

BOS - 2017




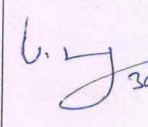

**SETHU INSTITUTE OF TECHNOLOGY, PULLOOR,
KARIAPATTI – 626 115**

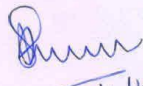
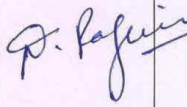
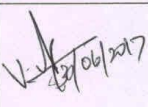
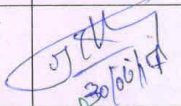
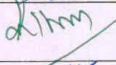
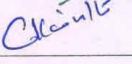
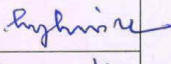
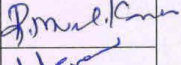
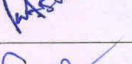
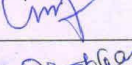



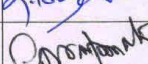
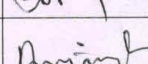
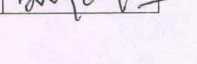





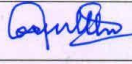





MINUTES OF THE 5th MEETING FOR THE BOARD OF STUDIES IN THE
DEPARTMENT OF MECHANICAL ENGINEERING HELD ON 30/06/2017.

The Fifth Meeting of the Board of Studies in the Department of Mechanical Engineering was held at 10.00 AM on **30/06/2017** 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.G.D.Siva Kumar	Vice principal / HOD Mechanical Sethu Institute of Technology	Chairman	 30/6/17
2.	Dr. U. Natarajan	Associate Professor Department of Mechanical Engineering, Alagappa College of Engineering and Technology, Karaikkudi – 630 004	University Nominee	 30/6/17
3.	Dr.U.Arunachalam	Assistant Professor University College of Engineering Anna university Constituent College Konam, Nagercoil -629004	Member- External	 30/6/17

4.	Dr.A. Asha	Professor, Department of Mechanical Engineering, Kamaraj College of Engineering and Technology, Virudhunagar – 625 701	Member- External	 30/6/17
5.	Dr.N.Rajini	Associate Professor, Department of Mechanical Engineering, Kalasalingam University, Srivilliputtur 626 126	Member- External	
6.	Mr.V.Muthukumar	Deputy Manager, PED TAFE Madurai, Tamil Nadu 624201	Member- Industrial	 30/6/2017
7.	Mr.S.J.Pradeep	CEO & Founder of Technofusion, Aruppukottai 626 101	Member- Alumni	 30/6/17
8.	Dr.A.Senthil Kumar	Prof/SIT	Member	 30/6/17
9.	Dr.C.Kailasanathan	Prof/SIT	Member	 30/6/17
10.	Dr.S.Mothilal	Prof/SIT	Member	 30/6/17
11.	Dr.R.Muralikannan	Prof/SIT	Member	 30/6/17
12.	Dr.K.Arun Balasubramanian	Prof/SIT	Member	 30/6/17
13.	Dr. C.Muthusamy	Prof/SIT	Member	 30/6/17
14.	Dr.R. Jothi Basu	Prof/SIT	Member	 30/6/17
15.	Dr. B. Raja Mohamed Rabi	Prof/SIT	Member	 30/6/17
16.	Mr.G.Pitchayya Pillai	Asso.Prof/SIT	Member	 30/6/17
17.	Mr.G.K.Tamilselvan	Asso.Prof/SIT	Member	 30/6/17
18.	Mr. N. Eswara Prasath	Asso.Prof/SIT	Member	 30/6/17
19.	Mr.I.Vijay Arasu	Asso.Prof/SIT	Member	 30/6/17

