



GOVT. COLLEGE OF ENGINEERING, BARGUR - 635 104
(Autonomous)

DEPARTMENT OF MECHANICAL ENGINEERING
MINUTES OF THE FOURTH MEETING OF BOARD OF STUDIES

Dt.15.12-2018

The Meeting of the board of studies in Mechanical Engineering was held on 15.12.2018 at 10.00 am in the Mechanical Department Mini Seminar Hall, Government College of Engineering, Bargur.

The following **internal members** were present in the BOS meeting:

Sl. No.	Name of the Teaching Faculty	Designation
1	Dr.P. K. Palani	HOD / Chairman - BOS
2	Dr. P. Thirumal	Asst. Professor (Sr. Gr.)
3	Mr. M. Anbarasu	Asst. Professor
4	Mr. M. Anantha Babu	Asst. Professor
5	Mr. S. Tamil Prabakaran	Asst. Professor
6	Dr. I. Ashok kumar	Asst. Professor
7	Dr. D. Thirumalaikumarasamy	Asst. Professor

The following **External members** were present in the BOS meeting:

Sl. No.	Name	Designation
1	Dr.K.Arunachalam	University Nominee Associate Professor, Dept. of Automobile Engg., MIT Campus, Anna University, Chennai
2	Dr. S. Sankar	Vice Chairman (Composite Working Group) NAFEMS India, Bangalore
3	Dr. R. Elansezhian	Professor, Department of Mechanical Engineering, PEC, Puducherry - 605 014
4	Dr. U.S. Mallik	Professor, Department of Mechanical Engineering, S.I.T, Tumkur – 572103,
5	Mr. K. Ramesh	Associate Consultant, Sapien,Bangalore
6	Dr. R. Vijayan	Professor & Head, Department of Mechanical Engineering, GCE, Salem



GOVT. COLLEGE OF ENGINEERING, BARGUR - 635 104
(Autonomous)

The following **Student Members** were also present in the BOS meeting

Sl. No	Name	Address
1	Mr. A. Aathi	Final year student
2	Mr. Murali	Final year student

Dr. P. K. Palani, Chairman-BOS welcomed the members and gave a brief overview on the agenda to be discussed in this BOS meeting. He also briefed the BOS members about the AICTE Model curriculum, and resolutions made in the third BOS meeting.

Dr. P. Thirumal, Coordinator – BOS presented complete syllabus, revised as per AICTE Model curriculum (2018 Regulation) to the BOS members.

BOS members discussed various features of the curriculum and syllabi and offered their suggestions to suit our institution and particularly the Department of Mechanical Engineering. The following points were discussed:

1. Dr. R. Elansezhian, External Member suggested to add the tutorial part to the course “18MES301 Engineering Mechanics”.
2. Dr. R. Elansezhian recommended to add ‘simple numerical problems’ in the fourth unit of the course “18MPC303 Manufacturing Technology I” and add also suggested to include the topic electro gas welding in the second unit of the course.
3. Dr. S. Sankar, Expert Member from Industry suggested to include one hour tutorial in addition to three hours theory, to the course, “18MPC304 Engineering Thermodynamics” which is supported by Prof. Mallik, external member from outside University.
4. Dr. R. Vijayan, Expert Member from other college, suggested to remove the topic Psychrometry from the course “18MPC304 Engineering Thermodynamics”.
5. Dr. K. Arunachalam, University Nominee, suggested to replace the term ‘oil’ from gear oil pump, in fourth Unit of the course “18MPC305 Fluid Mechanics and Fluid Machinery”.



