

**DEPARTMENT OF MECHANICAL ENGINEERING**  
**SCHOOL OF ENGINEERING & TECHNOLOGY GGV, BILASPUR CG**  
MINUTES OF MEETING OF BOARD OF STUDIES

A meeting of board of studies of Department of Mechanical Engineering was held on 26/02/2018 from 11:00AM, onwards at Room No.G-25 of New-IT building. Following members were present:-

1. Dr. Rajesh Kuamr Bhushan,  
H.O.D. Department Mechanical Engineering  
(Chairman Board of Studies)
2. Mr. Vivek Singh,  
Executive Engineer, (Mech), Damodar Valley Corporation,  
Koderma Thermal Power Station, Jharkhand  
(Member of B.O.S. as an Industry Expert)
3. Prof. Mukesh Kumar Singh  
Department Industrial and Production Engineering  
(Invited Member)
4. Mr. Prashant Kumar Jangde  
Assistant Prof. Department of Mechanical Engineering  
(Member Board of Studies)
5. Mr C P Dewangan, Associate Professor  
Department Industrial and Production Engineering  
(Invited Member)
6. Mr Leeladhar Rajput Assistant Professor  
Department Industrial and Production Engineering  
(Invited Member)

*Gaewad*  
26/2/18

*Jangde*  
26/2/18

*me*  
*High*  
26/02/18

*Signature*  
26.02.18

*Dewangan*  
26.2.18

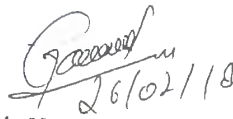
Prof. N.D. Mittal, Professor (Mechanical Engineering Department), Maulana Azad National Institute of Technology, Bhopal (M.P.), (External Expert Member) could not attend the BOS meeting due to health problem. However he has mailed his suggestions, which were discussed and incorporated as per opinion of other board members.

In the meeting syllabus and scheme of B.Tech (Mechanical Engineering) from VII Semester to VIII Semester have been discussed in detail as per Choice Based Credit System (CBCS). The syllabus and scheme of B.Tech (Mechanical Engineering) VII<sup>th</sup> Semester and VIII<sup>th</sup> Semester have been approved by the B.O.S. members, revised syllabus is attached with the minutes.

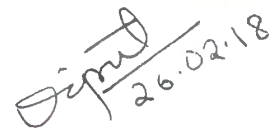
The B.O.S. meeting was concluded with vote of thanks.



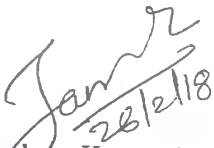
Mr. Vivek Singh, Executive Engineer, (Mech), Damodar Valley Corporation, (Member of B.O.S. as an Industry expert) Koderma Thermal Power Station, Jharkhand



Dr. Rajesh Kumar Bhushan, H.O.D. Department of Mechanical Engineering (Chairman Board of Studies)



Mr Leeladhar Rajput Department of Industrial and Production Engineering (Invited Member)



Mr. Prashant Kumar Jangde Assistant Prof. Department of Mechanical Engineering (Member Board of Studies)



Prof. M.K. Singh, Professor (Department of IPE) (Invited Member)



Mr C P Dewangan, Associate Professor Department Industrial and Production Engineering (Invited Member)

4<sup>TH</sup> YEAR 2018

Department of Mechanical Engineering, School of Engineering & Technology, GGV, Bilaspur (C.G.)

Changes in syllabus of B. Tech. 4<sup>th</sup> year (VII & VIII Sem) Mechanical Engineering BOS 26-2-18)

The following changes have been incorporated in the course syllabus of B. Tech. 4<sup>th</sup> Year Mechanical Engineering as per the discussion in BoS meeting held in the department. The complete VII and VIII semester syllabus along with the evaluation scheme is appended for your reference. Salient aspects of the revisions made are listed below.

- Power plant engineering:** The subject has been added as a compulsory subject in VII semester from the list of VIII semester professional elective subjects.  
**Reasons and Benefits:** Various competitive exams take place immediately after VII semester and Power plant engineering has a significant role in competitive examinations. Also this will help students in deciding their career path in various industries like NPTI, power plants etc.
- Turbo Machinery:** The subject has been moved from VII semester compulsory subject to VIII semester compulsory subject.  
**Reasons and Benefits:** The important topics of this subject (competitive examinations point of view) are already covered in different fluid mechanics courses in lower semesters.
- Theory of Vibration:** The subject has been moved from compulsory subjects to professional elective in VII semester.  
**Reasons and Benefits:** Lower semester has Kinematics and Dynamics of Machine courses, which covers this subject in details from UG program point of view. This subject is taught as a compulsory subject in most of the PG programs.
- CAD-CAM:** This subject has been moved from VIII semester compulsory subject to VII semester compulsory subject.  
**Reasons and Benefits:** This subject has great advantages in terms of modeling and analysis, which will help the students in their Major Project (VIII Semester).
- In VII semester, in place of two professional electives, one professional and one open elective combination has been chosen.  
**Reasons and Benefits:** This will help students to choose elective from other departments such as Management, Environment etc. according to their future career plans.
- Total subject credits in VII semester have been increased from 16 to 18 credits.
- Changes have been made in the professional and open elective subjects according to the change described in point no. 6.
- Following new electives have been introduced in 4<sup>th</sup> year syllabus:
  - Principle of Management
  - Microprocessors in Automation

### Objectives of the Program

- i. To produce competent, creative and imaginative engineers.
- ii. To create an intellectual reservoir to meet the growing engineer demands of the nation.
- iii. To inculcate in the student concepts and intellectual skills, courage and integrity.
- iv. To help the graduates to make their way in the society with proper scientific and technical knowledge in mechanical engineering.
- v. To help the graduates in design and analysis of mechanical systems with strong fundamentals and methods of synthesis.

