



Bos - 2016

**SETHU INSTITUTE OF TECHNOLOGY, PULLOOR,
KARIAPATTI – 626 115**




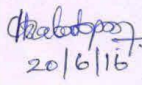


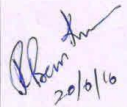
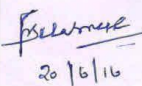
MINUTES OF THE 4th MEETING FOR THE BOARD OF STUDIES IN THE
DEPARTMENT OF MECHANICAL ENGINEERING HELD ON 20/06/2016.

The Fourth Meeting of the Board of Studies in the Department of Mechanical Engineering was held at 10.00 AM on **20/06/2016** at Seminar Hall of Mechanical Engineering Department, Sethu Institute of Technology, Pulloor, Kariapatti.

The following members were present.

Sl. No	Name of the Members	Designation and Institution	Position	Signature
1.	Dr.P.Seeni Kannan	HOD/ Mechanical Sethu Institute of Technology	Chairman	P. Seeni Kannan 20.6.16.
2.	Dr.A.Senthil Kumar	Prof/SIT	Member	[Signature]
3.	Dr.G.D.Sivakumar	Prof/SIT	Member	[Signature]
4.	Dr.C.Kailasanathan	Prof/SIT	Member	[Signature] 20/6/16
5.	Dr.S.Mothilal	Prof/SIT	Member	[Signature] 20/6/16
6.	Dr.R.Muralikannan	Prof/SIT	Member	R. Muralikannan 20/6/16
7.	Mr.G.Pitchayya Pillai	Asso.Prof/SIT	Member	[Signature] 20/6/16
8.	Dr.K.Arun Balasubramanian	Prof/SIT	Member	[Signature] 20/6/16
9.	Dr. C.Muthusamy	Asso.Prof/SIT	Member	[Signature] 20/6/16
10.	Mr.G.K.Tamilselvan	Asso.Prof/SIT	Member	[Signature] 20/6/16
11.	Mr.I.Vijay Arasu	Asso.Prof/SIT	Member	[Signature] 20/6/16
12.	Mr. N. Eswara Prasath	Asso.Prof/SIT	Member	[Signature] 20/6/16
13.	Mr.S.Paramasamy	Asso.Prof/SIT	Member	[Signature] 20/6/16
14.	Mr.G.Nagaraj	Asso.Prof/SIT	Member	[Signature] 20/6/16
15.	Mr.K.Vinayagar	Asso.Prof/SIT	Member	[Signature] 20/6/16

16.	Mr. P. Jayakumar	Asso.Prof/SIT	Member	AB
17.	Mr.B.Venkatram	Asso.Prof/SIT	Member	BSV 20/6/16
18.	Mr.R. Jothi Basu	Asso.Prof/SIT	Member	R. Jothi Basu
19.	Mr.S.Shaik Mohamed Ferozdheen	Asso.Prof/SIT	Member	Shahid 20/6/2016
20.	Mr. T.Gangadharan	Asst.Prof/SIT	Member	20/6/2016
21.	Mr. P. R.Rajkumar	Asst.Prof/SIT	Member	P.R. Rajkumar 20/6/16
22.	Mr. K.M. Ahamed Sheriff	Asst.Prof/SIT	Member	20/6/16
23.	Mr.R.Ravichandran	Asst.Prof/SIT	Member	20/6/16
24.	Mr.R.Sridhar	Asst.Prof/SIT	Member	20/6/16
25.	Mr. R.Karuppasamy	Asst.Prof/SIT	Member	20/6/16
26.	Mr. S. Shanmugam	Asst.Prof/SIT	Member	20/6/16
27.	Mr. R.Sirajudeen	Asst.Prof/SIT	Member	20/6/16
28.	Mr.A.Saravana Kumaar	Asst.Prof/SIT	Member	20/6/16
29.	Mr.P.Meenatchisundaramam	Asst.Prof/SIT	Member	20/6/16
30.	Mr.K.Thavasingam	Asst.Prof/SIT	Member	20/6/16
31.	Mr. T.P. Balaji	Asst.Prof/SIT	Member	20/6/16
32.	Mr. R. SelvaBharathi	Asst.Prof/SIT	Member	20/6/16
33.	Mr. V. Ramachandran	Asst.Prof/SIT	Member	20/6/16
34.	Mr.C.Tamilarasan	Asst.Prof/SIT	Member	20/6/16
35.	Mr.B.Muthu chozharajan	Asst.Prof/SIT	Member	20/6/16
36.	Mr. S. Devanand	Asst.Prof/SIT	Member	20/6/16
37.	Mr. A. Shyam Sundar	Asst.Prof/SIT	Member	20/6/16
38.	Mr. K.Sarbudeen			
39.	Mr. M. Kesavan	Asst.Prof/SIT	Member	20/6/16
40.	Mr. R. Jayaprakash	Asst.Prof/SIT	Member	20/6/16
41.	Mr. P. Karuppasamy	Asst.Prof/SIT	Member	20/6/16
42.	Mr. A. Syed Ibrahim	Asst.Prof/SIT	Member	20/6/16
43.	Mr. M. Jeyaram	Asst.Prof/SIT	Member	20/6/16
44.	Mr. K. Amirtharaj	Asst.Prof/SIT	Member	20/6/16
45.	Mr.M.S.Zakir Hussain	Asst.Prof/SIT	Member	20/6/16
46.	Mr.R.Balaji	Asst.Prof/SIT	Member	20/6/16
47.	Mr.M.Karthic	Asst.Prof/SIT	Member	20/6/16
48.	Mr.B.J.Praveen Kumar	Asst.Prof/SIT	Member	20/6/16
49.	Mr.M.Pasumpon	Asst.Prof/SIT	Member	20/6/16
50.	Mr.S.Saravanan	Asst.Prof/SIT	Member	20/6/16

