



## VASAVI COLLEGE OF ENGINEERING (Autonomous)

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### DEPARTMENT OF MECHANICAL ENGINEERING

Minutes of the third meeting of Board of Studies, Mechanical Engineering Department, held at 11.00 AM on 19.03.2016 (Saturday) at the Department of Mechanical Engineering, Vasavi College of Engineering, Ibrahimbagh, Hyderabad.

#### Members Presents

Prof. G.V. Ramana Murthy	Chairman & Head
Dr. Jeevan Jaidi	OU nominee (BITS Hyderabad)
Prof. Sriram Venkatesh	Subject expert (OU Hyderabad)
Dr. B. Venkatesham	Subject expert (IIT Hyderabad)
Dr. N.K. Singh	Industry representative (BHEL R&D)
Dr. K. Kishore	Faculty member
Dr. T. Ramamohan Rao	Faculty member
Mr. K. Srinivasa Rao	Faculty member
Mr. P.V.Gopal Krishna	Faculty member
Mr. K.Veladri	Faculty member
Mr. V.B.S. Rajendra Prasad	Faculty member
Mr. B.Radha Krishna	Faculty member
Mr. J. Anjaneyulu	Faculty Member
Mr. S. Sreekrishna	Faculty member
Mrs. P.V.S. Subhashini	Faculty member
Mr. K.I. Spurgeon	Faculty member
Mr. D. Govinda Rao	Faculty member
Mr. B. Naga Manohar	Faculty member
Dr. A. Srinivas	Faculty member
Mr. S.Venkataiah	Faculty member
Mr. P. Venkateswara Rao	Faculty member
Mr. M. Sudhakar	Faculty member
Mr. B. Sandeep	Faculty Member
Mr. N.B. Samba Murthy	Faculty member
Mr. S. Venkateswarulu	Faculty member

The following members of Board of Studies could not attend the meeting

1. Mr. K. Pratap Singh Naik, PG Alumnus

Chairman welcomed the members and readout the agenda points for discussion.

**1. Finalization of scheme of instruction for 3<sup>rd</sup> year I & II Semesters.**

Chairman readout the scheme of instruction proposed for B.E. 3<sup>rd</sup> year I & II Semesters. The highlights of the scheme are given under.

- 1.1. A new course on Human Values and Professional Ethics-II (HS 3160) is proposed to be introduced as a course in the I-Semester. The Committee has gone through the requirements and agreed to introduce this course as a continuation to the course offered in II-Semester of B.E. 2<sup>nd</sup> year. The Chairman informed that though the Department has proposed to introduce HVPE-II in the I-Semester and shown in the scheme of instruction for the academic year 2016-17, it may be shifted to II-Semester of AY 2016-17 after accertaining the distribution of load uniformly accross institute for all the programmes.
- 1.2. The Department has proposed to introduce Dynamics of Machines Lab (ME 3031) in the I-Semester of 3<sup>rd</sup> year with effect from academic year 2016-17. The members expressed that the introduction of this lab in the curriculum is necessary. However the Committee suggested that this may be shifted to 2<sup>nd</sup> semester as theory is being taught in I-Semester.
- 1.3. The Department has proposed to introduce a new course on Mechanical Vibration ( ME 3071) in the 2<sup>nd</sup> semester of 3<sup>rd</sup> year with effect from AY 2016-17.
- 1.4. The Department proposed to discontinue the course on "Control Systems Theory" which earlier was being offered in the affilliated system. However the Committee suggested the few topics of this course may be introduced in the course on "Metrology and Instrumentation" which would be included in the scheme of instruction in the final year.
- 1.5. Finishing School-III for Soft Skills and Technical Skills are proposed to be introduced with code no. HS 3010 and ME 3120 respectively in I-semester of 3<sup>rd</sup> year from AY 2016-17. These courses are being introduced for the purpose of improving the abilities of the students for placement.
- 1.6. Finishing School-IV for Soft Skills and Technical Skills are proposed to be introduced with code no. HS 3020 and IT 2180 respectively in II-semester of 3<sup>rd</sup> year from AY 2016-17. These courses are being introduced for the purpose of improving the abilities of the students for placement.

***The approved scheme of instruction for 3<sup>rd</sup> year to be implemented from AY 2016-17 under Autonomy is given in Annexure-I***

**2. Syllabus finalization of B.E. 3<sup>rd</sup> year I & II Semesters.**

The Department has circulated the proposed syllabus for the courses to be offered in the I & II Semesters of 3<sup>rd</sup> year from academic year 2016-17. The following points have been discussed.

- 2.1. In the syllabus for ME 3010, Dynamics of Machines, rigid body dynamics has not been included in the affiliated mode. It has been suggested by the Committee that rigid body dynamics be introduced as a unit in place of the unit on vibrations as a separate course is being offered in the II-Semester on Mechanical Vibrations. Accordingly the proposed syllabus for Dynamics of Machines has been modified and approved. Further the topics have been re-arranged unitwise.

The learning resources have been updated after introducing the unit on rigid body dynamics.

