



**Annasaheb Dange College of Engineering and  
Technology, Ashta  
An Autonomous Institute**

**Minutes of Meeting**

**BOS Meeting: Second Year B.Tech (170 Credits)  
& Final Year B.Tech (192 Credits)**

**Date – 14<sup>th</sup> December, 2019, Saturday**

**DEPARTMENT OF MECHANICAL ENGINEERING**



Sant Dnyaneshwar Shikshan Sanstha's  
Annasaheb Dange College of Engineering and Technology  
Ashta, (District: Sangli)  
Department of Mechanical Engineering  
**BOS: MINUTES OF MEETING**



## BOS Meeting Report& Minutes of Meeting

### Board of Studies (BOS) Meeting

**Day & Date – Saturday, 14<sup>th</sup> December, 2019**

Venue: Civil Seminar Hall

Time: 10:00 am to 1:30 pm

### Members present for the Meet

Sr. No	Name of Expert	Designation
1	Dr.L.Y.Waghmode	Chairman (HoD)
2	Dr. S. S. Mohite	Academic Expert-1
3	Dr. V. D. Shinde	Academic Expert-2
4	Mr. Ganeshprasad Nikam	Alumni Representative
5	Mr. Amod Kulkarni	Industry Representative
6	Dr. S. P. Chavan	Member
7	Dr. A. B. Shinde	Member
8	Dr. P. D. Kulkarni	Member
9	Dr.S.S.Desai	Member
10	Mr. A. M. Pirjade	Member
11	Mr. V. B. Patil	Member
12	Mr. M. M. Jadhav	Member
13	Mrs. J. S. Jadhav	Member
14	Mr. A. A. Jadhav	Member
Sr.	Name of Expert	Designation

No		
15	Mr. P. S. Daingade	Member
16	Mr. R. R. Gaji	Member
17	Mr. A. R. Mane	Member
18	Mr. Y. P. Ballal	Member
19	Mr. V. S. Ganachari	Member
20	Mr. G. B. Pawar	Member
21	Mr. K. J. Burle	Member
22	Mr. G. N. Rakate	Member
23	Mr. H. H. Patil	Member
24	Mr. S. A .Mullya	Member
25	Mr. S. V. Patil	Member
26	Mr. V. G. Salunkhe	Member
27	Mr. P. V. Mali	Member
28	Mr. K. I. Nargatti	Member
29	Mr. P. M. Wadekar	Member
30	Mr. S. S .Bhosale	Member
31	Mr. G. M. Chendke	Member
32	Mr. S. L. Chittewar	Member
33	Mr. S. T. Ghutukade	Member
Sr.	Name of Expert	Designation



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No		
34	Mr. V. S. Gondkar	Member
35	Mr. R. T. Patil	Member
36	Mr. S. S. Chavan	Member
37	Mr. P. B. Patil	Member
38	Mr. A.V. Patil	Member
39	Mr. A. S. Tate	Member

rNo	Name of Expert	Designation
40	Mr. S. V. Yadav	Member
41	Mr. P. B. Pawar	Member
42	Mr. P. R. Bhokare	Member
43	Mr. A.S. Dabhale	Member
44	Mr. S.V.Nishandar	Member
45	Mr.D.A.Mhamane	Member
46	Mr. M MBepari	Member

Agenda of the Meet

Sr. no.	Time	Particulars
1.	10:00am to 10:05am	SaraswatiPujan& Lighting lamp
2.	10:05am to 10:20 am	Felicitation of Guests
3.	10:20am to 10:30am	Welcome Speech -Dr. L.Y.Waghmode HOD, Mechanical Engineering Department
4.	10:30 am- 11:45 am	Review of S.Y.B. Tech Curriculum 170 Credits
5.	11:50 am - 1:20 pm	Review of Final Year .B. Tech Curriculum 192 Credits
6.	1:20 pm - 1:30 pm	Vote of thanks



  
H.O.D.  
Mechanical Engineering



## Minutes of Meeting

Dr. L. Y. Waghmode, Chairman (BOS) & Head of Mechanical Engineering Department chaired the meeting and welcomed all the members to the Board of Studies Meeting of the Department of Mechanical Engineering.

