

NANDHA ENGINEERING COLLEGE, ERODE – 638 052

(An Autonomous Institution, Affiliated to Anna University Chennai and

Approved by AICTE New Delhi)

Mr. Ganeshan
SN

MINUTES OF THE 3rd BOARD OF STUDIES MEETING

Name of the Body	Board of Studies
Name of the Board	Mechanical Engineering
Meeting No.	03
Date & Time	11.04.2015, 10.00 am
Venue	Board Room Nandha Engineering College (Autonomous) Erode – 638 052

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Minutes of 3rd Board of Studies Meeting (BoS) held on 11.04.2015

The 3rd Board of Studies (BoS) meeting was held on 11.04.2015 by 10.00am at Board Room, Nandha Engineering College, Erode - 52. The members attended the meeting are given in **Annexure I**.

The Chairman of the BoS, Dr.M.Easwaramoorthi, Professor & Dean, Mechanical Engineering welcomed the members for the meeting. Then, the items listed below were taken for discussion.

AGENDA	
Item 3.01	To note and approve the minutes of 2 nd BoS meeting, Mechanical Engineering held on 01.02.2014.
Item 3.02	To note the modified constitution of the BoS Mechanical Engineering nominated by the Academic Council, Vice-Chancellor of Anna University, Chennai and Principal of the College.
Item 3.03	To note and discuss the letter received from Anna University, Chennai related to UGC guidelines on adoption of Choice Based Credit System (CBCS)
Item 3.04	To note improvements/additions in academic facilities and other achievements of the department after second meeting of BoS.
Item 3.05	To approve amendments in Regulations R13 (UG)
Item 3.06	To review and approve the curriculum, Syllabi and continuous assessment pattern under Regulation R13 for 5 th & 6 th Semesters of B.E., Mechanical Engineering for the batch of students admitted in the year 2013-14. (Academic Year 2015 - 16).
Item 3.07	<ul style="list-style-type: none">• To consider the curriculum and syllabi of 3rd & 4th semesters of B.E., Mechanical Engineering and continuous assessment pattern under Regulation R13 and follow the same for the batch of students admitted in the year 2014-15.• To approve the revisions in LCD-1 & LCD-2 syllabi.
Item 3.08	To note and approve the Regulations R15 for UG & PG courses
Item 3.09	To review and approve the curriculum, Syllabi and continuous assessment pattern under Regulation R15 for 1 st and 2 nd Semesters of B.E., Mechanical Engineering for the batch of students who will be admitted in the year 2015-16.
Item 3.10	To review and approve the curriculum, Syllabi and continuous assessment pattern under Regulation R15 for all four Semesters of M.E., Engineering Design for the batch of students who will be admitted in the year 2015 -16.
Item 3.11	To review and approve Panel of examiners and Question paper setters
Item 3.12	Any other matters

The proceedings of BoS started and the minutes of the meeting are recorded as follows:

