meeting means link may mention

https://us06web.zoom.us/j/81704222433?pwd=aRMD9imXXryn1hWc9JiRy6yJWn4enz.1

All the members are requested to make it convenient to attend the meeting.

The members are:

Sl. No	Name of the member	Position	Signature
1	Dr. Susanta Kumar Satpathy	Chairperson	
2	Mr. Kakani Venkata Ramana Rao	External Member (Academia)	
3	Dr. Myneni Hareesh	Invited Member (Academia)	
4	Mr. B. Veeraiah	External Member (Industry)	B. veeraiah
5	Dr. Polamraju V.S. Sobhan	Internal Member	
6	Dr. Y. Srinivasa Rao	Internal Member	
7	Dr. M. Umamaheswara Rao	Internal Member	M.U.
8	Dr. N. Bharath Kumar	Internal Member	
9	Mr. M. Siva Jagadish Kumar	Internal Member	M.S.Jagadish
10	Mr. A. Suresh Babu	Member Secretary	A. Suresh Babu

Agenda of the BoS Meeting:

1. To Discuss and finalize the curriculum structure and detailed syllabus of Diploma in EEE for the Academic year 2025-2026.

2. To approve the R25 curriculum and syllabus of Diploma in EEE and recommend to the Academic council.

Chairperson
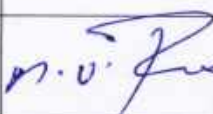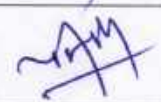
Directorate of Polytechnic Education

Minutes of the Board of Studies (BoS) Meeting
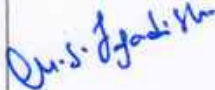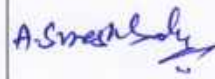# Diploma in Electrical and Electronics Engineering

Date:20-11-2024

A Board of Studies (BoS) meeting was held on 16th November 2024, in Room VPTF-02, VFSTR, to finalize the course structure, courses, and total credits for the proposed Diploma in Electrical and Electronics Engineering program. The meeting was conducted in the presence of the following BoS members:

Agenda:
- Finalization of Course structure
- Finalization of Syllabus considering blooms taxonomy aspects
- Finalization of no. of credits to acquire Degree in Diploma & Exit policy after two 2 years with a certificate of ITI.

Sl. No	Name of the member	Designation and Address	Position	Signature
1	Dr. Susanta Kumar Satpathy	Officiating Professor, Director – Diploma Email: director_dpe@vignan.ac.in Phone: 9179087666	Chairperson	
2	Mr. Kakani Venkata Ramana Rao	HoD, Dept. of EEE, M.B.T.S Govt. Polytechnic College, GunturEmail:kvrrao143@gmail.com Phone: 9866098255	External Member (Academia)	
3	Dr. Myneni Hareesh	Asst. Prof, Dept. of Electrical Engineering, National Institute of Technology Srinagar Hazratbal, Srinagar, Jammu and Kashmir, Email: hari247.sol@gmail.com Phone: 8333976309	Invited Member (Academia)	
4	Mr. B. Veeraiah	Senior Control Systems Engineer, Fluence Bess India Pvt. Ltd. Email: veeraiah.boddu@fluenceenergy.com Phone: 8124225302	External Member (Industry)	B. Veeraiah
5	Dr. Polamraju V.S. Sobhan	Assoc. Prof & HoD, EEE, VFSTR, Email: hodeee@vignan.ac.in Phone: 9985752322	Internal Member	
6	Dr. Y. Srinivasa Rao	Assoc. Professor, EEE, VFSTR, Email: drysr_eee@vignan.ac.in Phone: 8865042446	Internal Member	
7	Dr. M. Umamaheswara Rao	Asst. Professor, EEE, VFSTR Email: drumur_eee@vignan.ac.in Phone: 8501927805	Internal Member	M.U.
8	Dr. N. Bharath Kumar	Asst. Professor, EEE, VFSTR Email: nbk_eee@vignan.ac.in Phone: 7586985867	Internal Member	

9	Mr. M. Siva Jagadish Kumar	Asst. Prof, Dept. of Textile Tech, VFSTR **Email**: msjk_textile@vignan.ac.in **Phone**: 8125773070	Internal Member	
10	Mr. A. Suresh Babu	Asst. Professor, Directorate of Polytechnic Education, VFSTR **Email**: sa_csedip@vignan.ac.in **Phone**: 9989130426	Member Secretary	

Chairperson Dr. S. K. Satpathy, Officiating Professor and Director, Directorate of Polytechnic Education, VFSTR opened the meeting by welcoming and introducing the external members, invitees to the internal members. Chairperson presented about the syllabus and Curriculum Structure.

