

NANDHA ENGINEERING COLLEGE, ERODE - 638 052

(An Autonomous Institution, Affiliated to Anna University Chennai and

Approved by AICTE New Delhi)

MINUTES OF THE 5th BOARD OF STUDIES MEETING

Name of the Body	Board of Studies
Name of the Board	Mechanical Engineering
Meeting No.	05
Date & Time	29.04.2017, 10.00 am
Venue	Simulation Laboratory Nandha Engineering College (Autonomous) Erode - 638 052

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Minutes of 5th Board of Studies Meeting (BoS) held on 29.04.2017

The 5th Board of Studies (BoS) meeting was held on 29.04.2017 by 10.00am at Simulation Laboratory, Nandha Engineering College, Erode - 52. The members attended the meeting are given in **Annexure I**.

Dr. M. Easwaramoorthi, Chairman (BOS) and Professor & Dean, Mechanical Engineering Chaired the meeting and welcomed all the members to the fifth BoS meeting. He welcomed and introduced the new members of BoS which is constituted for the academic year 2017-18 & 2018-19. After the brief introduction, the agenda items listed were taken up for discussion and the following resolutions were passed.

AGENDA	
Item 5.01	To note and approve the minutes of 4 th BoS meeting of Mechanical Engineering held on 20.2.2016.
Item 5.02	Amendments in Regulation R15 for UG programme for review
Item 5.03	To review and approve the curriculum & syllabi of 5 th and 6 th semesters under Regulation R15 for the batch of students admitted from the year 2015 - 16 onwards in B.E., Mechanical Engineering programme
Item 5.04	✓ To review and ratify the one credit courses conducted for the students in B.E., Mechanical Engineering programme during the academic year 2016 - 17. ✓ To approve the proposed one credit courses for the academic year 2017 - 18
Item 5.05	To review and comment on Regulation R17 for UG programme
Item 5.06	To review and approve the curriculum & syllabi of 1 st to 4 th semesters under Regulation R17 for the batch of students admitted in B.E., Mechanical Engineering programme from the year 2017 - 18 onwards
Item 5.07	To review and comment on Regulation R17 for PG programme
Item 5.08	To review and approve the curriculum & syllabi of 1 st to 4 th semesters under Regulation R17 for the batch of students admitted in M.E., Engineering Design programme from the year 2017 - 18 onwards
Item 5.09	To approve panel of Examiners for question paper setting, valuation and laboratory examinations
Item 5.10	Any other matter

The proceedings of BoS started. The discussions and resolutions are recorded as follows:

Item 5.01	To note and approve the minutes of 4 th BoS meeting of Mechanical Engineering held on 20.2.2016.
Discussion	The minutes of 4 th BoS meeting were reviewed. There were no comments from members.
Resolution	Resolved to approve the minutes of 4 th BoS meeting.

Item 5.02	Amendments in Regulation R15 for UG programme for review	
Discussion	<ul style="list-style-type: none"> Dr. Vela Murali (Anna University): Expressed the concern about changing letter of grade and difficulties in issuing mark sheets from 1st semester onwards. Dr. P. Karthikeyan (PSG) & Dr. Rajesh Ranganathan (CIT): Appreciated the efforts taken by the college to bring in amendment clauses in R15 and also clarified that the changes in regulations as per UGC guidelines are inevitable. 	Chairman BoS accepted the difficulties in changing the letter of grade and justified the need for change in line with UGC guidelines.
Resolution	The BoS resolved and recommended to the Academic council for approval	

Item 5.03	To review and approve the curriculum & syllabi of 5 th and 6 th semesters under R15 for the batch of students admitted from the year 2015 - 16 onwards in B.E., Mechanical Engineering programme	
Discussion	<p>5th Semester: Dr. Vela Murali (Anna University) suggested to</p> <ul style="list-style-type: none"> Include one textbook by international author(s) and another textbook by Indian author(s) Order the reference books by considering the contents of the book in relevance to the syllabus Have the number of experiments for laboratories uniformly 	<p>✓ Textbook & reference books are included</p> <p>✓ Modified</p>
	<p>5th Semester:</p> <p><u>Course-1: Mechatronics</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-2: Design of Machine Elements</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-3: Heat and Mass Transfer (Theory + Lab)</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-4: Dynamics of Machinery</u></p> <ul style="list-style-type: none"> Dr. Vela Murali (Anna University) advised to include a textbook on Theory of Machines and Mechanisms by John J. Uicker et al. <p><u>Course-5: Mechatronics Laboratory</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-6: Kinematics and Dynamics Laboratory</u></p> <ul style="list-style-type: none"> No comments 	<p>✓ Included</p>