Item -3.01	To consider and approve the minutes of 2 nd BoS meeting, Mechanical Engineering held on 01.02.2014.	
Resolution	Resolved to approve the minutes of 2 nd BoS meeting.	
Item - 3.02	To note the modified constitution of the BoS Mechanical Engineering nominated by the Academic Council, Vice-Chancellor of Anna University, Chennai and Principal of the College.	
Resolution	BoS noted the modified constitution of the BoS of Mechanical Engineering.	
Item - 3.03	To note and discuss the letter received from Anna University, Chennai related to UGC guidelines on adoption of Choice Based Credit System (CBCS)	
Resolution	BoS noted the contents of the letter received from Anna University, Chennai related to UGC guidelines on adoption of Choice Based Credit System (CBCS)	
Item - 3.04	To note improvements/additions in academic facilities and other achievements of the department after second meeting of BoS.	
Resolution	BoS members were briefed about improvements/additions in academic facilities and other achievements of the department after second BoS. These improvements were noted and appreciated by BoS.	
Item - 3.05	<p>To approve the amendments in Regulations R13 (UG)</p> <ul style="list-style-type: none"> • Clause 5.1(III): Introduction of elective subjects as Professional Electives (PE), Open Electives (OE) and Self-Study Electives (SSE) for Third and Final years. • Clause 5.1(V): Allotting credits for In-plant training (IPT) and Extra-Curricular Activities (ECA) like NCC / NSS / NSO / YRC/etc., for skill development during 7th Semester • Clause 5.6 & 5.7: Guidelines for selecting electives under Choice Based Credit System (CBCS). • Clause 5.8: Introduction of one Credit Courses and guidelines. • Clause 5.9: Introduction of Project Based Learning (PBL) subjects. • Clause 5.10: Introduction of Higher Order Thinking (HOT) question patterns. • Clause 5.11: Value Added Courses (VAC). • Clause 20: Proctor Scheme • Clause 24: Malpractices in Continuous Assessment Tests (CAT) and examinations 	
Discussion	<ul style="list-style-type: none"> • Mr.R.Vasu suggested to add emerging topics like Safety Engineering, Energy Management, Optimization Techniques, Lean Management, and Quality Management & Sustainability in all electives. • Dr.L.Vijayaragavan suggested to specify the maximum number of students to register for Open Electives (OE) • Dr. R. Vasudevan suggested to group the electives semester wise. 	<p>✓ Added</p> <p>✓ Specified as Maximum 72 students per subject</p>
Resolution	Resolved to approve the amendments in R13.	

Item - 3.06	To review and approve the curriculum, Syllabi and continuous assessment pattern under Regulation R13 for 5 th & 6 th Semesters of B.E., Mechanical Engineering for the batch of students admitted in the year 2013-14 (Academic Year 2015 - 16).	
Discussion	<p>5th Semester:</p> <p><u>Mechatronics:</u> Dr. R. Vasudevan suggested</p> <ul style="list-style-type: none"> • to add basic microprocessor and microcontroller in Mechatronics. • Change the term "Performance terminology" into specific title <p>• <u>Heat and Mass Transfer :</u></p> <ul style="list-style-type: none"> ➤ Dr. E. Natarajan recommended to change the name of Unit-I "Conduction - I" as "Steady State Heat Conduction" and Unit-II "Conduction-II" as "Conduction with Heat Generation". ➤ Dr. E. Natarajan also suggested put radiation part before boiling and condensation in Unit-IV. <p>• <u>Design of Machine Elements:</u> Dr.R.Vasudevan suggested to restructure Unit IV and change the Unit-V title as "Machine Elements". He also suggested to add "Design of Rivets". Dr.L.Vijayaragavan suggested to follow standard books.</p> <p>• <u>Ethics and Cyber Security :</u>Dr.L.Vijayaragavan asked to ensure the coverage of syllabus in text book & add more case studies.</p> <p>• <u>Laboratory Courses :</u> Dr. E. Natarajan suggested to have uniform numbers of experiments in all laboratories.</p> <p>• <u>Rapid Manufacturing Technologies :</u>Mr. R. Vasu suggested to take the students to field visit to see the 3D printing.</p> <p>• Dr. E. Natarajan- Suggested to put one text book and minimum 4 reference books uniformly for all subjects.</p> <p>• Dr. R. Vasudevan suggested to rename the course title "Product Design for Manufacturing" into "Design for Manufacturing".</p> <p>• <u>Refrigeration and Air Conditioning:</u> Dr. E. Natarajan advised to change the tile of Unit-I and remove content on "Aircraft Refrigeration systems" in Unit-I.</p> <p>• <u>Power Plant Engineering :</u> Dr. E. Natarajan recommended to put "Power Plant Economics" in Unit-V</p> <p>• <u>Verbal, Aptitude, Reasoning Training-1</u> Dr.E.Natarajan suggested to rewrite "Odd man out" appropriately in Verbal Aptitude and Reasoning.</p>	<ul style="list-style-type: none"> ✓ Added ✓ Titles changed ✓ Modified ✓ Titles changed and a topic on Design of Rivets added ✓ Text books specified & case studied added ✓ 10 to 12 numbers of experiments per lab are specified ✓ Inplant Training or Industrial Visit will be arranged ✓ Indicated ✓ Course title changed ✓ Topic removed ✓ Modified ✓ Modified

