

# Agenda for 7<sup>th</sup> Meeting of Board of Studies for B. Tech. in Mechanical Engineering on 25.05.2018 @ 9:30 AM

- 1. Action taken report on minutes/ resolutions of 6th BOS meeting.
- 2. Report on implementation of autonomy with respect to syllabi and regulations (SVEC16 II B. Tech. & SVEC14 IV B. Tech.).
- 3. B. Tech. Academic Calendar for 2018-19.
- AICTE Model Curriculum-2018 Induction Training, Course Structure and Syllabi.
- 5. Teaching, Learning and Evaluation.
- 6. Research Activities.
- 7. Faculty Development Activities.
- 8. Staff Development Activities.
- 9. Student Development Activities.
- 10. Student Support Systems.
- 11. Extension Activities.
  - 12. Any other item.

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Dr. T.Hariprasad Chairman (BOS)

Dr T HARIPRASAU Professor & BOS Chairman Department of Mechanical Engineering REE VIDYANIKETHAN ENGINEERING COLLEGE (Autonomous) Sree Sainath Nagar, TIRUPATI-517 10 Chittoor District, Andhra Pradesh, INDIA 

## SREE VIDYANIKETHAN ENGINEERING COLLEGE (Autonomous) Sree Sainath Nagar, A.Rangampet, Tirupati – 517102 (A.P) Department of Mechanical Engineering

25<sup>th</sup> May, 2018

# Minutes of the 7<sup>th</sup> Board of Studies Meeting

Date : 25<sup>th</sup> May, 2018 Time : 10 AM Venue: Seminar Hall, Dept. of Mechanical Engineering

Dr. T. Hariprasad, Chairman, Board of Studies chaired the meeting and welcomed all the members to the 7<sup>th</sup> Board of Studies meeting in the Department of Mechanical Engineering.

#### MEMBERS PRESENT

1	Dr.T.Hari Prasad Professor, Dept. of Mechanical Engineering, Sree Vidyanikethan Engineering College, A.Rangampet, Tirupati.	Chairman, BOS	there	)
2	Dr.N.V.R.Naidu Principal & Professor Department of Industrial Engineering, M.S. Ramaiah Institute of Technology, Vidya Soudha, MSRIT Post, MSR Nagar, Bangalore.	External Member (JNTUA Nominee)		
3	<b>Dr. G.L. Samuel</b> Professor (Manufacturing), Department of Mechanical Engineering, Indian Institute of Technology Madras (IITM), Chennai.	External Member (AC Nominee)		
4	Dr. G.Jayachandra Reddy Professor, YSR Engineering College of Yogi Vemana University, Proddatur, Kadapa.	External Member (AC Nominee)	h-Jan chine	4075-18

Minutes of the 7th BoS Meeting of Mechanical Engineering

Page 1

5	Dr.K.Ramesh Kumar Scientist'G'		
	Director (Technical), Brahmos Aerospace, Defence R&D Laboratory (DRDL) Kanchanbagh, Hyderabad.	External Member (Industry Expert)	annut
6	Mr. M.V.Tulasiram Sharma, Business Technology Analyst Employ No:474920 Deloitte Consulting Private Limited P Janardhan Reddy Nagar, Gachibowli, Hyderabad-500081	External Member (Alumni)	
7	Dr. K.C.Varaprasad Professor & Head, Dept. of Mechanical Engineering, Sree Vidyanikethan Engineering College, A.Rangampet, Tirupati.	Internal Member	Ton
8	Dr. A.K.Damodaram Professor, Dept. of Mechanical Engineering, Sree Vidyanikethan Engineering College, A.Rangampet, Tirupati.	Internal Member	55
9	Dr. K.L. Narasimhamu, Professor, Department of Mechanical Engineering, Sree Vidyanikethan Engineering College, A.Rangampet, Tirupati.	Internal Member	10
10	Mr. D. Raghurami Reddy, Assistant Professor (SL), Dept. of Mechanical Engineering, Sree Vidyanikethan Engineering College, A.Rangampet, Tirupati.	Internal Member	Somiany
11	Mr.B.Vishnu Vardhana Naidu Assistant Professor, Dept. of Mechanical Engineering, Sree Vidyanikethan Engineering College, A.Rangampet, Tirupati.	Internal Member	Den

Minutes of the 7th BoS Meeting of Mechanical Engineering

Page 2

11	Mr.G.Dileep Kumar Assistant Professor, Dept. of Mechanical Engineering, Sree Vidyanikethan Engineering College, A.Rangampet, Tirupati.	rofessor, echanical Engineering, nikethan Engineering Internal Member	
12	Mr.S.Lakshmi Narayana Assistant Professor, Dept. of Mechanical Engineering, Sree Vidyanikethan Engineering College, A.Rangampet, Tirupati.	Internal Member	Cy

The chairman (BOS) briefed about the profile of the Mechanical Engineering Department through his presentation. Further, the discussion on the items mentioned in the Board of Studies meeting agenda was taken up and the following resolutions mentioned in the subsequent paragraphs were passed by the external and internal BOS members.