Dr. L. Y. Waghmode introduced the Department and presented the curriculum of Second Year B.Tech (170 Credits) & Final Year B.Tech (192 Credits), and requested the panel members to put forward their suggestions & recommendations.

### **The BOS members suggested to ponder over the following issues:**

1. For industrial visits course teacher must provide questionnaires' and students are supposed to write answers of asked question in industrial visit report.
2. For newly added courses; course teacher has to create interest among the students in first two lectures.
3. For newly added courses; literature referred by course teacher must be communicated to the paper setter.
4. Develop rapid prototyping laboratory.
5. Communication, Letter writing and chart reading is to be focused on.
6. To clarify the contents, emphasis can be given on videos while teaching.
7. Wherever applicable, analytical methods can be incorporated.
8. More number of Industrial visits are to be arranged.



  
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**Mechanical Engineering**



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**The detailed suggestions for different courses are summarized below:**

**Second Year B.Tech (170 Credits)- SEM-III**

Sr. No.	Course	Course Code	Suggestions
1.	Kinematics of Machines	1MEPC202	<ul style="list-style-type: none"><li>○ Add analytical method</li></ul>
2.	Thermodynamics	1MEPC203	<ul style="list-style-type: none"><li>○ Give importance to analytical method.</li><li>○ Add introduction to Mass balance/Heat balance and its applications.</li><li>○ For Unit 3: add types of steam, superheated and saturated, concept, theory and its applications.</li><li>○ Appropriate pressure of steam for different applications.</li><li>○ Velocity of steam. (Should not exceed more than 30 m/s).</li><li>○ For Unit 5: Turbine-use saturated steam.</li><li>○ For Unit 6: Performance of steam turbine, add how to improve performance, add theory of impact of quality of steam on turbine.</li><li>○ Add Rankine and modified Rankine cycle.</li></ul>
3.	Strength of Materials	1MEPC204	<ul style="list-style-type: none"><li>○ Add any software treatment.</li><li>○ Add assignment on deflection to calculate stress induced for simply supported beam with point load.</li><li>○ For torsion, experiment can be created with apparatus.</li></ul>
4.	Materials science and Metallurgy	1MEES205	Nil
5.	Manufacturing Processes & Machine Tools	1MEPC206	<ul style="list-style-type: none"><li>○ Add progression in development of machines, Machine tool transformation – state of art.</li><li>○ No bake sand molding can be included in CO<sub>2</sub> molding. Furon molding a new trend.</li><li>○ Lathe types are changing – lathe with turrets, live tools with sub – spindle and Y- axis.</li><li>○ Industries may be visited.</li><li>○ Abrasive Jet Machining</li></ul>
6.	Kinematics of Machines	1MEPC251	<ul style="list-style-type: none"><li>○ Add graphical simulation/computational tool using any software such as ADAMS.</li></ul>



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	Laboratory		
7.	Material science & Metallurgy Laboratory	1MEES252	<ul style="list-style-type: none"><li>○ Remove analysis word from experiment number 1.</li><li>○ Add hard/soft materials. For different materials tests can be conducted and graphs/properties can be visualized.</li><li>○ Industrial visit for metal heat treatment, forging shops.</li><li>○ Weightage to powder metallurgy can be reduced and can be given to carbide tool manufacturing.</li><li>○ Add Cold forming, hammering.</li></ul>
8.	Work shop Practice - II	1MEPC253	<ul style="list-style-type: none"><li>○ Give batch wise job for welding.</li><li>○ Remove pattern making job from curriculum.</li><li>○ Report preparation for welding operation by considering varying parameters must be added.</li><li>○ Different experiments for TIG and MIG welding must be introduced.</li><li>○ Male part of job preparation in workshop practice - II; Female part of job preparation in workshop practice - III can be performed for the job needed to be prepared on lathe machine.</li><li>○ Add performance on radial drilling machine.</li></ul>
9.	General proficiency Laboratory	1MEHS254	<ul style="list-style-type: none"><li>○ Letter writing,</li><li>○ Technical letter writing,</li><li>○ Gantt chart,</li><li>○ Pareto analysis,</li><li>○ Graphical tools.</li></ul>