20.	Mr.S.Paramasamy	Asso.Prof/SIT	Member	
21.	Mr.G.Nagaraj	Asso.Prof/SIT	Member	AB
22.	Mr.K.Vinayagar	Asso.Prof/SIT	Member	
23.	Mr.S.Shaik Mohamed Ferozdheen	Asso.Prof/SIT	Member	 30/6/17
24.	Dr. N. Premalatha	Asso.Prof/SIT	Member	
25.	Dr.A.Muthuraja	Asso.Prof/SIT	Member	A. Muthuraja 30/6/17
26.	Dr.R.Kamala Kannan	Asso.Prof/SIT	Member	AB
27.	Mr. T.Gangadharan	Asst.Prof/SIT	Member	 30/6/17
28.	Mr. P. R.Rajkumar	Asst.Prof/SIT	Member	P.R. Rajkumar 30/6/17
29.	Mr. K.M. Ahamed Sheriff	Asst.Prof/SIT	Member	AB
30.	Mr.R.Sridhar	Asst.Prof/SIT	Member	R. Sridhar 30/6/17
31.	Mr.A.Saravana Kumaar	Asst.Prof/SIT	Member	 30/6/17
32.	Mr. S. Shanmugam	Asst.Prof/SIT	Member	S. Shanmugam 30/6/17
33.	Mr. R.Karuppasamy	Asst.Prof/SIT	Member	R.K. 30/6/17
34.	Mr. A. Syed Ibrahim	Asst.Prof/SIT	Member	A. Syed Ibrahim 30/6/17
35.	Mr. G. Venkatesan	Asst.Prof/SIT	Member	G. Venkatesan 30/6/17
36.	Mr.P.Meenatchisundaram	Asst.Prof/SIT	Member	 30/6/17
37.	Mr. R. SelvaBharathi	Asst.Prof/SIT	Member	 30/6/17
38.	Mr. T.P. Balaji	Asst.Prof/SIT	Member	T.P. Balaji 30/6/17
39.	Mr. V. Ramachandran	Asst.Prof/SIT	Member	V. Ramachandran 30/6/17
40.	Mr.C.Tamilarasan	Asst.Prof/SIT	Member	C.T. 30/6/17
41.	Mr.B.Muthu chozharajan	Asst.Prof/SIT	Member	B. Muthu chozharajan 30/6/17
42.	Mr. S. Devanand	Asst.Prof/SIT	Member	 30/6/17

43.	Mr. A. Shyam Sundar	Asst.Prof/SIT	Member	<i>[Signature]</i>
44.	Mr. K. Amirtharaj	Asst.Prof/SIT	Member	<i>[Signature]</i>
45.	Mr. R. Jayaprakash	Asst.Prof/SIT	Member	<i>R. Jayaprakash</i>
46.	Mr. M. Kesavan	Asst.Prof/SIT	Member	<i>M. Kesavan</i>
47.	Mr. M. Jeyaram	Asst.Prof/SIT	Member	<i>M. Jeyaram</i>
48.	Mr. P. Karuppasamy	Asst.Prof/SIT	Member	<i>P. Karuppasamy</i>
49.	Mr. M.S. Zakir Hussain	Asst.Prof/SIT	Member	<i>M.S. Zakir Hussain</i>
50.	Mr. R. Balaji	Asst.Prof/SIT	Member	<i>R. Balaji</i>
51.	Mr. M. Pasumpon	Asst.Prof/SIT	Member	<i>M. Pasumpon</i>
52.	Mr. S. Saravanan	Asst.Prof/SIT	Member	<i>S. Saravanan</i>
53.	Mr. R. Seenivasan	Asst.Prof/SIT	Member	<i>R. Seenivasan</i>
54.	Mr. M. Elavarasan	Asst.Prof/SIT	Member	<i>M. Elavarasan</i>
55.	Mr. A. Perumal	Asst.Prof/SIT	Member	<i>A. Perumal</i>
56.	Mr. A. Shenbagaraj	Asst.Prof/SIT	Member	<i>A. Shenbagaraj</i>
57.	Mr. R. Sirajudeen	Asst.Prof/SIT	Member	<i>R. Sirajudeen</i>
58.	Mr. K. Sarbudeen	Asst.Prof/SIT	Member	<i>K. Sarbudeen</i>

The Chairman welcomed the members and presented the 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 and 2014-15 under Autonomous Regulation:

The members discussed Modification in semester V - VIII semesters and Electives in R2015 syllabus and curriculum and also semester VII - VIII semesters and Electives in R2014 syllabus and curriculum for B.E. Mechanical Engineering followed for 2015-16 batch and 2014-15 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 R2015

- 1.1 The board of studies chairman presented the Department Vision, Mission, PEOs and POs and PSOs of the U.G Programme.
- 1.2 The chairman presented the mapping of curriculum components with PSOs, POs and PEOs.