The following points were discussed in the BoS meeting:

1. Regulation R25.
2. Curriculum structure with credits, credits distribution.
3. Detailed Syllabus.
4. Depart Electives and Open Electives
5. Minor/ Major Projects.
6. Exit Policy after Two years with 75 credits

The following resolutions made after the discussion:

1. **Finalization of the Course Structure:**

   The proposed course structure submitted by the Directorate of the Polytechnic Education was accepted with the modification: Department electives are to be distributed semester-wise, wherever feasible, to ensure better curriculum flow and choice for students.

2. **Finalization of Courses/ Syllabus by BoS Members:**

   The proposed courses were reviewed, and the following **modifications** were suggested:

   - Electrical Power Generation, Transmission, and Distribution: Specific changes to course content to be discussed further.
   - New Course Introduction: Add a course on Electrical Installation and Estimation to enhance students' practical understanding.
   - Electric Vehicle Technology: Shifted from the elective category to the core courses, emphasizing the importance of electric vehicle advancements.
   - Electrical Circuits: Proposed changes to the content for improved clarity and practical relevance.
   - Renewable Sources of Energy: Introduced as a new course to align with global trends in sustainable energy and power systems.

3. **Finalization of Credits Required for the Diploma:**

   - The external BoS members expressed satisfaction with the total number of credits proposed for the diploma program.
   - The credits were found to be adequately distributed across core courses, electives, and practical components to achieve program objectives effectively. the student will be awarded in Diploma in Electrical and Electronics Engineering, Once he /she obtained 124 credits.
     - ITI in Electrical and Electronics Engineering will certify if the student want you exit after two years, if he/she obtained 75 credits.

Directorate of Polytechnic Education

APPENDIX 1

Diploma in EEE: Curriculum Structure

I Year I Semester Structure

Sl. No.	Course Code	Course Title	L	T	P.	C	Remarks	Course Offered By
1		Mathematics –I	3	2	-	4	Basic Sciences	Mathematics
2		Applied Physics –I	2	-	2	3	Basic Sciences	Physics
3		English Proficiency & Communication Skills	2	-	2	3	Humanities	English
4		Basics of Computer Engineering	2	-	2	3	Basic Engg.	CSE
5		Programming in C	3	-	2	4	Basic Engg.	CSE
6		Engineering Graphics	-	-	3	2	Basic Engg.	MECH
7		Engineering Workshop Practice	-	-	3	2	Basic Engg.	MECH
8		Physical Fitness, Sports & Games – I	-	-	2	1	Humanities	Physical Education
		Total	12	2	16	22		
		Contact Hours	30 Hours					

I Year II Semester Structure

Sl. No.	Course Code	Course Title	L	T	P	C	Remarks	Course Offered By
1		Mathematics-II	3	2	-	4	Basic Sciences	Mathematics
2		Applied Physics –II	2	-	2	3	Basic Sciences	Physics
3		OOP through C++	2	-	2	3	Basic Engineering	CSE
4		Fundamentals of Electrical & Electronics Engineering	2	-	2	3	Basic Engineering	EEE
5		Engineering Chemistry and Environmental Studies	2	-	2	3	Basic Sciences	Chemistry
6		English Proficiency & Communication Skills Lab	-	-	2	1	Humanities	English
7		Physical Fitness, Sports & Games – II	-	-	2	1	Humanities	Physical Education
8		Constitution of India	-	-	2	1	Binary grade	Training & Placements
9		Life Skills	-	-	2	1	Binary Grade Floating credits	SAC
		Total	11	2	16	20		
		Contact Hours	29 Hours					