51.	Dr.P.Vijian	Professor Department of Mechanical Engineering, Government college of Technology, Coimbatore – 641 013	University Nominee	
52.	Dr.T.Prabaharan	Professor, Department of Mechanical Engineering, Mepco schelnk Engineering college, Sivakasi 626 005	Member- External	 20/6/16
53.	Dr.D.Ravindran	Professor Department of Mechanical Engineering, National Engineering College, Kovilpatti, 628 503.	Member- External	 20/6/2016
54.	Dr.P.Venkumar	Dean Student Affairs, Department of Mechanical Engineering, Kalasalingam University, Srivilliputtur 626 126	Member- External	 20/6/2016
55.	Er.R.Prem Kumar	Managing Director, Anu polygraft Engineering,	Member- Industrial	 20/6/16
56.	Prof.P.Sabarinath	Asso. Professor, Department of Mechanical Engineering, KLN college of Engineering ,Madurai	Member- Alumni	 20/6/16

The Chairman welcomed the members and presented the proposed Curriculum and Syllabi to be followed based on **Choice Based Credit System (CBCS)** for students who admitted during the academic year 2015-16, under Autonomous Regulations for B.E. Mechanical Engineering and M.E.CAD/CAM.

B.E. (Mechanical Engineering) – 2015-16 under Autonomous Regulation:

The members discussed in detail the new curriculum and Syllabi for B.E. Mechanical Engineering followed for 2015-16 batch under autonomous regulation and offered useful suggestions.

Based on the suggestions given by the members, the following resolutions are made.

1. B.E. Mechanical Engineering

- 1.1 The board of studies chairman presented the Department Vision, Mission, PEOs and POs of the U.G Programme.
- 1.2 The Board analyzed the stakeholders feedback regarding curriculum and syllabi under 2015 regulation.

Stakeholders Feedback

S. No.	Stakeholders	Stakeholders	Suggestions/Feedback
1.	Industry	Srinivasan Sethuraman Managing Director SAI Inspection Ltd.,	Suggested to include Economics & Environmental Hazards in Power plant Engineering
2.	Employer	Dinesh Mani Project Manager NAFFCO Dubai	Suggested to include the topic "Six sigma concept, control charts for variables, Producers risk and consumer risk in Quality control and reliability Engineering course. Suggested to include the topic "Evolution of modern safety concept- Incident Recall Technique (IRT), safety training DGFASLI, NSC, ASSE, HSE, OSHA-NEBOSH" in Industrial safety Engineering course
3.	International Faculty	Prof. M. Kathirvel Mechanical Engineering Division Institute of science and Technology , Muscat	In Manufacturing Technology I & II course are updated with recent manufacturing process. Suggested to include Economics & Environmental Hazards in Power plant Engineering
4.	Alumni	V.Varatharajan	Suggested to include Smart materials in curriculum
5.	Alumni	K.Balachandar	Suggested to include Smart materials, Jigs & Fixture and CNC programming in curriculum
6.	Alumni	A. Guru vignesh	Suggested to include Solar Energy in curriculum

Industry Designed One credit course

S. No.	Industry	Name of the Industry designed course
1.	Singai Coirs Cluster Pvt Ltd.,	Smart materials
2.	3D MAKERS CADD ACADEMY	CNC Programming
3.	SOLARIZ REGEN technologies Pvt Ltd.,	Solar Energy
4.	HI-TECH ARAI Pvt Ltd.,	Work Study
5.	HVAC projects, Madurai	Basics in Refrigeration and Air conditioning
6.	Anu Poly craft	Jigs & Fixtures

Industry Offered Elective Course:

S. No.	Industry	Name of the Industry designed course
1.	INFOSYS	Introduction to aircraft industry and aircraft systems
2.		Design of aircraft structures