Discussion	<p>6th Semester:</p> <ul style="list-style-type: none"> • <u>Turbo Machinery</u> : Dr.E.Natarajan suggested to add topics on "Compressible Fluid Flow" • <u>Industrial Engineering and Operations Research</u>: Mr.M.Vinoth recommended to add introductory topics on Lean Manufacturing, Visual Controls. • <u>Engineering Economics and cost analysis</u> : <ul style="list-style-type: none"> ➤ Mr.R.Vasu suggested to add activity based costing. ➤ Mr.C.Sathyamurthy, suggested to have case studies on reading balance sheet and profit & Loss account. • <u>Non destructive testing and evaluation</u> Mr.C.Sathyamurthy recommended to add a topic on thermography • <u>Computational Fluid Dynamics</u> :Dr.E.Natarajan suggested to put appropriate textbook. • <u>Automobile Engg</u> :Mr.R.Vasu recommended to include topics on automobile safety standards, ARAI standards 	<ul style="list-style-type: none"> ✓ Topic on "Compressible flow through constant & variable area ducts are added" ✓ Topics added ✓ Topic brought under content beyond syllabus ✓ Topic brought under content beyond syllabus ✓ Topic brought under content beyond syllabus ✓ Textbook added ✓ Topics added
Resolution	Resolved to approve the curriculum, Syllabi and continuous assessment pattern under Regulation R13 for 5 th & 6 th Semesters of B.E., Mechanical Engineering for the batch of students admitted in the year 2013-14	
Item - 3.07	<ul style="list-style-type: none"> • To consider the curriculum and syllabi of 3rd & 4th semesters of B.E., Mechanical Engineering and continuous assessment pattern under Regulation R13 and follow the same for the batch of students admitted in the year 2014-15. 	
Resolution	Resolved to follow.	
Item 3.08	To note and approve the Regulations R15 for UG & PG courses.	
Resolution	Resolved to approve R15 regulations for UG & PG.	
Item 3.09	To review and approve the curriculum, Syllabi and continuous assessment pattern under Regulation R15 for 1 st and 2 nd Semesters of B.E., Mechanical Engineering for the batch of students who will be admitted in the year 2015-16.	
Discussion	<ul style="list-style-type: none"> • Dr.E.Natarajan insisted to have the course "Principles of Energy Conversion" as elective subject and offer "Engineering Mechanics" in second semester. • Dr.R.Vasudevan suggested to modify the title of the subject Fundamentals of Mechanical Engineering as Basics of Mechanical Engineering. Also suggested to modify the contents in Unit-V. 	<ul style="list-style-type: none"> ✓ Course Changed ✓ Modified
Resolution	Resolved to approve the curriculum, Syllabi and continuous assessment pattern under	