II Year I Semester Structure

Sl. No.	Course Code	Course Title	L	T	P	C	Remarks	Course Offered By
1		Mathematics-III	3	2	-	4	Basic Sciences	Mathematics
2		Analog Electronics	2	-	2	3	Professional core	ECE
3		Electrical Circuits	2	-	2	3	Professional core	EEE
4		D.C. Machines & Batteries	2	-	2	3	Professional core	EEE
5		Electrical Power Generation	3	2	-	4	Professional core	EEE
6		Department Elective-I	2	-	2	3	Department Elective	EEE
7		NCC/ NSS/ E-cell/ Social activities	-	-	-	1	Binary Grade Floating credits	SAC
		Total	14	4	8	21		
		Contact Hours	26 Hours					

II Year II Semester Structure

Sl. No.	Course Code	Course Title	L	T	P	C	Remarks	Course Offered By
1		A.C. Machines - I	3	-	2	4	Professional core	EEE
2		Electrical Power Transmission and Distribution	3	2	-	4	Professional core	EEE
3		Digital Electronics	3	-	2	4	Professional core	ECE
4		**Organizational Behaviour**	2	2	-	3	Humanities	Mgmt. Studies
5		Department Elective-II	2	-	2	3	Department Elective	EEE
6		Open Elective – I	2	2	-	3	Open Elective	
7		Minor Project-I	-		2	1	Project	
		Total	15	4	10	22	.	.
		Contact Hours	29 Hours					

III Year I Semester Structure

Sl. No.	Course Code	Course Title	L	T	P	C	Remarks	Course Offered By
1		A.C. Machines - II	2	-	2	3	Professional core	EEE
2		Power Electronics	3	-	2	4	Professional core	EEE
3		Switch Gear and Protection	3	2	-	4	Professional core	EEE
4		Renewable Sources of Energy	2	2	-	3	Professional core	EEE
5		Summer Project/ Internship-I (4 weeks) after II-year II Semester	-	-	4	2	Internship	EEE
6		Department Elective-III	2	-	2	3	Department Elective	EEE
7		Open Elective – 2	2	2	-	3	Open Elective	
8		Minor Project -2	-	-	2	1	Project	EEE
9		Essence of Indian Knowledge and Tradition	-	-	2	1	Binary Grade	Training & Placements
		Total	14		18	24		
		Contact Hours	34 Hours					

III Year II Semester Structure

Sl. No.	Course Code	Course Title	L	T	P	C	Remarks	Course Offered By
1		Industrial Training (Project) / Internship	-	-	30	15	Internship / Project	EEE
		Total	0	0	30	**15**		
		Contact Hours	30 Hours			15		

List of Department Elective Courses

S. No	Course Title
Course-1	Electrical & Electronic Measuring Instruments
Course-2	Electric Traction & PLC
Course-3	Electrical Installation and Estimation
Course-4	Electrical Engineering Material Science
Course-5	Electrical Vehicle Technology
Course-6	Electrical Utilization

List of Open Elective Courses

S. No	Course Title
Course-1	Fundamentals of Electric Vehicles
Course-2	Fundamentals of Solar PV Systems
Course-3	Fundamentals of Alternative Energy Sources
Course-4	Management Science
Course-5	Entrepreneurship And Start-Up