### Learning Outcomes

- i. Ability to apply knowledge of mechanical engineering fundamentals for solving problems.
- ii. Ability to design and develop mechanical components and processes to meet desired needs considering various aspects.
- iii. Ability to understand and investigate complex mechanical engineering problems experimentally.
- iv. Ability to develop sustainable solutions and understand their impact on society and environment.
- v. Ability to function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.
- vi. Ability to comprehend, design documentation, write effective reports, make effective presentations to the engineering community and society at large.
- vii. Ability to apply knowledge of engineering to lead teams and manage projects in multidisciplinary environments.
- viii. Ability to engage in independent and life-long learning in the broad context of technological changes and advancements.



**INSTITUTE OF TECHNOLOGY, (SCHOOL OF ENGINEERING & TECHNOLOGY)**  
**GURU GHASIDAS VISHWAVIDHALAYA, (A CENTRAL UNIVERSITY)**  
 DEPARTMENT OF MECHANICAL ENGINEERING  
 CBCS, STUDY & EVALUATION SCHEME  
 W.E.F. SESSION 2018-2019

Year: B.Tech. IV year  
 SEMESTER- VII

S. No.	Course No.	SUBJECT	PERIODS			EVALUATION SCHEME			CREDITS
			L	T	P	INTERNAL ASSESSMENT	ESE	SUB-TOTAL	
1.	ME7TPC15	Power Plant Engineering	3	1	0	40	60	100	4
2.	ME7TPC16	Refrigeration & Air Conditioning	3	1	0	40	60	100	4
3.	ME7TPC17	CAD-CAM	3	1	0	40	60	100	4
4.	ME7TPE04	Professional Elective-PE04	3	0	0	40	60	100	3
5.	ME7TOE03	Open Elective-OE03	3	0	0	40	60	100	3
Total			15	03	0	200	300	500	18
<b>PRACTICALS</b>									
1.	ME7LPC16	Refrigeration & Air Conditioning Lab	-	-	3	30	20	50	2
3.	ME7LMP01	Minor Project	-	-	4	50	-	50	2
4.	ME7LPS02	Seminar on Summer Training (About 30 Days)**	-	-	3	50	-	50	2
Total					10	130	20	150	6

\*\* 30 days summer training after the end semester examination of VI semester and students are required to submit certificate, detailed training report & make presentation during the seventh semester.

Total Credits: 24, Total Contact Hour: 28, Total Marks: 650

\*INTERNAL ASSESSMENT-(MSE- Mid Semester Examination of 20 Marks, one Class Test of 10 marks.

Assignment/Quizzes/Group Discussion etc. of 10 marks

L-LECTURE, T-TUTORIAL, P-PRACTICAL, CT-CLASS TEST, E.S.E -END SEMESTER EXAMINATION.

Professional Elective -PE4	Open Elective-OE03
ME7TPE04	ME7TOE03
ME7TPE41 Analysis and Synthesis of Mechanism	ME7TOE31 Principle of Management
ME7TPE42 Gas Dynamics and Jet propulsion	ME7TOE32 Optimization in Engineering Design
ME7TPE43 Theory of Vibration	ME7TOE33 Microprocessors in Automation
ME7TPE44 Production Planning & Control	



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 CBCS, STUDY & EVALUATION SCHEME  
 W.E.F. SESSION 2018-2019

Year: B.Tech. IV year  
**SEMESTER- VIII**

S. No.	Course No.	SUBJECT	PERIODS			EVALUATION SCHEME			CREDITS
			L	T	P	INTERNAL ASSESSMENT	ESE	SUB-TOTAL	
1.	ME8TPC18	Auto Mobile Engineering	3	0	0	40	60	100	3
2.	ME8TPC19	Turbo Machinery	3	1	0	40	60	100	4
3.	ME8TPE05	Professional Elective-PE05	3	0	0	40	60	100	3
4.	ME8TOE04	Open Elective-04	3	0	0	40	60	100	3
Total			12	1	0	160	240	400	13
<b>PRACTICALS</b>									
4.	ME8LMP02	Major Project	-	-	12	120	80	200	10
Total					12	120	80	200	10

Total Credits: 23, Total Contact Hour: 25, Total Marks: 600

INTERNAL ASSESSMENT- (MSE- Mid Semester Examination of 20 Marks, one Class Test of 10 marks. Assignment /Quizzes/Group Discussion etc. of 10 marks.

L-LECTURE, T-TUTORIAL, P-PRACTICAL, CT-CLASS TEST, E.S.E – END SEMESTER EXAMINATION

Professional Elective –PE5	Open Elective –OE4
ME8TPE05	ME8TOE04
ME8TPE51 Total Quality Management	ME8TOE41 Supply Chain Management
ME8TPE52 Cryogenic Engineering	ME8TOE42 Operation Research
ME8TPE53 Robotics and Robot Applications	ME8TOE43 Maintenance Management
ME8TPE54 Finite Element Analysis	ME8TOE44 Intellectual Property Rights