- 1.3 The chairman presented the mapping of curriculum and syllabi with programme specific criteria.
- 1.4 The chairman presented the Industry involved courses, project based and problem based courses in regulation 2015.
- 1.5 The BoS members approved the key components of PEOs which describe the graduates carrier and their professional accomplishment after their few years of completion
- Develop the core competency
 - Practice lifelong learning
 - Develop the ethical skills
- BoS member recommended to get stakeholders feedback about Key components of PEOs as suggested by DAB members.
- 1.6 The BoS members approved to modify PEO II as “Pursue their higher education and involve in research for solving real time societal problems”.
- 1.7 The BoS members approved the following program specific outcomes (PSOs)
The Mechanical Engineering Graduates will be able to:
- Ability to understand the concepts of design and manufacturing related to industries.
 - Ability to use the knowledge of mechanical engineering domain to provide solution for the problem in industry.
- 1.8 The BoS members approved to modify PO 4 (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”.
- 1.9 The BoS members approved the suggestion for improving PO attainment for the batch 2013-17, 2014-18, 2015-19 and forwarded to academic council for their approval.

The board analyzed the stakeholders feedback regarding curriculum and syllabi under 2015 regulation.

Stakeholders Feedback

Sl.No.	Stakeholders	Stakeholders	Suggestions/Feedback
1.	Industry	Sivakumar Jayaraman AGM – HR & Admin JK Fenner	Suggested that the content repeated in two different courses “ Preferred numbers, Fits & tolerance” Design of Machine Elements and Machine Drawing
2.	Industry	Vetri Vigas Auto tech Hosur	Suggested that Stochastic Inventory topic in Operation research is suitable for students in PG level students
3.	Industry	Aravind Enterprises Hosur	Suggested to include the topic in the course Refrigeration and Air conditioning Units of Refrigeration, COP of a refrigerator, Open and closed air refrigeration cycle, Air refrigerator working on reversed Carnot cycle, Air refrigerator working on Bell – Coleman Cycle
4.	Industry	Gopinath Industries	Suggested that the student may encourage to do their project work from their 7 th semester onwards
5.	Alumni Batch 2013-2017	G. Muthu pandian	Suggested to include the course solid works and inventors
6.	Alumni Batch 2012-2016	V. Murugaesan	Suggested to include the course Project management and finance
7.	Alumni Batch 2013-2017	T.J Prabhakaran	Suggested to include the course Instrumentation and Measurement
8.	Student	T. Ajith kumar	Suggested to included the topic “Basic concept of network model, shortest route and spanning tree” in Operations Research
9.	Student	T.S. Deva Krishnan	Suggested to remove the topic Stochastic Inventory in Operations Research
10.	Student	R.Aravindh	Suggested to remove the topic Fits and tolerance in machine Drawing
11.	Student	S.Ganesh	Suggested to remove the topic Forward pass, Backward pass, TQM in project earned management in Project Management and Finance
12.	Student	K.Masana Perumal	Suggested to include the topic “Comfort Air Conditioning System Winter Air Conditioning System, Summer Air Conditioning System”, in Refrigeration and Air Conditioning

- 1.10 The BoS members resolved to approve modified syllabus V – VIII semesters and Electives of B.E. Mechanical Engineering under 2015 regulation.
- 1.11 The BoS members resolved to approve modified syllabus VII – VIII semesters and Electives of B.E. Mechanical Engineering under 2014 regulation.
- 1.12 The BoS members discussed about course outcome assessment plan and expected attainment level for the courses in academic year 2017-18 odd semesters (III, V, and VII).