Chairperson

Directorate of Polytechnic Education

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	Mathematics –I	Skill development
2.	I Year I Semester	Applied Physics –I	Skill development
3.	I Year I Semester	English Proficiency & Communication Skills	Skill development
4.	I Year I Semester	Basics of Computer Engineering	Employability
5.	I Year I Semester	Programming in C	Employability
6.	I Year I Semester	Engineering Graphics	Skill development
7.	I Year I Semester	Engineering Workshop Practice	Skill development
8.	I Year I Semester	Physical Fitness, Sports & Games – I	Skill development
9.	I Year II Semester	Mathematics-II	Skill development
10.	I Year II Semester	Applied Physics –II	Skill development
11.	I Year II Semester	OOP through C++	Employability
12.	I Year II Semester	Fundamentals of Electrical & Electronics Engineering	Employability
13.	I Year II Semester	Engineering Chemistry and Environmental Studies	Skill development
14.	I Year II Semester	English Proficiency & Communication Skills Lab	Skill development
15.	I Year II Semester	Physical Fitness, Sports & Games – II	Skill development
16.	I Year II Semester	Constitution of India	Skill development
17.	I Year II Semester	Life Skills	Skill development
18.	II Year I Semester	Mathematics-III	Skill development
19.	II Year I Semester	Analog Electronics	Employability
20.	II Year I Semester	Electrical Circuits	Employability
21.	II Year I Semester	D.C. Machines & Batteries	Employability
22.	II Year I Semester	Electrical Power Generation	Employability
23.	II Year I Semester	Department Elective-I	Employability
24.	II Year I Semester	NCC/ NSS/ E-cell/ Social activities	Skill development
25.	II Year II Semester	A.C. Machines - I	Employability
26.	II Year II Semester	Electrical Power Transmission and Distribution	Employability
27.	II Year II Semester	Digital Electronics	Employability
28.	II Year II Semester	Organizational Behaviour	Entrepreneurship
29.	II Year II Semester	Department Elective-II	Employability
30.	II Year II Semester	Open Elective – I	Employability
31.	II Year II Semester	Minor Project-I	Employability
32.	III Year I Semester	A.C. Machines - II	Employability

33.	III Year I Semester	Power Electronics	Employability
34.	III Year I Semester	Switch Gear and Protection	Employability
35.	III Year I Semester	Renewable Sources of Energy	Employability
36.	III Year I Semester	Summer Project/ Internship-I (4 weeks) after II-year II Semester	Skill development
37.	III Year I Semester	Department Elective-III	Employability
38.	III Year I Semester	Open Elective – 2	Employability
39.	III Year I Semester	Minor Project -2	Employability
40.	III Year I Semester	Essence of Indian Knowledge and Tradition	Skill development
41.	III Year II Semester	Industrial Training (Project) / Internship	Skill development

Chairperson

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VIGNAN'S FOUNDATION FOR SCIENCE, TECHNOLOGY AND RESEARCH
Directorate of Polytechnic Education

Date: 30.10.2024

The Directorate of Polytechnic Education is delighted to invite you to the Department Academic Advisory Committee (DAAC) meeting scheduled to review the Introduction of three new Courses in Diploma – AI & ML, EEE and Mechanical Engineering programs curriculum and Course Structure. The meeting will be held on 05.11.2024, from 10:00 AM onwards. Venue: Diploma Director's Room, Third floor, Pharmacy Block, VFSTR. We request all members to make it convenient to attend, your presence and valuable inputs are essential for the success of this meeting.

The members are:

1. Dr. S. K. Satpathy, Officiating Professor and Director – Chairman
2. Dr. G. Suresh, Officiating Professor, Co-ordinator, Mechanical Engineering– Member
3. Dr. M. Umamaheswara Rao, Assistant Professor, Co-ordinator, Electrical and Electronics Engineering – Member
4. Mr. A. Sureshbabu, Assistant Professor – Member
5. Mr. A. Siva Rao, Assistant Professor - Member

Agenda of the Department Academic Advisory Committee Meeting:

1. Regulation R25
2. Finalization of Course structures of AI & ML, EEE and Mechanical Engineering programs
3. Finalization of Syllabus considering blooms taxonomy aspects
4. Curriculum structure with credits, credits distribution.
5. Detailed Syllabus.

Chairperson

VIGNAN'S
FOUNDATION FOR SCIENCE, TECHNOLOGY & RESEARCH

Directorate of Polytechnic Education
Department of DMECH
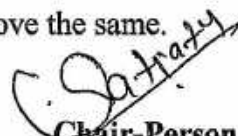## Constitution of Board of Studies (BoS)

