

GLAU/ME/BOS/13/2018-19

**Institute of Engineering & Technology
Department of Mechanical Engineering**

April.30, 2019

All members of the Board of Studies of Mechanical Engineering Department

Agenda for the 13th meeting of the Board of Studies

The 13th meeting of the Board of Studies of Mechanical Engineering Department will be held at 12:00 noon on May11, 2019 in the Seminar Hall(202) of Mechanical Engineering Department.

The agenda of the meeting will be as follows:

Item No. 13.1: To confirm the minutes of 12th Board of Studies meeting.

Item No. 13.2: To consider and recommend to approve the Course Structure of B.Tech. in Mechatronics & Automobile Engineering.

Item No. 13.3: To consider and recommend to approve the programme electives offered by Mechanical Engineering department for the B.Tech. Mechanical Engineering (Syllabus & Course Structure) under CBCS System.

Item No. 13.4: To consider and recommend to introduce the new courses in the existing Programmes.

Item No. 13.5: To consider and recommend the courses having focus on employability/ entrepreneurship/ skill Development.

Item No. 13.6: To consider and recommend the restructuring and updation of contents of following B.Tech and M.Tech programs:

S.N.	Programme	Number of courses under consideration for revision	Name of the courses under consideration for revision
1	B.Tech. Mechanical Engineering	3	(1) Modern Vehicle Technology (2) Kinematics of Machines (3) Solar Energy,

Item No. 13.7: To consider and approve courses recommended by Training & Development Department.

Item No. 13.8: Any other item with the permission of chair.

(Prof. Piyush Singhal)

**Head, Dept. of Mech. Engg. &
Chairperson, BoS**

PROF. PIYUSH SINGHAL
Head, Dept. of Mech. Engg
GLA University, Mathura

CC to:

PS to Hon'ble Vice-Chancellor for kind information of Hon'ble Vice-Chancellor

PS to Pro-Vice-Chancellor for kind information of Pro-Vice-Chancellor

All Concern Directors for kind information

All Concern Members for kind information & necessary action

**MINUTES OF
13TH MEETING
OF
BOARD OF STUDIES (BOS)**

**DEPARTMENT OF
MECHANICAL
ENGINEERING**



GLA
UNIVERSITY
MATHURA
Recognised by UGC Under Section 2(f)

Accredited with



Grade by NAAC

MAY11, 2019

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Minutes of 13th meeting of Board of Studies
Department of Mechanical Engineering

Date: 14.05.2019

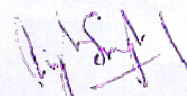
GLAU/ME/BOS_MoM/13/2018-19

The 13th meeting of the Board of Studies of Mechanical Engineering Department was held at 12:00 noon on May 11, 2019 in the Seminar Hall (202) of Mechanical Engineering Department.

Chairperson BOS, Dr. Piyush Singhal presented details of introduction of new B.Tech courses, Mechatronics and Automobile engineering along with other CBCS based programme elective for undergraduate and post graduate students. All members enthusiastically appreciated institutional acumen and keenness to cope with ever-changing scenario of industry and responsibility towards society and environment. Members discussed things with open heart and added their experience and knowledge to further enhance adaptability and impact of new courses.

Members present:

- | | |
|-----------------------------|--|
| 1. Dr. Piyush Singhal | Chairperson & Head, Mech. Engg. Dept., GLA University |
| 2. Mr. Shriram Agrawal | External Expert, Senior Manager, New Model R&D,
Honda Motors Scooters India Ltd., Gurugram, |
| 3. Dr. Debanik Roy | External Expert, Sr. Scientist, Division of Remote Handling &
Robotics, Bhabha Atomic Research Centre, Mumbai |
| 4. Mr. Vinod Atpadkar | Chief Operating Officer, SVR Infotech, Pune |
| 5. Dr. B.R.K. Gupta | Head, Dept. of Physics, GLA University, Mathura |
| 6. Dr. Vinay Kr. Deoliya | Head, Dept. of ECE, GLA University, Mathura |
| 7. Dr. Kamal Sharma | Associate Dean Research, GLA University, Mathura |
| 8. Dr. Rudra Pratap Singh | Member |
| 9. Dr. Manoj Kumar Agrawal | Member |
| 10. Dr. Vijay Kumar Dwivedi | Member |
| 11. Dr. Sujit Kumar Verma | Member |
| 12. Dr. Naveen Kumar Gupta | Member |
| 13. Dr. Pradeep Kumar Singh | Member |
| 14. Mr. Kuwar Mausam | Member |
| 15. Mr. Shashank Srivastava | Member |
| 16. Mr. Pankaj Sonia | Member |
| 17. Mr. Vikas Sharma | Member |
| 18. Mr. Gaurav Bharadwaj | Member |
| 19. Mr. Alok Soni | Member |
| 20. Mr. Aneesh Kumar | Member |
| 21. Mr. Bharat Singh | Member |
| 22. Mr. Rahul Goswami | Member |
| 23. Mr. Sanjeev Kr. Gupta | Member |
| 24. Mr. Toshit Jain | Member |
| 25. Mr. Deepak Sharma | Member |



The agenda of the meeting were discussed as follows:

Item No. 13.1: To confirm the minutes of 12th Board of Studies meeting.

