

**VIGNAN'S FOUNDATION FOR SCIENCE, TECHNOLOGY AND RESEARCH  
UNIVERSITY :: VADLAMUDI  
School of Mechanical Engineering**

**Minutes of Board of Studies Meeting**

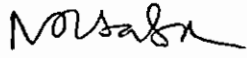
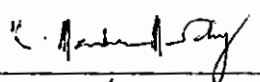
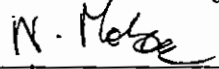
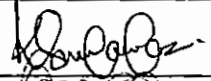

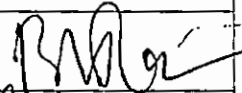
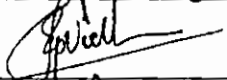
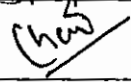
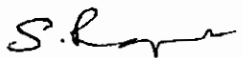

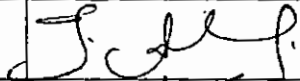
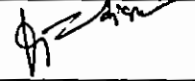
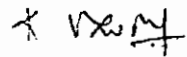
**16<sup>th</sup> March 2013**

The following members were present for the Board of Studies meeting for B.Tech in Mechanical Engineering held on 16-03-2013 at AGF-04, U-Block, Vignan's University, Vadlamudi.

1. Dr. N Ramesh Babu, Prof, Mech Engg Dept., IITM, Chennai, Hyderabad (External Member)
2. Dr. K. Madhu Murthy, Professor, NIT, Warangal (External Member)
3. Dr. N Mohan Rao, Associate professor & Head, JNTUK, Vizianagaram (External Member)
4. Sri. K Suryanarayana, Academic Relations Manager, TCS, Hyderabad (External Member)
5. Dr. V. Madhusaudhan Rao, Director, DET, VU, (Internal member)
6. Dr. B. Seetha Ramanjaneyulu, Director (Academics), VU (Internal Member)
7. Dr. Vidhu Kampurath P., Assoc Prof & Head, School of Mech Engg, VU (Internal Member)
8. Dr. K. Phaneendra Kumar, Professor & Principal, Vignan's LARA Institute (Internal Member)
9. Dr. S. Rajasekharan, Professor, School of Mech Engg, VU (Internal Member)
10. Mr. P B G S N Murthy, Assoc Prof, School of Mech Engg, VU (Internal Member)
11. Mr. Anoop Kumar T, Assoc Prof, School of Mech Engg, VU (Internal Member)
12. Dr. D. Jagadish, Assoc Prof, School of Mech Engg, VU (Internal Member)
13. Mr. K. Venkata Rao, Assoc Prof, School of Mech Engg, VU (Internal Member)

**The following were the discussed in the meeting:**

1. Revision in Course structure and detailed syllabus of B.Tech. Mechanical Engineering
2. Assessment and required changes in laboratories for concerned Programme.
3. Choice Based Credit System (CBCS) is practiced in the curriculum
4. All the Courses in the Curriculum are designed to fall under either of the domains of employability or entrepreneurship or skill development (Appendix A)
5. Inclusion of substantial changes in courses of curriculum is reviewed and is provided as Appendix B.
6. The feedback from various stakeholders is carefully collected, analyzed and their suggestions are implemented in the curriculum.

S.No	Name	Designation & Organization	Signature
1	Dr. N Ramesh Babu	Professor, Mechanical Engineering Dept. IIT Madras, Chennai	
2	Dr. K. Madhu Murthy	Professor, Mechanical Engineering Dept. NIT, Warangal	
3	Dr. N. Mohan Rao	Associate Professor & Head, UCE, JNTUK, Vizianagaram	
4	Sri. K Suryanarayana	Academic Relationship Manager, TCS, Hyderabad	
5	Dr. V. Madhusaudhan Rao	Director, DET, VU	
6	Dr.C.Ranga Rao	Director (Evaluation), VU	Not attended
7	Dr. B. Seetha Ramanjaneyulu	Director (Academics), VU	
8	Dr.Vidhu Kampurath P	Assoc Prof & Head, School of Mechanical Engineering VU	
9	Dr.K. Phaneendra Kumar	Professor & Principal, Vignan's LARA Institute	
10	Dr. S. Rajasekaran	Professor, School of Mech Engg, VU	
11	Mr. P B G S N Murthy	Assoc Prof, School of Mech Engg, VU	
12	Mr. Anup Kumar T	Assoc Prof, School of Mech Engg, VU	
13	Dr. D. Jagadish	Assoc Prof, School of Mech Engg, VU	
14	Mr. K. Venkata Rao	Assoc Prof, School of Mech Engg, VU	
15	Mr. D. Satyanarayana	Assoc Prof, School of Mech Engg, VU	Not attended