12-11-2024

The board of studies is constituted with the following members for the programme Diploma in Mechanical Engineering
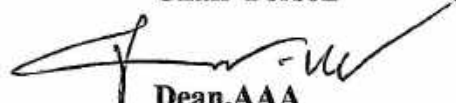
Sl. No	Name of the member	Designation and Address	Role
1	Dr. Susanta Kumar Satpathy	Officiating Professor, Director – Diploma Email: director_dpe@vignan.ac.in Phone:9179087666	Chair person
2	Dr. K. Vijaya Bhaskar,	HoD, Dept. of Mechanical, Govt. Polytechnic College, Vijayawada, Phone:7989610759, Email:bhaskarvijayak@gmail.com	External member (Academia)
3	Dr. Shankar Swarup Das	Ass. Prof, Mechanical Engineering, Dept. of FMPE, Central Agricultural University Imphal, Ranipool, Gangtok, Sikkim, Phone: 7005862171, Email: shankarswarup@gmail.com	Invited member (Academia)
4	Mr.Aadhar Kanta Deo	Manger Safety Dept. Neelachal Ispat Nigam Lmt. Jaipur, Odisha, Phone: 7008335566, Email: adharkantadeo2011@gmail.com	External member (Industry)
5	Dr. T.CH. Anil Kumar	HoD, Dept. of Mechanical, VFSTR Phone:9959966002, Email: hodmech@vignan.ac.in	Internal member
6	Dr. G. Suresh	Officiating Professor, Dept. of Mechanical Engineering, VFSTR Email: drgs_mech@vignan.ac.in Phone6303460685	Internal member
7	Dr. N. Narayan Rao	Assoc. Prof, Dept. of Mechanical Engineering, Phone:9666079790, Email:nnr_mech@vignan.ac.in	Internal member
8	Dr. SK. Farooq,	Asst. Prof, Dept. of Mechanical Engineering, Phone:7013525528, Email: skf_mech@vignan.ac.in	Internal member
9	Mr. M. Siva JagadishKumar	Asst. Prof, Dept. of Textile Tech, VFSTR Email: msjk_textile@vignan.ac.in Phone:8125773070	Internal member
10	Mr. A. Suresh Babu	Asst. Professor, Directorate of Polytechnic Education, VFSTR, Email: sa_csedip@vignan.ac.in Phone:9989130426	Member Secretary

We request you to consider the above listed members and approve the same.

Member Secretary

Associate Dean, AAA

12/11/24

Chair-Person

Dean, AAA

VIGNAN'S
FOUNDATION FOR SCIENCE, TECHNOLOGY & RESEARCH

(Deemed to be University) - Estd. u/s 3 of UGC Act 1956

Directorate of Polytechnic Education

CIRCULAR

Date: 12.11.2024

Directorate of Polytechnic Education going to conduct Board of Studies (BoS) meeting for the Diploma in Mechanical Engineering **18.11.2024** from 10.30 AM in blended mode. At AGF-06, U- Block at 10.45AM and virtual meeting means link may mention

https://us06web.zoom.us/j/85828002501?pwd=VjgN4SSacwpTqvisW9SEthBKyTsf0D.1

All the members are requested to make it convenient to attend the meeting.

The members are:

S. No	Name of the member	Position	Signature
1	Dr. Susanta Kumar Satpathy	Chair person	
2	Dr. K. Vijaya Bhaskar,	External member (Academia)	K.V. Bhaskar
3	Dr. Shankar Swarup Das	Invited member (Academia)	
4	Mr. Aadhar Kanta Deo	External member (Industry)	
5	Mr. Dr. T.CH. Anil Kumar	Internal member	T. Ch. Anil
6	Dr. G. Suresh	Internal member	G. Suresh
7	Dr. N. Narayan Rao	Internal member	
8	Dr. SK. Farooq,	Internal member	
9	Mr. M. Siva JagadishKumar	Internal member	M.S. Jagadish
10	Mr. A. Suresh Babu	Member Secretary	A. Suresh Babu

Agenda of the BoS Meeting:

1. To Discuss and finalize the curriculum structure and detailed syllabus of Diploma, Mechanical Engineering for the Academic year 2025-2026.

2. To approve the R25 curriculum and syllabus of Diploma, for Mechanical Engineering and recommend to the Academic council.
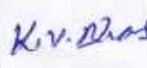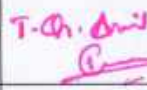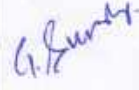
Chairperson

Directorate of Polytechnic Education

Minutes of the Board of Studies (BoS) Meeting
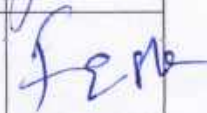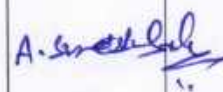# Diploma in Mechanical Engineering

Date:25-11-2024

A Board of Studies (BoS) meeting was held on 18th November 2024, in Room AGF-06 U- Block, VFSTR, to finalize the course structure, courses, and total credits for the proposed Diploma in Mechanical Engineering program. The meeting was conducted in the presence of the following BoS members:

Agenda:

❖ Finalization of Course structure
❖ Finalization of Syllabus considering blooms taxonomy aspects
❖ Finalization of no. of credits to acquire Degree in Diploma & Exit policy after two 2 years with a certificate of ITI.