- 1.3 The chairman presented the choice based credit system, Curriculum and syllabi under 2015 regulation.
- 1.4 The chairman presented the curriculum and syllabi of Regulation 2015 based on the stakeholders feedback.
- 1.5 The chairman presented the mapping of curriculum components with POs and PEOs.
- 1.6 The chairman presented the mapping of curriculum and syllabi with programme specific criteria.
- 1.7 The chairman presented the Industry involved courses, project based and problem based courses in regulation 2015.
- 1.8 The BoS members approved to fix the target values for PO attainment calculation for the batches 2012-16 and 2016-20
- 1.9 The Board of Studies (BOS) resolved to approve modified curriculum and syllabi (I - VIII semesters) of B.E. Mechanical Engineering under 2015 regulation.
- 1.10 The BOS members approved to modify PEO II as "Pursue their higher education and work in research organizations in solving real world problems".
- 1.11 The BOS members approved to modify PO d (Investigation) as "Conduct investigations of complex mechanical problems in design and analysis of machine elements, mechanisms, thermal systems and to manufacture components and systems using research methods including design of experiments, analysis and interpretation of data analysis of information to provide valid conclusions".
- 1.12 The BOS members suggested to form a common template to avoid miss alignment in syllabus book.
- 1.13 The BOS members suggested all the text and reference books follow the order as Author name, Title, Publisher, Place, recent Edition and Year.
- 1.14 The BOS members suggested to mention the use of charts, table, and design data book for end semester examination are listed in the top of the syllabus.
- 1.15 The BOS members suggested to indicate course outcomes as CO1, CO2 CO3, CO4, CO5.
- 1.16 The BOS members suggested not to duplicate any content in more than one course.
- 1.17 The BoS members approved the suggestion for improving PO attainment
- 1.18 The BoS members approved to calculate the Indirect attainment for the batch 2012-16 from the student exit survey, student portfolio and to collect survey form with sample size of 30% employer survey for PO attainment

Semester V

- 1.19 The BOS members suggested to include the content “crashing of network” in unit III, “Replacement model” in unit IV and “simulation” in unit V of 15UME504 Operations Research

Semester VI

- 1.20 The BOS members suggested to modify 15UME607 Technical Project in 6th semester and group of student members should not exceed more than 3 members.

Semester VII

- 1.21 The BOS members suggested Project Management and Finance course as common to all branches in 7th semester of R2013, R2014, and R2015.

Professional Elective

- 1.22 The BOS members suggested to include the content “power and efficiency calculation” in unit IV of 15UME902 Gas dynamics and jet propulsion.
- 1.23 The BOS members suggested to include the content “Economics and Environmental hazards” in unit V of 15UME910 Power Plant Technology.
- 1.24 The BOS members suggested to include Industrial Robotics course as Professional elective.
- 1.25 The BOS members suggested to conduct the following Integrated courses as normal Professional core courses without lab support
- Strength of Materials
 - Dynamics of Machinery
 - Engineering Materials and Metallurgy
 - Engineering Metrology and Measurements
 - Heat and Mass Transfer
- 1.26 The BOS members suggested to conduct the following integrated courses as normal professional electives without lab support.
- 15UME904 Applied hydraulics and pneumatics
 - 15UME906 Computational Fluid Dynamics
 - 15UME922 Advanced I.C. Engines

New course Introduced

- 15UME406 Machine Drawing
- 01UME701 Project Management and Finance

Percentage of changes in Syllabus

S.No	Course Code	Course Name	Changes		Percentage of change
			Removed (if Any unitwise)	Added (if Any unitwise)	
1.	15UME504	Operations Research	-	15%	15%
2.	15UME902	Gas Dynamics and jet Propulsion	-	5%	5%
3.	15UME910	Power Plant Technology	-	5%	5%
Total Percentage of change					Sum of % of Change = 25%
Percentage of revision in syllabus = Total Percentage of change / Total No of courses in which the syllabus revision is made					= 25 / 3 = 8.33%

- 1.27 The BOS members suggested to introduce following courses designed by industry as one credit course.

- Basics in Refrigeration and Air-conditioning
- CNC programming
- Solar energy
- Work study
- Introduction to Smart materials
- Introduction to Jigs and Fixtures

- 1.28 The following courses are offered for project based learning

- 15UME607 Technical Project
- 15UME804 Project Work

- 1.29 The BOS members identified Employment Enhanced Courses as follows

- 15UME804 Project
- 15UME607 Technical Project
- 15UME507 CAD/CAM Laboratory
- 15UME706 Computer Aided Analysis & Simulation Laboratory
- 15UGS431 Reasoning and Quantitative Aptitude

- 1.30 The BOS members suggested to introduce German, Japan foreign language courses as one credit course.

Open Elective

- 1.31 The BOS members suggested to include the content "Project management technique" in unit I of 15UME955 Total Quality Management.

- 1.32 The BoS members suggested to mention "There is no prerequisite for open elective" below the open elective curriculum

Industry Designed Course

- 1.33 The BoS members suggested to include following courses designed by Infosys Technologies Limited as professional electives with L T P C - 3 0 0 3
- 15UME927 Introduction to Aircraft industry and Aircraft systems
 - 15UME928 Design of Aircraft structures.

2.0 M.E.CAD/CAM

The Members of BOS thoroughly discussed about the curriculum and Syllabi for M.E. CAD/CAM. They prescribed that there is no change in the curriculum 2015 and they recommended to follow the curriculum and syllabi of regulation 2015 for 2016-2017 batch also. The members of BOS has reviewed and accepted.

P. Senthil Kumar

**Chairman
Board of Studies
Mechanical Engineering**