

MINUTES OF THE 42 MEETING OF THE
BOARD OF STUDIES OF MECHANICAL ENGINEERING

22-07-2023

The minutes of the meeting of the Board of Studies of Mechanical Engineering held on 22-07-2023 at 9:30 am in IT Block 213- Conference hall

The Following members were Present in the meeting

- SL NO
- 22. Dr. G. V.
- 23. Dr. P.
- 24. Dr. D.P.
- 25. Dr. P.
- 26. Dr. R.
- 27. Dr. G.
- 28. Mr. R. S.
- 29. Dr. C.
- 30. Dr. H. S.
- 31. Dr. S.
- 32. Dr. S.
- 33. Dr. G.
- 34. Dr. B.
- 35. Dr. B.
- 36. Dr. C. F.
- 37. Mrs. I.
- 38. Dr. S. M.
- 39. Dr. K.

SL NO	NAME	DESIGNATION	SIGNATURE
1.	Dr. N. Rajam Rama Swamy	Chairman	
2.	Dr. A. P. Sethiya Gnanam	University Nominee (UG & PG)	
3.	Dr. S. Vinodh	Expert Member - Academic	
4.	Dr. A. Valan Arasu	Expert Member - Academic	ONLINE
5.	Dr. N. Kulashekaran	Expert Member - Industry	Pre occupied
6.	Mr. N. Mani	Expert Member - Industry	
7.	Dr. K. Marimuthu	Members	
8.	Dr. R. Rajesh	Members	
9.	Dr. A. S. Krishnan	Members	
10.	Dr. G. Suresh Kannan	Members	
11.	Dr. G. Sivakumar	Members	
12.	Mr. P. Ramakrishnan	Members	
13.	Dr. M. Velliangiri	Members	
14.	Dr. G. Suganya Priyadarshini	Members	
15.	Mr. M. Karthikeyan	Members	
16.	Dr. C. Balaji Ayyanar	Members	
17.	Mr. K. Karthik	Members	
18.	Dr. S. Selvam	Members	
19.	Dr. A. Karthikeyan	Members	
20.	Dr. A. Thangarasu.	Member	
21.	Dr. S. Balamurugan	Members	

The
Dr. A. S.
curric
Regul
The fo
Item 1

Item 2: To discuss and finalize the Curriculum structure for R2023 Regulations of B.E Mechanical Engineering (I to VII Semesters)

The curriculum structure for Regulations R2023 was recommended and approved by the BoS Members.

Item 3: To discuss and conclude the course contents of proposed I to VII semesters of Regulations R2023 of B.E. Mechanical Engineering program.

After due consultations and the suggestions of BoS experts, the proposed course contents from I to VII semesters are finalized.

Item 4: To discuss and finalize the list of "Verticals" proposed to offer for the students admitted after 2021 during their course of study from their V semester onwards.

The recommended list of verticals and the courses provided within each vertical are finalized after extensive consultations and comments from BoS members.

DISCUSSIONS ON THE CURRICULUM STRUCTURE AND

COURSE CONTENTS:

1. Expert members suggested including any one numerical method in the course in Mathematics offered in the third semester.
2. Dr. S. Vinodh suggested including material selection topic and Ashby's chart in Materials and Metallurgy course.
3. Dr. S. Vinodh suggested including "Zigbee" networking techniques in the Basic Electrical and Electronic course.
4. Dr. S. Vinodh suggested adding "Reliability Curve" in the course on Metrology and Quality Control.

5. Mr. N
Mater
Comp

6. Dr. S
topic

Comp

7. Mr.
of Pa

Comp

8. Dr. S
Non-

Drill

give

9. Expe
Shor

Mat

10. Expe
Autr

couz

11. Dr.

Crit

Syst

12. The
Com

as

addi

13. Dr.
cou

14. Dr.
Phy

for

15. Dr.

riculum structures
Mechanical Engineering

Regulations R2023
the BoS Members

use contents of
Regulations R2023
Program.

Suggestions of BoS
from I to VII

of "Verticals."
its admitted
study from

and the courses

finalized after
from BoS members.

ME AND

any one
Mathematics

Material selection
and Metallurgy

"bee" networking
and Electronic

"Stability Curve" in
of Control.

5. Mr. N. Mani suggested including a topic on Bill of Materials (BoM) after 3D modeling in the course on Computer Aided Machine Drawing.
6. Dr. S. Vinodh suggested including an introduction of a topic on Process Chart/Planning Chart in the course on Computer Aided Machine Drawing.
7. Mr. K. Karthik suggested an experiment on generation of Part Drawing from 3D components in the course on Computer Aided Machine Drawing.
8. Dr. S. Vinodh suggested including a module on Non-traditional Machining and that the topic on Drilling, Milling and Grinding could be combinedly given as a single module.
9. Expert members suggested adding an experiment on Shore-D Hardness in the Laboratory course on Material Characterization.
10. Expert members suggested adding one experiment on Automated part programming language in the laboratory course on Computer Aided Manufacturing.
11. Dr. A.P. Sathiyagnanam suggested adding "Routh Stability Criteria" before "Bode Plot" in the course on Control System and Mechatronics.
12. The expert members suggested renaming the course on Computer Aided Design and Manufacturing Management as Computer Integrated Manufacturing (CIM) and suggested adding some topics in manufacturing.
13. Dr. S. Vinodh suggested adding the "KV Mapping" in the course on Fluid Power Control System.
14. Dr. A. Valan Arasu suggested adding the course on Physics for Mechanical Engineers II as a pre-requisite for the course on Engineering Thermodynamics.
15. Dr. A. Valan Arasu suggested renaming the Unit III as

Pipe flow and Measurement In the course on Fluid Mechanics and Machinery.