GOVT. COLLEGE OF ENGINEERING, BARGUR - 635 104
(Autonomous)

6. Dr.K.Arunachalam suggested to include the topic, “introduction to limits, Fits and tolerances and symbols” and “Geometric Dimensioning and Tolerancing” to the course of “18MPC308 Machine Drawing”.
7. The members suggested to replace any two manual drawings with computer aided drawings in the course of “18MPC308 Machine Drawing”. Members recommended making the students to draw few assembly drawings using computer software during Continuous Assessment Tests.
8. Dr.U.S.Mallik and other external members recommended to reduce the content of the course “18MBS402 Biology for Engineers” in consultation with experts in the relevant field.
9. Dr. U.S. Mallik and Dr.K.Arunachalam, suggested to add the tutorial hours to the course “18MPC403 Strength of Materials” in addition to three theory classes.
10. Dr.K.Arunachalam suggested to add the topic “Moment Area method and Double integration method” and to remove the topic ‘leaf spring’ in fourth Unit of the course “Strength of Materials”. It was also suggested to add the book “Strength of Materials” by Ramamrutham and Narayanan as one of the text books.
11. The members insisted that maximum number of text books can be two, if necessary three text books may be recommended in the syllabus, to cover all the five units.
12. Dr. U.S. Mallik suggested the following points with regarding to the course “18MPC404 Engineering Materials and Metallurgy”:
 - a. The topic “TTT Diagram” may be included in the second unit.
 - b. The topic ‘powder metallurgy’ may be removed in unit-IV and it may be included in the course “18MPC303 Manufacturing Technology I”
 - c. Unit –IV and Unit – V can be combined as a single unit, “Casting and Welding Metallurgy” and “Introduction to Smart materials” may be added as fifth Unit.



GOVT. COLLEGE OF ENGINEERING, BARGUR - 635 104
(Autonomous)

- d. The book "Materials Science and Engineering" by V. Raghavan" to be added as reference book.
13. Dr.K.Arunachalam recommended to add 'solving of simple problems' in basics of mechanisms unit of the course "18MPC405 Kinematics of Machines"
14. Mr. K. Ramesh, Alumni member suggested to add Limits in the first unit of the course "18MPC501 Design of Machine Elements".
15. Dr.K.Arunachalam suggested to add the topic "conventional lathe" in the second unit in addition to Capstan Turret lathes in "18MPC503 Manufacturing Technology II"
16. Dr. U.S. Mallik suggested to change the title of Unit-V as 'NC, CNC, RPT' and accordingly to modify the content in the unit for the course, "Manufacturing Technology II"
17. Members suggested following points regarding revising the course "18MPC504 Metrology and Measurements"
- a. Second unit 'Linear and Angular measurements' to be split into two units viz., Linear Measurements and Angular measurements.
 - b. Topics on 'Machine vision measurement system' and 'introduction to clean room' are added to Unit- V
 - c. Corresponding books to cover the topic "introduction to clean room" and Machine vision are to be included in the list of Text Books.
18. Dr. R. Elansezhian suggested to reduce the number of experiment, maximum 14 (7+7) in the course of "18MPC507 Manufacturing Processes and Metrology Laboratory"
19. Board suggested to bring external experts to give lecture on the mandatory course "18ZMC506 Essence of Indian Traditional Knowledge"
20. Members suggested to reduce the number of experiments in the course of "18MPC508 Heat and Mass Transfer Laboratory".



GOVT. COLLEGE OF ENGINEERING, BARGUR - 635 104
(Autonomous)

21. Dr.P.Thirumal, internal member requested the experts from industry and other universities, to offer their suggestion on the course "Project / Internship" and following suggestions were given by the board:
- a. The name of the course "Project I / Summer Internship" can be "Project I / Internship" instead of 'summer / winter' internship.
 - b. "In house training" by industries/ external experts / Alumni members, may be treated as equivalent to internship.
22. Dr. R. Elansezhian suggested to add 'simple case studies' in each unit of the course "18MPC602 Finite Element Analysis"
23. With respect to the course "18MPC701 Automation in Manufacturing", Dr. R. Elansezhian suggested to remove "NC and NC part programming – CNC" from the first unit. Also to remove, "Remote Monitoring System - Serial Communication – Net Working - Network standards - Human Machine Interfaces" from Unit V, and to add "Introduction to mechatronics, components of mechatronics , sensors and actuators" in Unit-V and accordingly change the title of Unit-V as "Mechatronic System Design"
24. Dr. R. Elansezhian suggested to include a few topics on TPM in the course "18MHS801 Total Quality Management"
25. Dr.K.Arunachalam suggested to add topics related to EGR and lean burning in the professional elective course "Internal Combustion Engines"
26. Dr.K.Arunachalam suggested to add "Introduction to Nano composites" in the first Unit of the course "Processing of Composite Materials"
27. Dr. R. Elansezhian suggested to add CAPP and ERP in the course, "Process Planning and Cost Estimation"
28. External experts suggested to include assembly and environment topics in the syllabus of course "Design for Manufacture" and subsequently the course title is changed as "Design for Manufacture, assembly and Environments".