**Second Year B.Tech (170 Credits) - SEM-IV**

Sr. No.	Course	Course Code	Suggestions
1.	Dynamics of Machines	1MEPC208	<ul style="list-style-type: none"><li>○ Add applications of gear trains with automotive power transmissions.</li><li>○ Example - Gyroscope in mobiles, accelerometers, MEMS gyroscopes.</li></ul>



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			<ul style="list-style-type: none"><li>○ In Unit 4 – add industrial visit for studying balancing.</li></ul>
2.	Fluid Mechanics	1MEPC209	<ul style="list-style-type: none"><li>○ For Unit 4 add advantages of Laminar flow.</li></ul>
3.	Design of Machine Elements-I	1MEPC210	<ul style="list-style-type: none"><li>○ Add Roller screw design</li></ul>
4.	Tools Engineering	1MEPC211	<ul style="list-style-type: none"><li>○ Hex cutting</li></ul>
5.	Metrology, Quality Control & Measurement	1MEPC212	<ul style="list-style-type: none"><li>○ Add calibration with master instrument available in FIE group. Facility can be availed by industrial visit to FIE research lab.</li></ul>
6.	Economics for Mechanical Engineers	1MEHS213	<ul style="list-style-type: none"><li>○ Contemporary issues must be covered.</li><li>○ Add reference books.</li><li>○ Questions based on journals.</li><li>○ Add breakeven analysis.</li><li>○ Unit 1 – Nature of Companies – Pvt. Ltd, proprietorship, public etc.</li><li>○ Non-banking financial sources.</li><li>○ Unit 3 – make separate heads for expenses.</li><li>○ Unit 5 – Add Profit loss statement.</li><li>○ Unit 6 – Add Asset to liability ratio, PBT, PAT.</li></ul>
7.	Dynamics of Machines Laboratory	1MEPC255	<ul style="list-style-type: none"><li>○ Show balancing chart available in automobile service center.</li></ul>
8.	Fluid Mechanics Laboratory	1MEPC256	Nil
9.	Metrology, Quality Control & Measurement Laboratory	1MEPC257	<ul style="list-style-type: none"><li>○ Add one more experiment on measuring instrument / Add industrial visit.</li></ul>
10.	CAD Laboratory	1MEPC258	<ul style="list-style-type: none"><li>○ Point load analysis to find deflection of beam</li></ul>
11.	Workshop Practice III	1MEPC259	<ul style="list-style-type: none"><li>○ For jig and fixture exercises, reserve at least six turns of practical.</li><li>○ Add GD &amp;T symbols on job drawing, jig and fixtures exercises sheets.</li><li>○ Casting hardness may be included and covered in industrial visit.</li></ul>



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Final Year B.Tech (192 Credits) - SEM-VII