## B.Tech R13-Mechanical Engineering Course Structure

### I Year I Semester

Course Title	C
Fundamentals of Electrical Engineering	4
Engineering Mathematics - I	4
Engineering Chemistry	4
Environmental Studies	3
Engineering Materials	4
Professional Ethics, Values and Human Rights	-
Fundamentals of Electrical Engineering Lab	2
Engineering Chemistry Lab	2
Engineering Graphics	3
Total	26

### I Year II Semester

Course Title	C
Problem Solving and Computer Programming	5
Engineering Physics	4
Technical English Communication	5
Engineering Mathematics - II	4
Engineering Mechanics	4
Network Security	-
Computer Programming Lab	2
Engineering Physics Lab	2
Workshop Practice	2
Total	28

## II Year I Semester

Course Title	C
Manufacturing Process - I	4
Material Science & Metallurgy	4
Thermodynamics	4
Mechanics of Solids	4
Computational Methods for Engineers	4
Minor-I	4
Seminar	1
Strength of Materials & Metallurgy Lab	2
Manufacturing Process Lab	2
Computational Methods for Engg. Lab	2
Total	31

## II Year II Semester

Course Title	C
Data Structures	4
Fluid Mechanics & Hydraulic Machines	4
Probability & Statistics	4
Kinematics of Machines	4
Thermal Engineering - I	4
Minor- II	4
Seminar	1
Soft Skills Lab	2
Machine Drawing	2
Fluid Mechanics & Hydraulic Machinery Lab	2
Total	31

### III Year I Semester

Course Title	C
Design of Machine Elements - I	4
Dynamics of Machines	4
Manufacturing Process - II	4
Thermal Engineering - II	4
<b>Dept. Electives - I</b>	<b>4</b>
Mechanical Vibrations	
Metrology & Instrumentation	
Rapid Prototyping	
<b>Minor - III</b>	<b>4</b>
<b>Seminar</b>	<b>1</b>
Machine Tools & Metrology Lab	2
Fuels & I.C. Engines Lab	2
Manufacturing Drawing & Instrumentation Lab	2
Total	31

### III Year II Semester

Course Title	C
Design of Machine Elements - II	4
Heat Transfer	4
Finite Element Analysis	4
CAD/CAM	4
<b>Dept. Electives - II</b>	<b>4</b>
Computational Fluid Dynamics	
Mechatronics	
Composite Materials	
<b>Minor - IV</b>	<b>4</b>
<b>Seminar</b>	<b>1</b>
Modeling & Simulation Lab	2
<b>Mini Project</b>	<b>2</b>
Professional Communication Lab	2
Total	31

#### IV Year I Semester

Course Title	C
Operations Research	4
Robotics	4
Refrigeration and Air Conditioning	4
Managerial Economics	4
Dept. Electives - III	4
Automobile Engineering	
Power Plant Engineering	
Non-Destructive Testing	
Dept. Electives - IV	4
Nano Technology	
Automation in Manufacturing	
Object Oriented Programing	
Mechanisms & Machine Dynamics Lab	2
Heat Transfer Lab	2
Hydraulics & Pneumatics Lab	2
Total	30

#### IV Year II Semester

Course Title	C
MINOR-V	4
Dept. Electives - V	4
Total Quality Management	
Unconventional Manufacturing Processes	
Non-Conventional Sources of Energy	
Electives - VI	4
Operations Management	
Linear Control Systems	
Digital Electronic Circuits	
Project/Internship	10
Total	22

**Courses offered under Choice Based Credit System are highlighted in the structure**



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**Appendix A**  
**Courses under Employability, Entrepreneur and Skill development**