	<p>6th Semester:</p> <p><u>Course-1: Power Plant Engineering</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-2: Design of Transmission Systems</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-3: Finite Element Analysis</u></p> <ul style="list-style-type: none"> Dr. Vela Murali (Anna University) advised to include a textbook on The Finite Element Method in Engineering by S.S. Rao <p><u>Course-4: Metrology and Measurements (Theory + Lab)</u></p> <ul style="list-style-type: none"> Dr. Vela Murali (Anna University) advised to add a textbook on Mechanical Measurements by Thomas G. Beckwith Dr. P. Karthikeyan (PSG): suggested to provide suitable weightage to Metrology and Measurements contents. Mr.S.Sriraman (TAFE) insisted to include topic on CMM under theory and laboratory courses <p><u>Course-5: Computer Aided Analysis Laboratory:</u></p> <ul style="list-style-type: none"> Dr. Vela Murali (Anna University) suggested to include experiments on CFD and deflection of beams simulation <p><u>Course-6: Comprehension:</u></p> <ul style="list-style-type: none"> Dr. Vela Murali (Anna University) insisted to provide standard reference course material for preparation 	<p>✓ Included</p> <p>✓ Added</p> <p>✓ Will be provided</p> <p>✓ Included</p> <p>✓ Included</p> <p>✓ Will be provided</p>
	<p><u>Professional Electives:</u></p> <p><u>Course-1: Composite Materials</u></p> <ul style="list-style-type: none"> Dr. Vela Murali (Anna University) suggested to rename the course name into "Composite Materials and Mechanics" <p><u>Course-2: Design for Manufacturing</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-3: Engineering Failure Analysis</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-4: Mechanical Vibrations</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-5: Micro Electro Mechanical Systems</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-6: Product Design</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-7: Tool Design</u></p> <ul style="list-style-type: none"> No comments 	<p>✓ Renamed</p>

<p><u>Course-8: Tribology</u></p> <ul style="list-style-type: none"> • No comments <p><u>Course-9: Automobile Engineering</u></p> <ul style="list-style-type: none"> • Mr. S.Sriraman (TAFE) advised to rename the elective course "Automobile Engineering" into "Advanced Automobile Engineering" • He also suggested to conduct elective courses by the industry experts and attend online courses conducted by reputed universities • Dr. P.Karthikeyan (PSG) suggested to include textbooks on Automobile Engineering Vol.1 & Vol.2 by Kirpal Singh <p><u>Course-10: Computational Fluid Dynamics</u></p> <ul style="list-style-type: none"> • Dr. P.Karthikeyan (PSG) advised to revise the contents under Unit III and Unit IV <p><u>Course-11: Cryogenic Engineering</u></p> <ul style="list-style-type: none"> • No comments <p><u>Course-12: Fuels and Combustion</u></p> <ul style="list-style-type: none"> • No comments <p><u>Course-13: Gas Dynamics and Jet Propulsion</u></p> <ul style="list-style-type: none"> • No comments <p><u>Course-14: Internal Combustion Engines</u></p> <ul style="list-style-type: none"> • No comments <p><u>Course-15: Refrigeration and Air Conditioning</u></p> <ul style="list-style-type: none"> • No comments <p><u>Course-16: Solar Thermal Systems</u></p> <ul style="list-style-type: none"> • No comments <p><u>Course-17: Nanotechnology</u></p> <ul style="list-style-type: none"> • No comments <p><u>Course-18: Non-Destructive Evaluation and Testing</u></p> <ul style="list-style-type: none"> • No comments <p><u>Course-19: Rapid Manufacturing Technologies</u></p> <ul style="list-style-type: none"> • Dr. Rajesh Ranganathan (CIT) suggested renaming the course "Rapid Manufacturing Technologies" into "Additive Manufacturing Processes". 	<ul style="list-style-type: none"> ✓ Renamed ✓ Will be put forth in Academic council for approval ✓ Textbooks added ✓ Contents Revised ✓ Renamed
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	<p><u>Course-20: Engineering Economics and Cost Analysis</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-21: Industrial Engg. and Operations Research</u></p> <ul style="list-style-type: none"> Dr. Rajesh Ranganathan (CIT) suggested to have individual courses on Industrial Engineering & Management, Operations Research respectively under elective courses <p><u>Course-22: Lean and Agile Manufacturing</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-23: Metal Casting Technology</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-24: Metal Forming Technology</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-25: New Venture Planning and Management</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-26: Industrial Robotics</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-27: Process Planning and Cost Estimation</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-28: Surface Engineering</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-29: Total Quality Management and Reliability</u></p> <ul style="list-style-type: none"> No comments <p><u>Course-30: Welding Engineering</u></p> <ul style="list-style-type: none"> No comments 	<p>✓ Modified as Industrial Engg and Mgmt elective course</p>
Resolution	Resolved to approve the curriculum & syllabi of 5 th and 6 th semesters under Regulation R15 for the batch of students admitted from the year 2015 - 16 onwards in B.E., Mechanical Engineering course programme.	
Item 5.04	<ul style="list-style-type: none"> To review and ratify the "one credit courses" conducted during 2016-17 to 2nd year (3rd semester) and 3rd year (5th Semester) students of B.E., Mechanical Engineering To approve the proposed one credit courses for the academic year 2017 - 18 	
Discussion	Dr. Vela Murali (Anna University) insisted to include one credit courses on Digital systems Management, Electronic Engine Management System, Maintenance Engineering, Marketing Management	✓ Topics included
Resolution	<ul style="list-style-type: none"> Resolved to approve the titles of "one credit courses" conducted during 2016-17 Resolved to approve the proposed one credit courses for the academic year 2017 - 18 	