	Regulation R15 for 1 st and 2 nd Semesters of B.E., Mechanical Engineering	
Item 3.10	To review and approve the curriculum, Syllabi and continuous assessment pattern under Regulation R15 for all four Semesters of M.E., Engineering Design for the batch of students admitted in the year 2015 -16.	
Discussion	<ul style="list-style-type: none"> • Dr. E. Natarajan recommended to rename the courses under "Core Electives" into "Professional Electives". • Dr.L.Vijayaragavan suggested that the courses "Industrial visit & Technical seminar", "Integrated Manufacturing Systems" , "Modeling of Machine Elements Laboratory" should be renamed as "Technical seminar", "Computer Integrated Manufacturing Systems" and "Computer Aided Modeling Laboratory" respectively. • Dr.L.Vijayaragavan also mentioned that the courses "Applied Mathematics for Engineering Design", "Finite Element Methods in Mechanical Design" should be renamed with title related to specific subject content. • Dr. L. Vijayaragavan suggested to avoid the electives in self study mode for PG courses. • Dr.R.Vasudevan insisted to revise the syllabus for "Experimental stress analysis" by considering recent academic and industrial needs. • Mr.R.Vasu recommended to include the topics like Design for Six Sigma, Quality Function Deployment etc., • Dr.L.Vijayaragavan suggested not to specify the name of software in the Computer Aided Modeling Laboratory syllabus 	<ul style="list-style-type: none"> ✓ Renamed ✓ Renamed ✓ Renamed ✓ Changed ✓ Revised ✓ Included in the electives. ✓ Changed
Resolution	Resolved to approve the curriculum, Syllabi and continuous assessment pattern under Regulation R15 for all four Semesters of M.E., Engineering Design	
Item 3.11	To review and approve Panel of examiners and Question paper setters	
Resolution	Resolved to approve the Panel of examiners and Question paper setters	
Item 3.12	Any other matters	
	Nil	

The Chairman thanked all the members for their active participation.

Date: 11.04.2015


 11/04/15
Dr.M.Easwaramoorthi
 (Chairman, BoS /Prof & Dean /Mech)



NANDHA ENGINEERING COLLEGE
(Autonomous Institution)
Pitchandampalayam, Erode To Perundurai Road, Erode-638 052

BOARD OF STUDIES

Academic Year: 2015 - 16

Board	Mechanical Engineering	Meeting No.	3	R2013 & R2015
Venue	Block 3, Board Room, 111A, NEC	Date & Time	11 th Apr 2015, 10.00 AM	

MEMBERS ATTENDED

Sl.No	Members	Representation	Signature
1	Dr. Easwaramoorthi.M, Professor & Dean / MECH	Chairman	
2	Dr.E.Natarajan, Professor, Institute of Energy Studies, Anna University, Chennai - 600 025	University Nominee	
3	Dr.L.Vijayaraghavan, Professor, Mechanical Engineering, Indian Institute of Technology Madras, Chennai	Expert Nominee (Nominated by Academic Council)	
4	Prof. R.Vasudevan Professor & Programme / Design Division Chair, VIT University, Vellore Campus, Vellore - 632 014	Expert Nominee (Nominated by Academic Council)	
5	Mr. R.Vasu Senior General Manager / Quality Systems TVS - Brakes India Limited, Chennai - 600 050	Member (Expert from Industry)	
6	Mr.C.Sathyamurthy, General Manager - Foundry, AQUASUB Engineering, Coimbatore - 641 034	Member (Expert from Industry)	
7	Mr. M.Vinoth, Senior Lean Manufacturing Consultant, Head of Tamil Nadu Operations, Savoir faire Management Services Pvt Ltd, Mumbai - 400 705	Alumni	



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8	Prof.M.K.Murthi, Professor / Mech	Member	<i>M.K.Murthi</i> 11/12/15
9	Prof.M.Muthukumar, Professor / Mech	Member	<i>M.Muthukumar</i> 11/12/15
10	Mr.V.Chandramohan, Associate Professor / Mech	Member	<i>V.Chandramohan</i>
11	Mr.V.N.Loganathan, Associate Professor / Mech	Member	<i>V.N.Loganathan</i>
12	Mrs.A.D.Latha, Associate Professor / Mech	Member	<i>A.D.Latha</i>
13	Mr.K.Ganesan, Associate Professor / Mech	Member	<i>K.Ganesan</i> 11/12/15
14	Mr.M.Shanmugam, Associate Professor / Mech	Member	<i>M.Shanmugam</i>
15	Mr.M.Sengottaiyan, Assistant Professor / Mech	Member	<i>M.Sengottaiyan</i>
16	Mr.S.Eswaran, Assistant Professor / Mech	Member	<i>S.Eswaran</i>
17	Mr.K.Pradeep Kumar, Assistant Professor / Mech	Member	<i>K.Pradeep Kumar</i>