-	Name of the member	Designation and Address	Position	Signature
1	Dr. Susanta Kumar Satpathy	Officiating Professor, Director – Diploma Email: director_dpe@vignan.ac.in Phone:9179087666	Chair person	
2	Dr. K. Vijaya Bhaskar,	HoD, Dept. of Mechanical, Govt. Polytechnic College, Vijayawada, Phone:7989610759, Email:bhaskarvijayak@gmail.com	External member (Academia)	K. v. Bhaskar
3	Dr. Shankar Swarup Das	Ass. Prof, Mechanical Engineering, Dept. of FMPE, Central Agricultural University Imphal, Ranipool, Gangtok, Sikkim, Phone: 7005862171, Email: shankarswarup@gmail.com	Invited member (Academia)	
4	Mr.Aadhar Kanta Deo	Manger Safety Dept. Neelachal Ispat Nigam Lmt. Jaipur, Odisha, Phone: 7008335566, Email: adharkantadeo2011@gmail.com	External member (Industry)	
5	Mr Dr. T.CH. Anil Kumar	HoD, Dept. of Mechanical, VFSTR Phone:9959966002, Email: hodmech@vignan.ac.in	Internal member	T-Ch. Anil
6	Dr. G. Suresh	Officiating Professor, Dept. of Mechanical Engineering, VFSTR Email: drgs_mech@vignan.ac.in Phone6303460685	Internal member	G.Suresh

7	Dr. N. Narayan Rao	Assoc. Prof, Dept. of Mechanical Engineering, Phone:9666079790, Email:nnr_mech@vignan.ac.in	Internal member	
8	Dr. SK. Farooq,	Asst. Prof, Dept. of Mechanical Engineering, Phone:7013525528, Email: skf_mech@vignan.ac.in	Internal member	
9	Mr. M. Siva JagadishKumar	Asst. Prof, Dept. of Textile Tech, VFSTR Email: msjk_textile@vignan.ac.in Phone:8125773070	Internal member	
10	Mr. A. Suresh Babu	Asst. Professor, Directorate of Polytechnic Education, VFSTR, Email: sa_csedip@vignan.ac.in Phone:9989130426	Member Secretary	

Chairperson Dr. S. K. Satpathy, Officiating Professor and Director, Directorate of Polytechnic Education, VFSTR opened the meeting by welcoming and introducing the external members, invitees to the internal members. Chairperson presented about the syllabus and Curriculum Structure.

The following points were discussed in the BoS meeting:

1. Regulation R25.
2. Curriculum structure with credits, credits distribution.
3. Detailed Syllabus.
4. Depart Electives and Open Electives .
5. Minor/ Major Projects.
6. Exit Policy after Two years with 75 credits

The following resolutions made after the discussion:

1. **Finalization of the Course Structure:**

   The course structure proposed by the Directorate of Polytechnic Education has been accepted with the following modifications

   a) Based on the possibility in place of OOPs through C++ incorporate Engineering Mechanics course
   b) After several discussions with External and Internal members it has been finalised to introduce OOPs through C++ in I-II semester with 4 credits.
   c) One of the External BoS member suggested CAD/CAM course in place of Metrology and Instrumentation course. But after discussion among all BoS Members Metrology and Instrumentation course was finalised.

2. **Finalization of Courses / Syllabus by BoS Members :**
   a) Sections of solids to be included in engineering drawing
   b) In strength of materials strain energy chapter is to be replaced by statics part of engineering mechanics
   c) Engineering materials chapter to be included instead of cutting fluids in manufacturing technology course

d) Design of IC engine components are to be removed from design of machine elements course and all remaining 4 units are to be reshuffled in to 5

e) R&AC course syllabus to be dealt at understanding level only

f) IE&QA course is to be supported with IPR as Unit 5

g) Industrial visits are to be followed at the end of each semester, a valuable input by Mr. Deo sir External Expert from Industry.

h) Another input from Mr. Deo sir is considering the inclusion of industrial safety related course.