Sr. No.	Course	Course Code	Suggestions
1.	Refrigeration and Air conditioning	OMEPC401	<ul style="list-style-type: none"><li>○ Give importance to real life examples.</li><li>○ Add importance, types and applications of insulation.</li><li>○ For unit 4 - Psychrometry use the link <a href="http://humcal.com/index.php">humcal.com/index.php</a></li><li>○ For unit 6 - Ideal velocity of air in duct, Discuss ASHRAE standards, Heat recovery system in recirculation of air, Importance of ventilation of air, Pressure drops in duct design, duct system for process industry, if possible add filter, add material of duct.</li></ul>
2.	Internal Combustion Engines	OMEPC402	<ul style="list-style-type: none"><li>○ Discuss new trends in engines.</li><li>○ Add applications of IC engines.</li><li>○ Unit 6 - discuss alternative fuels like CNG, Exposure towards Electric vehicle and Hybrid vehicles.</li><li>○ Include fuel pumps.</li></ul>
3.	Mechanical System Design	OMEPE403	<ul style="list-style-type: none"><li>○ Give case study for ergonomics, aesthetics.</li><li>○ Unit 5 and 6 - general terminology has been used. Give tangible examples and specify it.</li><li>○ Can think of exercise in ANSYS.</li><li>○ Add optimization technique in this subject</li><li>○ Add industrial visit.</li></ul>
4.	Advanced Welding Engineering	OMEPE404	<ul style="list-style-type: none"><li>○ To clarify contents give emphasis on videos while teaching / Add industrial visit.</li></ul>
5.	Design of thermal System & Optimization	OMEPE405	<ul style="list-style-type: none"><li>○ Discuss concept of air heater.</li></ul>
6.	Noise & Vibration	OMEPE406	Nil
7.	Non Destructive Testing	OMEPE407	<ul style="list-style-type: none"><li>○ Take help of ISNT chapter while teaching.</li></ul>
8.	Steam Engineering	OMEPE408	<ul style="list-style-type: none"><li>○ Add fuel efficiency. (GCV, NCV)</li><li>○ Add feed water recovery/ condensate recovery.</li></ul>





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			<ul style="list-style-type: none"><li>○ Add basics and types of steam.</li><li>○ Change sequence of topics.</li><li>○ Reduce contents of Topic 3 and Topic 5.</li><li>○ Combine topic 5 and 6 and add steam basics.</li><li>○ Deep study of enthalpy, entropy, latent heat, use of steam table.</li></ul>
9.	Industrial Management and Operation Research	0MEOE409	Nil
10.	Industrial Automation and Robotics	0MEOE410	<ul style="list-style-type: none"><li>○ Add Industry 4.0, IoT</li><li>○ Add pick and place gantries, multi machine automation, cycle time analysis, line balancing</li></ul>
11.	Mechanics of Fibrous Composites	0MEOE411	Nil
12.	Human values and Professional Ethics	0MEHS412	Nil
13.	Refrigeration and Air conditioning Laboratory	0MEPC451	Nil
14.	Internal Combustion Engines Laboratory	0MEPC452	Nil
15.	Noise & Vibration Laboratory	0MEPE453	Nil
16.	NDT Laboratory	0MEPE454	<ul style="list-style-type: none"><li>○ Experiment number 1 must be performed on engineering components.</li><li>○ Add experiment on leakage testing if possible.</li><li>○ Add industrial visit.</li></ul>
17.	Steam Engineering. Laboratory	0MEPE455	<ul style="list-style-type: none"><li>○ Add design of sample steam air heater.</li><li>○ Take blower experiment in Turbo machinery.</li><li>○ Arrange visit to Forbes Marshall.</li><li>○ Arrange minimum two industrial visits for subject.</li><li>○ Add one more experiment</li></ul>
18.	Project-I	0MEPR456	Nil



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**Final Year B.Tech (192 Credits) - SEM-VIII**

Sr. No.	Course	Course Code	Suggestions
1.	Industrial Engineering	OMEPC413	○ Add LIFO etc.
2.	Smart Materials	OMEPC414	○ Take precaution of literature availability.
3.	Vehicle Dynamics	OMEPE415	Nil
4.	Solar Technology	OMEPE416	Nil
5.	Vehicle Dynamics Laboratory	OMEPE457	Nil
6.	Solar Technology Laboratory	OMEPE458	○ For Experiment 1 make arrangement of Pyrometer. ○ For Experiment 3 make arrangement of concentric collector. ○ Take group activity for stand-alone system. ○ Take audit for college or industry.
7.	Project-II	OMEPR459	Nil

Prepared By  
BOS Meeting In charge

*Sudhar*



Approved by  
H.O.D  
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