<b>S.No</b>	<b>Course Title</b>	<b>Type of Course</b>
1	Engineering Graphics	Skill development
2	Engineering Mechanics	Skill development
3	Workshop Practice	Skill development
4	Manufacturing Process - I	Skill development
5	Material Science & Metallurgy	Skill development
6	Thermodynamics	Skill development
7	Mechanics of Solids	Skill development
8	Computational Methods for Engineers	Skill development
9	Seminar	Skill development
10	Strength of Materials & Metallurgy Lab	Skill development
11	Manufacturing Process Lab	Skill development
12	Computational Methods for Engg. Lab	Skill development
13	Fluid Mechanics and Hydraulic Machines	Skill development
14	Kinematics of Machines	Skill development
15	Seminar - I	Skill development
16	Machine Drawing	Skill development
17	Fluid Mechanical & Hydraulic Machinery Lab	Skill development
18	Design of Machine Elements - I	Skill development
19	Dynamics of Machines	Skill development
20	Manufacturing Process-II	Employability
21	Thermal Engineering-II	Skill development
22	Mechanical Vibrations	Employability
23	Metrology & Instrumentation	Skill development
24	Rapid Prototyping	Skill development
25	Seminar - II	Skill development
26	Machine Tools Metrology Lab	Employability
27	Fuels & I.C. Engine Lab	Skill development
28	Manufacturing Drawing & Instrumentation Lab	Skill development
29	DME - II	Skill development
30	Heat Transfer	Skill development
31	Finite Element Analysis	Employability
32	CAD/CAM	Employability
33	Computational Fluid Dynamics	Employability
34	Mechatronics	Employability
35	Composite Materials	Skill development
36	Seminar - III	Skill development
37	Modeling & Simulation Lab.	Employability
38	Mini Project	Skill development
39	Operations Research	Skill development

40	Robotics	Employable
41	Refrigeration and Air conditioning	Employability
42	Automobile Engineering	Employability
43	Power Plant Engineering	Skill development
44	Non-Destructive Testing	Skill development
45	Nano Technology	Skill development
46	Automation in Manufacturing	Employability
47	Mechanisms & Machine Dynamics Lab	Skill development
48	Heat Transfer Laboratory	Skill development
49	Hydraulics and Pneumatics Lab	Skill development
50	Total Quality Management	Skill development
51	Unconventional Manufacturing Processes	Skill development
52	Non-Conventional Sources of Energy	Employability
53	Operations Management	Skill development
54	Project	Employability
55	Internship	Employability



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**Appendix B**  
**List of new courses added**

<b>S.No</b>	<b>Course Title</b>
1	Engineering Graphics
2	Engineering Mechanics
3	Workshop Practice
4	Manufacturing Process - I
5	Material Science & Metallurgy
6	Thermodynamics
7	Mechanics of Solids
8	Computational Methods for Engineers
9	Seminar
10	Strength of Materials & Metallurgy Lab
11	Manufacturing Process Lab
12	Computational Methods for Engg. Lab
13	Fluid Mechanics and Hydraulic Machines
14	Kinematics of Machines
15	Seminar - I
16	Machine Drawing
17	Fluid Mechanical & Hydraulic Machinery Lab
18	Design of Machine Elements - I
19	Dynamics of Machines
20	Manufacturing Process-II
21	Thermal Engineering-II
22	Mechanical Vibrations
23	Metrology & Instrumentation
24	Rapid Prototyping
25	Seminar - II
26	Machine Tools Metrology Lab
27	Fuels & I.C. Engine Lab
28	Manufacturing Drawing & Instrumentation Lab
29	DME - II
30	Heat Transfer
31	Finite Element Analysis
32	CAD/CAM
33	Computational Fluid Dynamics
34	Mechatronics
35	Composite Materials
36	Seminar - III
37	Modeling & Simulation Lab.
38	Mini Project
39	Operations Research

40	Robotics
41	Refrigeration and Air conditioning
42	Automobile Engineering
43	Power Plant Engineering
44	Non-Destructive Testing
45	Nano Technology
46	Automation in Manufacturing
47	Mechanisms & Machine Dynamics Lab
48	Heat Transfer Laboratory
49	Hydraulics and Pneumatics Lab
50	Total Quality Management
51	Unconventional Manufacturing Processes
52	Non-Conventional Sources of Energy
53	Operations Management
54	Project
55	Internship

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