3. Finalization of Credits Required for the Diploma:

- The external BOS members had expressed their satisfaction about the total credits proposed and distributed across various disciplines & the student will be awarded in Diploma in Mechanical Engineering, Once he /she obtained 124 credits.

- ITI in Mechanical Engineering will certify if the student want you exit after two years, if he/she obtained 75 credits.

Directorate of Polytechnic Education

APPENDIX 1

Diploma in Mechanical: Curriculum Structure

I Year I Semester Structure

Sl. No.	Course Code	Course Title	L	T	P	C	Remarks	Course Offered By
1		Mathematics –I	3	2	-	4	Basic Sciences	Mathematics
2		Applied Physics –I	2	-	2	3	Basic Sciences	Physics
3		English Proficiency & Communication Skills	2	-	2	3	Humanities	English
4		Basics of Computer Engineering	2	-	2	3	Basic Engg.	CSE
5		Programming in C	3	-	2	4	Basic Engg.	CSE
6		Engineering Graphics	-	-	3	2	Basic Engg.	MECH
7		Engineering Workshop Practice	-	-	3	2	Basic Engg.	MECH
8		Physical Fitness, Sports & Games – I	-	-	2	1	Humanities	Physical Education
		Total	12	2	16	22		
		Contact Hours	30 Hours					

I Year II Semester Structure

Sl. No.	Course Code	Course Title	L	T	P	C	Remarks	Course Offered By
1		Mathematics-II	3	2	-	4	Basic Sciences	Mathematics
2		Applied Physics –II	2	-	2	3	Basic Sciences	Physics
3		OOP through C++	2	-	2	3	Basic Engineering	CSE
4		Fundamentals of Electrical & Electronics Engineering	2	-	2	3	Basic Engineering	EEE
5		Engineering Chemistry and Environmental Studies	2	-	2	3	Basic Sciences	Chemistry
6		English Proficiency & Communication Skills Lab	-	-	2	1	Humanities	English
7		Physical Fitness, Sports & Games – II	-	-	2	1	Humanities	Physical Education
8		Constitution of India	-	-	2	1	Binary grade	Training & Placements
9		Life Skills	-	-	2	1	Binary Grade Floating credits	SAC
		Total	11	2	16	20		
		Contact Hours	29 Hours					

II Year I Semester Structure

Sl. No.	Course Code	Course Title	L	T	P	C	Remarks	Course Offered By
1		Mathematics-III	3	2	-	4	Basic Sciences	Mathematics
2		Digital Electronics	2	-	2	3	Professional core	ECE
3		Strength of Materials	2	-	2	3	Professional core	ME
4		Manufacturing Technology	2	-	2	3	Professional core	ME
5		Thermodynamics	3	2	-	4	Professional core	ME
6		Department Elective-1	2	-	2	3	Department Elective	ME
7		NCC/ NSS/ E-cell/ Social activities	-	-	-	1	Binary Grade Floating credits	SAC
		Total	12	4	8	21		
		Contact Hours	26 Hours					

II Year II Semester Structure

Sl. No.	Course Code	Course Title	L	T	P	C	Remarks	Course Offered By
1		Design of Machine Components	3	-	2	4	Professional core	ME
2		Applied Thermodynamics	3	-	2	4	Professional core	ME
3		Production Technology	3	-	2	4	Professional core	ME
4		Entrepreneurship and Start-ups	2	2	-	3	Humanities	Mgmt. Studies
5		Department Elective-2	2	-	2	3	Department Elective	ME
6		Open Elective – 1	2	2	-	3	Open Elective	ME
7		Minor Project-I	-		2	1	Project	
		Total	15	4	10	22		
		Contact Hours	29 Hours					