# **ITEM NO.1**

# Action taken report on minutes/ resolutions of 6<sup>th</sup> BOS meeting

The action taken report on the suggestions made by the honorable members in the earlier BoS meeting was presented.

SI. No.	Minutes of BOS Meeting held on 24-03-2017	Action Taken
1.	Introduce the concept of Principal Stresses and Strains in Unit-IV instead of Unit-I and remove Moment Area method in Strength of Materials Subject	Introduced the concept of Principal Stresses and Strains in Unit-IV instead of Unit-I and removed Moment Area method in Strength of Materials Subject
2.	Keep books on Introduction to Manufacturing Processes by M.P. Groover and Workshop Technology by Hazra Choudhary Books for Manufacturing Technology	Introduced books on Introduction to Manufacturing Processes by M.P. Groover and Workshop Technology by Hazra Choudhary.
3.	check the order of Material Characterization and Phase Diagrams in Engineering Metallurgy	Verified and corrected the order of Material Characterization and Phase Diagrams in Engineering Metallurgy.

4.	Any two mechanisms can be kept for velocity and acceleration diagrams in Kinematics of Machinery subjects	Kinematics of Machinery subject.	
5.	Remove Rayleigh method as the syllabus is heavy in Dynamics of Machinery subject		
6.	Remove the concept on Jigs and Fixtures in Machine Tools and Modern Manufacturing Processes subject.	Fixtures.	
7.	Replace unit-IV with Fuels and Combustion in Thermal Engineering-I	Suggestion incorporated.	
8.	Replace rivetted joints with welded joints. Also text book by Pandya and Shah can be introduced instead of R.S.Khurmi in Design of Machine Elements-I subject		
9.	Work Study by Barnes can be kept as reference book for Industrial Engineering and Management subject.		
10.	Remove Unit-I and split gears and bearings into two units in Design of Machine Elements-II subject	Suggestion implemented.	
11.	An experiment on Fuels should be included in IC Engines Lab.	Included an experiment on Fuels in IC Engines Lab.	
12.	Remove Unit-IV and divide Unit- III into two parts in Mechanical Vibrations.	Suggestion incorporated.	
13.	Experiments on Fatigue measurement tests should be included in Industrial Engineering lab.	Included experiments on Fatigue measurement test in Industrial Engineering lab.	
14.	Concept on Enterprise Resource Planning should be included in Supply Chain Management.	Included concept on Enterprise Resource Planning in Supply Chain Management.	

The members agreed with the proceedings and the action taken against the suggestions made in the previous meeting.

#### ITEM NO.2

# Report on implementation of autonomy with respect to syllabi and regulations (SVEC-16: II B.Tech. & SVEC-14: IV B. Tech.)

In executing SVEC-14 for IV B.Tech. and SVEC-16 for II B.Tech., no difficulties were found in teaching and learning practice of theory and laboratory courses. The same is conveyed to the members.

# ITEM NO.3

#### B. Tech. Academic Calendar for 2018-19

Members of the board perused and approved the academic calender for II, III & IV B.Tech, I & II Semesters.The members of BOS felt that deliberations/ changes if any required may be submitted for discussion in next academic council or governing body meeting.

#### **ITEM NO.4**

# AICTE Model Curriculum-2018 Induction Training, Course Structure and Syllabi

The chairman (BOS) presented AICTE Model Curriculum-2018 Induction Training, Course Structure and Syllabi. BOS Members made the following suggestions with respect to AICTE Model Curriculum-2018 Induction Training, Course Structure and Syllabi.

- Discussion was made on the induction programme introduced in the AICTE model curriculum. The members felt that the idea may be good but not easy to execute. This programme may be easy to execute only for residential colleges but not for all. Many resources are required and is a burden for the members of the faculty. But as it is only for 3 weeks faculty can extend their support in induction programme. At Present there may be some difficulties but over a period time, it will standardize. Definitely this programme will be helpful for all round quality, maintain relationships, develop human values, foster to adapt to college environment.
- Instead of training on yoga and other things in morning session, that can be done in the evening sessions by adjusting the class hours.
- Guiding more number of projects is very difficult for faculty members. It is preferable to confine to a maximum of two projects.