- 2.2. A topic on welding defects has been introduced in unit-III of Manufacturing Processes (ME 3030).
- 2.3. The syllabus for ME 3120 in Finishing School-III (Technical Skills-III) had been reviewed in detail. Based on the discussions, syllabus has been reframed and approved.
- 2.4. Two new experiments have been introduced on submerged arc welding and injection moulding machine in Manufacturing Processes Lab (ME 3011). These two experiments require the procurement of new machinery and the Department has been directed to take necessary action immediately.
- 2.5. The Hydraulic Machinery and Systems Lab has been re-designated as Fluids and Hydraulic Machinery Lab (ME 3021). Five new experiments have been added in the area of Fluid Mechanics and the experiments in the area of Hydraulic Machines have been regrouped. With these modifications, the syllabus for Fluids and Hydraulic Machinery Lab has been approved.
- 2.6. A topic on selection of bearings using the data book has been introduced in the syllabus for the course on ME 3060 Machine Design. The learning resources have been updated.
- 2.7. A new course on Mechanical Vibrations (ME 3070) has been introduced considering the importance of vibrations in the area of Mechanical Engineering.
- 2.8. The syllabus for CAD / CAM (ME 3080) has been restructured and revised.
- 2.9. Earlier the course on Metal Cutting and Machine Tools Engineering was being offered during the 2<sup>nd</sup> semester. This has been rechristened as "Machine Tools and Metal Cutting" considering that Machine Tools precedes Metal Cutting. Accordingly the structure of the syllabus has been revised and topics on milling have been introduced.
- 2.10 The syllabus for Heat Transfer (ME 3100) has been restructured and revised.
- 2.11 Few additional topics have been added in the syllabus for Refrigeration & Airconditioning (ME 3110).
- 2.12 Considering the placement opportunities it is proposed to introduce python as a language to the students of Mechanical Engineering under Finishing School-IV (Technical Skills-IV) with code no. IT 2180. The faculty of IT will teach this course and accordingly their syllabus is followed.
- 2.13 Inline with the theory, Metal Cutting & Machine Tools Lab has been redesignated as Machine Tools and Metal Cutting Lab. Few new experiments have been added in this syllabus.
- 2.14 As explained earlier course on Dynamics of Machines Lab has been introduced in 2<sup>nd</sup> semester of 3<sup>rd</sup> year. The required experiments in the areas of CAM, Governors, Gears, Balancing and Vibrations have been listed.

***The approved syllabus to be followed for 3<sup>rd</sup> year students of AY 2016-17 with the above modifications under autonomy is given in Annexure-II***

**3. Transfer of Fluid Mechanics from BOS of Civil Engineering to BOS of Mechanical Engineering in BE 2<sup>nd</sup> year I-Semester.**

Civil Engineering Department has been offering the course on Fluid Dynamics (CE 2060) to the students of Mechanical Engineering until the academic year 2015-16. It has now been decided that this course will be transferred to the Board of Studies of Mechanical Engineering considering the applications to be taught in Mechanical Engineering. Accordingly this subject is proposed to be included Mechanical Engineering with course code no. ME 2090. It is now proposed to offer this course with a title "Mechanics of Fluids" instead of Fluid Dynamics considering the contents that are being offered in the course.

**4. Deletion of Finishing School (Technical Skills) in BE 2<sup>nd</sup> year and increasing the credits from 1 to 2 for Finishing School (Soft Skills) and approval of revised scheme of instruction for 2<sup>nd</sup> year.**

In the earlier scheme which were approved for the academic year 2015-16 vide minutes of meeting dated 18.12.2015 two courses were being offered separately for Finishing School-I (SS-I) and Finishing School-I (Technical Skills-I) with course code no. HS 2010 and ME 2060 in the I-semester. Similarly HS 2020 and ME 2070 were being offered in the 2<sup>nd</sup> semester for Soft Skills-II and Technical Skills-II. Considering the experience gained during the academic year 2015-16, it is now proposed to offer only Soft Skills during the 2<sup>nd</sup> year in both the semesters with course code no. HS 2010 and HS 2020 with two credits each. This revision in the scheme of instruction is put up for approval and has been approved.

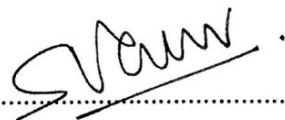
***The revised scheme of instruction for 2<sup>nd</sup> year with effect from AY 2016-17 under Autonomy with the approved syllabus for Mechanics of Fluids is given in Annexure-III***

**5. Any other points**

5.1. The Department recieved a request from HOD-ECE for shifting the course "Elements of Mechanical Engineering" (ME 2060) from I-Semester to II-Semester in 2<sup>nd</sup> year w.e.f. AY 2016-17 due to their own readjustments in their scheme of instructions. This has been discussed and approved.

5.2. The possibility of allocating the final semester in the final year for executing project work only was discussed. This will enable the students to be placed in the industry as an intern and execute the project work. This may necessitate curtailing some of the courses in the final year. This needs to be discussed further and hence the issue was postponed.

Prof. Sriram Venkatesh  
Subject Expert-1



Dr. B. Venkatesham  
Subject Expert-2



Dr. N.K. Singh  
Industry Expert



Dr. Jeevan Jaidi  
OU Nominee



Dr. G.V. Ramana Murty  
Chairman, BOS