Members were appraised about 12th Board of studies minutes. All members unanimously appreciated approach and initiative of the department regarding launching of new B.Tech courses Mechatronics and Automobile Engineering. (Annexure A)

Item No. 13.2: To consider and approve the Course Structure of B.Tech. in Mechatronics & Automobile Engineering.

In principle, members of BoS approved the new courses; members suggested new labs must have defined numbers of practical linked with labs those will be offered to students in new courses. (Annexure B)

- Members suggested training programme for students, industry linking for internship and short term training programme for strengthening of practical knowledge.
- New courses should be flexible enough to incorporate industry requirement
- Students should be offered to change their core mechanical to Automobile or Mechatronics branch and vice-versa after finishing common programme.

Item No. 13.3: To consider and approve the professional electives offered by Mechanical Engineering department for the B.Tech. Mechanical Engineering (Syllabus & Course Structure) under CBCS System.

In principle members unanimously agreed to run CBCS subjects along with J components of subjects. Members are highly enthusiastic about running J component subjects. These courses will be highly useful for students to get placement in specific industry particularly solar energy and Mechatronics. (Annexure C)

Item No. 13.4: To consider and recommend introduction of new courses in the existing Programmes.

Based on the feedback of various stakeholders (Faculty, Alumni, Corporate and students) the list of new courses discussed with the experts. After thorough discussion Board approved the same. (Annexure D)

Item No. 13.5: To consider and recommend the courses having focus on employability/ entrepreneurship/ skill Development.

The experts discussed and recommend the courses having focus on employability/ entrepreneurship/skill Development of the students (Annexure - E).

Item No. 13.6: To consider and recommend the restructuring and updation of contents of following B. Tech and M. Tech programs:

Based on the feedback received from students, faculty, employers & alumni the revision/ upgradation/ modification in syllabus of existing courses in various Programmes is proposed as follows.

S.N.	Programme	Number of courses under consideration for revision	Name of the courses under consideration for revision
1	B.Tech. Mechanical Engineering	3	(1) Modern Vehicle Technology (2) Kinematics of Machines (3) Solar Energy,

Members considered and approved the same(*Annexure - F*).

Item No. 13.7: To consider and approve courses recommended by Training & Development Department

Training & Development Department of the University recommended to get the syllabi of few courses approved in the Board of Studies Meeting of the department. Same was presented in front of the board. After due discussions, the board approved the same whose details are as follows:

Year & Semester	Code & Title of the Course
III Year, V Sem	BTDH 0303, Soft Skills - III
III Year, VISEm	BTDH 0304, Soft Skills - IV

Item No. 13.8: Any other item with the permission of chair.

Overall members were highly thankful for hospitality and never-ending appetite to develop association with industries and professional bodies. The meeting ended with thanks to the chair

(Prof. Piyush Singhal)

Head, Dept. of Mech. Engg.

Prof. PIYUSH SINGHAL

Head, Dept. of Mech. Engg

Copy to GLA University Chairman, Academic Council

Director, IET, GLA University, Mathura

Registrar, GLA University, Mathura

All the members of BoS

Annexure E

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List of courses having focus on employability/ entrepreneurship/ skill development offered by the Department

S.No.	Name of the Course	Focus on Employability/ Entrepreneurship/ Skill development
1	Measurement and Metrology	Employability/ Skill development
2	Manufacturing Science -I	Employability
3	Applied Thermodynamic	Employability/ Skill development
4	Kinematics of Machine	Skill development
5	Measurement & Metrology Lab	Employability/ Skill development
6	Manufacturing Science -I Lab	Employability
7	Machine Drawing Lab	Employability/ Skill development
8	Soft Skills- II	Skill development
9	Fluid Machinery	Employability/ Skill development
10	Internal Combustion Engine	Employability
11	Machine Design -II	Employability
12	Refrigeration and Air Conditioning	Employability/ Skill development
13	Fluid Machinery Lab	Employability
14	Machine Design - II Lab	Employability
15	Refrigeration and Air Conditioning Lab	Employability/ Skill development
16	Soft Skills – IV	Skill development
17	Operations Research	Skill development
18	Industrial Engineering	Skill development
19	Fluid Mechanics	Skill development
20	Material Science	Skill development
21	Strength of Materials	Skill development
22	Fluid Mechanics Lab	Skill development
23	Materials Science & Testing Lab	Skill development
24	Dynamics of Machine	Skill development
25	Theory of Machine Lab	Skill development
26	Manufacturing Science II	Employability
27	Machine Design-I	Employability
28	Heat & Mass Transfer	Skill development
29	Manufacturing Science II Lab	Employability
30	Machine Design II Lab	Employability
31	Automobile Engineering b.tech 4th year	Employability
32	Applied Mechanics	Skill development
33	Applied Mechanics Lab	Skill development
34	Engineering Drawing	Employability/Skill development
35	Engineering Workshop Practice Lab	Employability
36	Computer Programming	Skill development
37	Basic Electrical Engineering	Skill development
38	Electronics Engineering	Skill development
39	Electronics lab I	Skill development
40	English Language Skills for Communication – I	Skill development