Item 5.05	To review and comment on Regulation R17 for UG programme	
Discussion	Dr. Vela Murali (Anna University) & Dr. Rajesh Ranganathan (CIT): Appreciated the efforts taken by the college to implement Choice Based Credit System (CBCS) in R17 and its key features like Reappearance, Redo, Add or Drop courses	
Resolution	Resolved to approve the Regulation R17	
Item 5.06	To review and approve the curriculum & syllabi of 1 st and 2 nd semesters under Regulation R17 for the batch of students admitted from the year 2017 - 18 onwards in B.E., Mechanical Engineering programme.	
Discussion	1st Semester: Course-1: Engineering Graphics <ul style="list-style-type: none"> Dr. Vela Murali (Anna University) insisted to include topics on free hand sketching of plane curves and perspective projection of cone, pyramid & prism Dr. Vela Murali (Anna University) suggested to include a textbook on Engineering Drawing by N.S. Parthasarathy and Vela Murali Course-2: Engineering Practices Laboratory <ul style="list-style-type: none"> No comments 	✓ Topics included ✓ Textbook included
	2nd Semester: Course-1: Engineering Mechanics <ul style="list-style-type: none"> Dr. Vela Murali (Anna University) suggested to include a textbook on Engineering Mechanics by Vela Murali Also, he suggested to include a text book on Vector Mechanics for Engineers: Statics and Dynamics by Beer and Johnston Course-2: Computer Aided Modeling and Drafting Laboratory <ul style="list-style-type: none"> Mr. S.Sriraman (TAFE) insisted to keep exercises on manual drafting of 2D models and shift the 3D models to Computer Aided Machine Drawing in consecutive semester. 	✓ Textbooks included ✓ Exercises included
Resolution	Resolved to approve the curriculum & syllabi of 1 st and 2 nd semesters under Regulation R17 for the batch of students admitted from the year 2017 - 18 onwards in B.E., Mechanical Engineering course	
Item 5.07	To review and approve the Regulation R17 for PG programme	
Discussion	The BoS members noted the contents of the Regulation R17	
Resolution	Resolved to approve the Regulation R17 for PG programme	
Item 5.08	To review and approve the curriculum & syllabi of 1 st to 4 th semesters under Regulation R17 for the batch of students admitted from the year 2017 - 18 onwards in M.E., Engineering Design course	
Discussion	<ul style="list-style-type: none"> Dr. Vela Murali (Anna University) suggested to include a laboratory course on "Vibration Laboratory" and "Advanced 	✓ Will be put forth in academic council for

	Strength of Materials Laboratory" suitably in M.E Engineering Design course	approval
	<ul style="list-style-type: none"> • Dr. P.Karthikeyan (PSG) suggested to include Employability Enhancement Courses to PG also. 	
Resolution	Resolved to approve the curriculum & syllabi of 1 st to 4 th semesters under Regulation R17 for the batch of students admitted from the year 2017 - 18 onwards in M.E., Engineering Design course	
Item 5.09	To approve the panel of Examiners for question paper setting, valuation and laboratory examinations	
Discussion	The BoS members recommended to prepare the panel of examiners based on their specialization viz., Design Engineering, Thermal Engineering, Manufacturing Engineering and Management	
Resolution	Resolved to approve the panel of Examiners for question paper setting, valuation and laboratory examinations	
Item 5.10	Any other matters – Nil	

Finally, Prof.M.K. Murthi, Head of the Department thanked all the members for their active participation

Date: 29.04.2017


Dr. M. Easwaramoorthi
(Chairman, BoS / Mechanical Engineering)

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