Minutes of the 7th BoS Meeting of Mechanical Engineering

- Elaborate discussion was made on the Interdisciplinary electives and open electives. For open electives, there is no need to introduce German, French languages etc. Basically student joins in the engineering course to get core domain knowledge. Other things (German, French etc.) can be learnt after engineering or during vacation or free time. Open electives should be the subjects where student is interested to learn from other core engineering departments. A student might have joined Mechanical Engineering, but if he is desirous of learning electronics subjects, open electives should be the path. But open electives should not be nontechnical subjects.
- There may be discrepancy if marks are not mentioned for mandatory courses and it is not wise to mark as pass or fail. A student who got 24 marks and 58 marks are considered as same stating pass/fail, then the students will lose interest and prepare for 24 marks only. Benefit should be given to the students who perform well.
- Also marks for theory subjects should not be uneven like 60, 100 etc. It should be same for all courses as 100 so that it is easy for grading and percentage calculation. If industry people want to calculate the grades/ percentage when student appear for interview, it should be convenient for comparison.
- Coming to the course structure, uniformity should be maintained in the credits across all semesters. But it should not be uneven like 20,18,36, etc.
- In Semester-I, it is difficult to learn C-language and Computer Aided Engineering Drawing at the same time as some students may be from rural background, telugu as medium of instruction and not acquainted with computers.
- Computer Aided Machine Drawing should be in II year as basic concepts of Mechanical Engineering should be known for this subject. It is too early to introduce in II-Semester. In its place Engineering Mechanics laboratory can be introduced instead. Electrical and Electronics Engineering can be offered as two courses as they are necessary for interdisciplinary knowledge and it is very essential for future world.

- In Semester-III, recheck the importance of Biology for Engineering Programme and if required, syllabus needs to be framed as per engineering applications by taking utmost care.
- In Semester-V, Machine Tools should be replaced with Machine Tools and Modern Manufacturing Processes. Machine Tools laboratory and subject can be introduced in II year rather than III year. In Dynamics and vibrations lab, self designed experiments can be introduced. For example, connecting rod moment of inertia, flywheel experiment, simple pendulum with additional mass.
- Semester-VII, regarding summer internship (mini-project), it is very difficult to get permission from industries. So regulations can be prepared in such a way that they can be done in the campus also. Many industries are charging money for internships and giving certificates without training. Those things may not be worthful. Safety and security to girl students outside the college need to be considered. Even APSSDC Siemens labs can be used for summer internships.
- Core subjects and laboratory courses should be given more weightage while implementing AICTE model curriculum despite dilution as suggested in AICTE model curriculum

Regulations can be framed by taking decision in the common board of studies on par with AICTE and JNTUA. Instead of freezing few sujects across the departments, course structure can be left to indivdual departments, so that they can prepare as per their requirements.

### ITEM NO.5

#### **Teaching, Learning and Evaluation Procedures**

The members expressed satisfaction over the teaching, learning, and evaluation procedures. The members have appreciated the good practices followed by the department in conducting diagnostic test, formative tests, remedial and reinforcement classes as well as offering of the necessary add-on courses.

#### **ITEM NO.6**

#### **Research Activities.**

The members appreciated progress made by research clusters on knowledge domains and expressed satisfaction in regard to the research progress. Establishment of Micromachining research lab was greatly appreciated by the members present.

#### **ITEM NO.7**

#### **Faculty Development Activities**

BoS members appreciated the Faculty Development activities conducted by the Department

#### **ITEM NO.8**

#### **Staff Development Activities**

BoS members suggested to conduct Staff Development activities also as they in turn can assist students in the laboratories and academic projects.

### **ITEM NO.9**

#### **Student Development Activities**

The chairman (BOS) presented the activities of Creative Association of Mechanical Engineering Students (CAMS), SAE India Professional Body activities, Indian Society for Heating, Refrigerating and Air Conditioning Engineers (ISHRAE) Professional Body activities, Indian Welding Society (IWS) Professional Body activities, Expert and Guest Lecturers organized etc. Hon'ble members appreciated the efforts of the department in enriching the students suited to latest trends.

#### **ITEM NO.10**

#### Student Support Systems

The chairman (BOS) presented the counseling system, placement related training, remedial classes, entrepreneurship activities and IIIC activities. Members satisfied with the efforts.

# ITEM NO.11

#### **Extension Activities**

The chairman (BOS) submitted that the Department is encouraging students to participate in various community oriented activities. NSS Volunteers have participated in Blood Donation Camp, Cashless Transaction campaign etc. The External Members expressed their satisfaction over the steps taken in involving students over social activities.

#### ITEM NO.12

#### **Substitute Subjects**

As two regulations are running simultaneously, members resolved to authorize the Chairman, BOS in Mechanical Engineering to finalize the substitute subjects as and when required and forward the same to the Chairman, Academic Council for further action.

#### **ITEM NO.13**

#### **Discretion for minor changes**

The Board authorised the chairman BOS to effect any minor changes as per the need in syllabi and later intimate these changes to the members of the BOS.

Meeting concluded with thanks to the Members by Dr,K.C.Varaprasad, Head of the Department.

(Dr.T.Hariprasad)

Chairman, BOS (ME)

CHAIRMAN Board of Studies Department of Mechanical Engineering