Semester V

- 1.13 The BoS members approved to remove the content “Preferred numbers, fits and tolerances” in Unit I of **15UME503 - Design of Machine Elements** which already covered in **15UME406 - Machine Drawing** subject.
- 1.14 The BoS members suggested to transfer the topic “Sequencing” from Unit III to Unit II of **15UME504 - Operations Research** and the title of Unit III may be modified as Network Model.

And also suggested to remove the content “Critical path scheduling and crashing” with the replacement topic of Shortest route, minimal spanning tree and maximum flow in Unit III.

The members suggested to remove the advance topic “stochastic inventory” in Unit IV of **15UME504 - Operations Research**.

Semester VII

- 1.15 The BoS members approved to modify the correction in the content “Application in heat transfer in 2D problem and Application in fluid mechanics in 2D problem” in Unit V of **15UME702 - Finite Element Analysis**.

New courses Introduced

- 15UME862 CNC Programming
- 15UME863 Solar Energy
- 15UME866 Work Study
- 15UME973 Synthesis of Nano Materials

S.No	Course Code	Course Name	Changes		Percentage of change
			Removed (if Any unitwise)	Added (if Any unitwise)	
1.	15UME503	Design of Machine Elements	5%	-	5 %
2.	15UME504	Operations Research	10%	-	10 %
3.	15UME916	Refrigeration and air Conditioning	15%	10%	25 %
4.	14UME701	Project Management and Finance	25%	-	25 %
Total Percentage of change					Sum of % of Change = 65%
Percentage of revision in syllabus = Total Percentage of change /Total No of courses in which the syllabus revision is made					= 65 / 4 = 16.25%

Professional Elective

- 1.16 The BoS members suggested to remove the content “Carnot Refrigeration Cycle, Use of P.H. Charts, Multistage and multiple evaporator systems, COP Comparison” in Unit I of **15UME916 - Refrigeration and Air Conditioning** with the replacement of the topics “Thermodynamic Principles of refrigeration, vapour compression systems, vapour absorption systems, cascade systems, multiple refrigeration systems, basic air refrigeration cycle”.

In Unit IV the BoS members suggested to remove the content “Ductile Split, Packaged Air conditioning, VAV & VRV Systems, Duct Design by equal friction

method” with the replacement of the content “Air conditioning systems, winter Air Conditioning System, Summer Air Conditioning System, Factors affecting Comfort Air Conditioning, Comfort Air Conditioning System, cooling load calculation”.

- 1.17 The BoS members approved to change the objective as “operations of a CNC milling and turning” and approved to modify the Title name as “CNC MACHINING” in Unit II of **15UME862 - CNC Programming**.

2. B.E. Mechanical Engineering R2014

Semester VII


- 2.1 The BoS members approved to remove the content in Unit II “Constructing network diagram, AON basics, Forward Pass and Backward Pass”, in Unit IV “TQM in projects Earned Value Management, performance measurement methods to monitor, evaluate and control planned cost and schedule performance”, and also in Unit V “Analysis & Interpretation of financial statements Risks and return evaluation of investment decision” for **14UME701 - Project Management and Finance**.
- 2.2 The BoS members approved to modify the correction in the content “Application in heat transfer in 2D problem and Application in fluid mechanics in 2D problem” in Unit V of **14UME702 - Finite Element Analysis**.

Professional Elective

- 2.3 The BoS members approved to remove the content “Carnot Refrigeration Cycle, Use of P.H. Charts, Multistage and multiple evaporator systems, COP Comparison” in Unit I of **14UME913 - Refrigeration and Air Conditioning** with the replacement of the “Thermodynamic Principles of refrigeration, vapour compression systems, Vapour absorption systems, cascade systems, multiple refrigeration systems, basic air refrigeration cycle”. In Unit IV “Ductile Split, Packaged Air conditioning, VAV & VRV Systems, Duct Design by equal friction method” may be removed with the replacement of the content “Air conditioning systems, winter Air Conditioning System, Summer Air Conditioning System, Factors affecting Comfort Air Conditioning, Comfort Air Conditioning System, cooling load calculation.”.

3.0 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.


Chairman
Board of Studies
Mechanical Engineering