III Year I Semester Structure

Sl. No.	Course Code	Course Title	L	T	P	C	Remarks	Course Offered By
1		Hydraulics and Pneumatics	2	-	2	3	Professional core	ME
2		Industrial Engineering & Quality Assessment	3	2	-	4	Professional core	ME
3		Refrigeration & Air Conditioning	2	2	-	3	Professional core	ME
		Metrology & Instrumentation	3	-	2	4	Professional core	ME
4		Summer Project/ Internship-I (4 weeks) after II year II Semester	-	-	4	2		
5		Department Elective-3	2	-	2	3	Department Elective	ME
6		Open Elective – 2	2	2	-	3	Department Elective	ME
		Minor Project -2	-	-	2	1	Project	ME
8		Essence of Indian Knowledge and Tradition	-	-	2	1	Binary Grade	Training & Placements
		Total	14	2	18	24		
		Contact Hours	34 Hours					

III Year II Semester Structure

Sl. No.	Course Code	Course Title	L	T	P	C	Remarks	Course Offered By
1		Industrial Training (Project) / Internship	-	-	30	15	Internship / Project	ME
		Total	0	0	30	15		
		Contact Hours	30 Hours			15		

List of Department Elective Courses

Sl. No.	Course Title
Course 1	Green Energy & Thermal Systems.
Course 2	Robotics & Automation
Course 3	Industrial Instrumentation
Course 4	Advanced Manufacturing Systems
Course 5	Production Drawing

List of Open Elective Courses

Sl. No.	Course Title
Course 1	Industrial Robotics & Automation
Course 2	3D Printing
Course 3	Drone Technology

Chairperson

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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	Mathematics –I	Skill development
2.	I Year I Semester	Applied Physics –I	Skill development
3.	I Year I Semester	English Proficiency & Communication Skills	Skill development
4.	I Year I Semester	Basics of Computer Engineering	Employability
5.	I Year I Semester	Programming in C	Employability
6.	I Year I Semester	Engineering Graphics	Skill development
7.	I Year I Semester	Engineering Workshop Practice	Skill development
8.	I Year I Semester	Physical Fitness, Sports & Games – I	Skill development
9.	I Year II Semester	Mathematics-II	Skill development
10.	I Year II Semester	Applied Physics –II	Skill development
11.	I Year II Semester	OOP through C++	Employability
12.	I Year II Semester	Fundamentals of Electrical & Electronics Engineering	Employability
13.	I Year II Semester	Engineering Chemistry and Environmental Studies	Skill development
14.	I Year II Semester	English Proficiency & Communication Skills Lab	Skill development
15.	I Year II Semester	Physical Fitness, Sports & Games – II	Skill development
16.	I Year II Semester	Constitution of India	Skill development
17.	I Year II Semester	Life Skills	Skill development
18.	II Year I Semester	Mathematics-III	Skill development
19.	II Year I Semester	Digital Electronics	Employability
20.	II Year I Semester	Strength of Materials	Employability
21.	II Year I Semester	Manufacturing Technology	Employability
22.	II Year I Semester	Thermodynamics	Employability
23.	II Year I Semester	Department Elective-I	Employability
24.	II Year I Semester	NCC/ NSS/ E-cell/ Social activities	Skill development
25.	II Year II Semester	Design of Machine Components	Employability
26.	II Year II Semester	Applied Thermodynamics	Employability
27.	II Year II Semester	Production Technology	Employability
28.	II Year II Semester	Entrepreneurship and Start-ups	Entrepreneurship
29.	II Year II Semester	Department Elective-II	Employability
30.	II Year II Semester	Open Elective – I	Employability
31.	II Year II Semester	Minor Project-I	Employability
32.	III Year I Semester	Hydraulics and Pneumatics	Employability
33.	III Year I Semester	Industrial Engineering & Quality Assessment	Employability

34.	III Year I Semester	Refrigeration & Air Conditioning	Employability
35.	III Year I Semester	Metrology & Instrumentation	Employability
36.	III Year I Semester	Summer Project/ Internship-I (4 weeks) after II-year II Semester	Skill development
37.	III Year I Semester	Department Elective-III	Employability
38.	III Year I Semester	Open Elective – 2	Employability
39.	III Year I Semester	Minor Project -2	Employability
40.	III Year I Semester	Essence of Indian Knowledge and Tradition	Skill development
41.	III Year II Semester	Industrial Training (Project) / Internship	Skill development

Chairperson