GOVT. COLLEGE OF ENGINEERING, BARGUR - 635 104
(Autonomous)

29. Dr. R. Elansezhian suggested to add 'Introduction to Green manufacturing' in fifth unit of the course "Design for Manufacture and Assembly"
30. Dr.K.Arunachalam, recommended to add recent developments in microprocessor such as "introduction to Arduino" in addition to '8085, 8051' in the second unit of the elective course, "Mechatronics Systems"
31. Dr.K.Arunachalam, felt that Open Electives are only meant for other department students and not for parent department students.
32. Dr.K.Arunachalam, and other Experts from outside University suggested that the total number of credits can be up to 165 and PCC need not be restricted to 48.
33. The board also revised COs, POs and PSOs and suggested to add innovations, industry institute interaction in PSOs.

Finally the board approved the 2018 Regulation Curriculum and Syllabi for B.E Mechanical Engineering.

The Chairman (BOS) Dr. P. K. Palani Professor and Head, thanked the members present and the meeting came to close at 1.30 P.M.



GOVT. COLLEGE OF ENGINEERING, BARGUR - 635 104
(Autonomous)

Sl. No.	Name and Designation	Board of Studies	Signature
1	Dr.P.K.Palani Professor / Mechanical, GCE, Bargur	Chairman	
2	Dr.K.Arunachalam Associate Professor, Dept. of Automobile Engg., MIT Campus, Anna University Chennai	University Nominee	
3	Dr.S.Sankar Vice President (Composite Working Group) NAFEMS India, Bangalore	Industry Expert – External Member	
4	Dr. U.S.Mallik Professor, Department of Mechanical Engineering S.I.T, Tumkur – 572103, Karnataka, India	External Member	
5	Dr. R. Elansezhian Professor Department of Mechanical Engineering PEC, Puducherry - 605 014	External Member	
6	Dr.R.Vijayan Professor & Head of the Dept. Department of Mechanical Engineering, GCE, Salem	External Member	
7	Mr.K.Ramesh Associate Consultant, Sapient , Bangalore	Alumini-External Member	
8	Dr.P.Thirumal Asst. Professor (Sr.Gr)/Mechanical, GCE, Bargur	Internal Member	
9	Prof. M. Anbarasu Asst. Professor/Mechanical, GCE, Bargur	Internal Member	



GOVT. COLLEGE OF ENGINEERING, BARGUR - 635 104
(Autonomous)

10	Mr. M. Anantha Babu Asst. Professor / Mechanical, GCE, Bargur	Internal Member	<i>Ananth</i>
11	S.Tamil prabakaran Asst. Professor / Mechanical, GCE, Bargur	<i>Internal Member</i>	<i>S.Tamil prabakaran</i>
12	Dr. I. Ashokkumar Asst. Professor/Mechanical, GCE, Bargur	Internal Member	<i>Dr. I. Ashokkumar</i>
13	Dr. D. Thirumalaikumarasamy Asst. Professor/Mechanical, GCE, Bargur	Internal Member	<i>Dr. D. Thirumalaikumarasamy</i>
14	Mr.A. Aathi Final Year/ Mechanical GCE, Bargur	Student Member	<i>Mr.A. Aathi</i>
15	Mr.Murali Final Year/ Mechanical GCE, Bargur	Student Member	<i>Mr.Murali</i>

Joseph
15.12.2018
CHAIRMAN (BOS-MECHANICAL)

Copy:

1. Submitted to the principal
2. The Controller of Examinations, GCE, Bargur
3. Members by circulation
4. File