16. Dr. A. Valan Arasu suggested that Unit IV shall be named as Radiation and Heat Exchanger and the contents shall be rearranged in course on Heat Transfer.
17. Dr. S. Vinodh suggested including topics of applications pertaining to Mechanical Engineering in the courses on Chemistry and Physics for Mechanical Engineers.
18. Expert members suggested that 15 hours of manual drawing in Engineering Graphics I and II is required. Expert Members too recorded and suggested not to include the name of software packages in the title of experiments in the course contents.
19. Dr. S. Vinodh suggested adding "Evaluation of Process Capability" in the Module on Control, in the course on Metrology and Quality Control.
20. Expert members suggested rephrasing experiment 9 and 10 in the laboratory course on Metrology. They also suggested including inference from the experiments in the report.
21. Dr. S. Vinodh suggested renaming experiments from 6 to 9 in the laboratory course on Lathe and Special Machines.

DISCUSSIONS ON THE VERTICALS AND LIST OF COURSES:

1. Dr. S. Vinodh suggested moving the course on Advanced Statistics and Data Analytics from the vertical on Computational Engineering to Engineering Management.
2. Mr. N. Mani suggested that the Artificial Intelligence course does not fit in the Robotics and Automation vertical.

3. Dr. S
on I
4. Dr. S
IoT
from
5. Mr
in v
6. Dr.
Elen
7. Dr.
ver
as
- GENEF
1. Exp
the
mi
2. Dr.
an
of
3. Dr
ma
4. Dr
col
ins
5. Dr
Ede
the
6. M.
rel
an
7. M.

use on Fluid

Unit IV shall be

re and the

on Heat Transfer

of applications

in the courses

ical Engineers.

works of manual

and II is required.

suggested not to

es in the title

uation of Process

, in the course

experiment 9 and

logy. They also

experiments is

periments from

Lathe and Special

OF COURSES:

course on

ics from the

to Engineering

cial Intelligence

and Automation

3. Dr. S. Vinodh suggested renaming the title of Vertical on Manufacturing Sciences as Manufacturing Technology.
4. Dr. S. Vinodh suggested that Digital Manufacturing and ToT be shifted to the vertical on Robotics and Automation from the vertical on Engineering Management.
5. Mr. N. Mani suggested removing Manufacturing Planning in vertical six and have it as Manufacturing Cost Estimation.
6. Dr. G. Ramkumar suggested offering the course on Finite Element Analysis (FEA) as program core.
7. Dr. A. Valan Arasu suggested revising the title of the vertical on Engineering Management, if it is offered as a Minor Vertical to other programs.

GENERAL DISCUSSIONS:

1. Expert members insisted on five units by reassembling the units such that two and half units covered for mid-semester tests.
2. Dr. S. Vinodh suggested giving insights of topics (that are removed in the syllabus) from an application point of view in the class.
3. Dr. A. P. Sathiyagnanam opined that six COs are too many for the courses.
4. Dr. B. Gayathri suggested offering the mandatory course on "Environment Science" in the second semester instead of first semester.
5. Dr. S. Vinodh suggested offering the course on Electrical Machines and Drives earlier, preferably in third or fourth semester.
6. Mr. N. Mani suggested introducing the students to robotic welding in the laboratory course on Molding and Welding.
7. Mr. N. Mani suggested educating students on

Thermal Cutting.

8. Mr. N. Mari suggested having small projects from the third semester onwards, and integrating these for the final year project.
9. Dr. S. Vinodh opined that giving micro projects every semester is very difficult for students and that a mini project is a feasible solution. He added that the students can be asked to carry out a micro project and mini project during their vacation after second and third year respectively.
10. Dr. A. Valan Arasu suggested that the unit pattern in syllabus may be removed, since Course Outcomes replace the units in OBE style.
11. Dr. A.P. Sathiyagnanam expressed his concern on rearranging the contents into four units since it does not align with the format followed in Anna University. He suggested exploring alternative to facilitate the ease of learning.
12. Dr. S. Vinodh suggested to ensure that no topics are missed during this reorganization.
13. The Board would like to record that
 - The number of units has been reduced to four from five in all the courses for all semesters. However, it is insisted that a minimum of five units shall be followed.
 - Some topics have been removed in some of the courses in the process of rearranging the contents from five units to four units. It is felt that this has made the contents weak.
 - The need for rearranging the contents was not well defended and the expert members expressed their concern on the same.

Dr. Raju
conclude

Dr. Rajesh Ranganathan proposed the Vote of Thanks and concluded the meeting.



CHAIRMAN

Board of Studies

Dr. N. Rajam Ramasamy, Ph.D.,
Head i/c,
Department of Mechanical Engineering,
Coimbatore Institute of Technology,
Coimbatore - 641 014, INDIA.

projects from
integrating these

20 projects every
and that a
be added that
out a micro
in vacation after

re unit pattern
Course Outcomes

his concern on
units since it
followed in
doing alternative

that no topic
ion.

it
duced to four
all semesters,
minimum of five

in some of the
nging the contents
It is felt that

ments was not
members expressed