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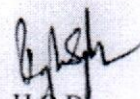
41	English Language Lab – I	Skill development
42	Computer Programming Lab	Skill development
43	Electrical Simulation lab	Skill development
44	English Language Lab - II	Skill development
45	Electrical Machines & Automatic Control	Employability/ Skill development
46	Electrical Machines & Automatic Control Lab	Employability/ Skill development
47	Soft Skills – III	Skill development
48	Soft Skills – I	Skill development
49	Computer aided drafting lab	Skill development
50	Solar energy	Employability
51	solar energy lab	Employability
52	PROJECT BASED SOLAR ENERGY LAB	Employability
53	Welding Science & Technology	Employability
54	Welding Science & Technology Lab	Employability
55	Composite Materials	Skill development
56	Mini Project I	Skill development
57	Mini Project II	Skill development
58	Industrial Training I	Skill development
59	Industrial Training II	Skill development
60	Advance Material Science	Skill development
61	English for Professional Purpose – I	Skill development
62	English for Professional Purpose – II	Skill development
63	Non-Conventional Energy Resources	Employability/ Skill development
64	Basic Mechanical Engineering	Skill development
65	POWER PLANT ENGINEERING	Employability/Skill development
66	ADVANCED SOFTWARE LAB	Skill development
67	Automobile Engineering B.Tech 3rd year	Employability/Skill development
68	Computer Aided Design	Skill development
69	Computer Aided Manufacturing .	Employability
70	Soft Computing Techniques	Skill development
71	Computational Fluid Dynamics	Skill development
72	Industrial Automation & Control Systems	Entrepreneurship /Skill development
73	Automobile Engineering Lab B.Tech 4th year	Entrepreneurship /Skill development
74	Automobile Engineering Lab B.Tech 3rd year	Entrepreneurship /Skill development
75	CAD/CAM Lab	Skill development
76	Industrial Training/Seminar	Skill development
77	Project	Skill development
78	Minor Project	Skill development
79	Modern Manufacturing Processes	
80	Basics of Nano Technology	Employability/ Skill development
81	Mechanical Vibrations	Skill development
82	Mechatronics	Skill development
83	Turbo Machines	Employability

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84	Micro Manufacturing	Skill development
85	Project Management	Skill development
86	Total Quality Management	Skill development
87	Supply Chain Management	Skill development
88	Renewal Energy Resources and Its Utilization	Skill development
89	Finite Element Method	Skill development
90	Non Conventional Energy Resources	Employability/ Skill development
91	Entrepreneurship Development Program	Entrepreneurship/ Skill development
92	PRODUCT DEVELOPMENT & DESIGN	Employability/ Skill development
93 -	Engineering Mathematics I	Skill development
94	Engineering physics	Skill development
95	Engineering Chemistry	Skill development
96	Engineering physics lab	Skill development
97	Engineering Chemistry lab	Skill development
98	Engineering Mathematics II	Skill development
99	Composite materials 3rd year	Skill development
100	Ethics and values	Skill development
101	Engineering Mathematics – III	Skill development
102	Environment studies	Skill development
103	Electrial Engineering lab	Skill development
104	Industrial Economics	Skill development
105	Computer Aided Manufacturing (CAM)	Employability
106	Simulation, Modeling and Analysis	Skill development
107	Simulation, Modeling and Analysis Lab	Skill development
108	Advanced Production Technology	Employability
109	Optimization for Engineering Design	Skill development
110	Finite Element Method (FEM)	Skill development
111	Finite Element method Lab (FEM)	Skill development
112	Industrial Tribology	Skill development
113	Theory of Elasticity and plasticity	Skill development
114	Machine tool Design	Employability/ Skill development
115	Interfacial Tribology	Skill development
116	Energy Conservation and Management	Skill development
117	Industrial Automation & Robotics	Employability/ Skill development
118	Supply Chain Management	Skill development
119	Colloquium	Skill development
120	Dissertation - I	Skill development
121	Rapid prototyping and tooling	Skill development
122	Design of Production Tooling	Employability
123	Reliabilty and maintenance	Skill development
124	Advanced Machining	Employability
125	Nanotechnology and its Applications	Employability/ Skill development
126	Computer-Based Numerical Techniques and Soft	Skill development
127	Micro Manufacturing	Employability
128	Technology of Competitive Manufacturing	Employability
129	Concurrent Engineering	Skill development

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130	Dissertation - II	Skill development
131	Competitive Manufacturing Strategies and Group	Skill development
132	Numerical Techniques and Soft Computing	Skill development
133	Metal Working Tribology	Employability/ Skill development
134	Production Toolings	Skill development
135	Accuracy Inspection and Measurements	Skill development
136	Value Engineering & Cost Control	Skill development
137	Optimization Techniques	Skill development
138	Nano Technology & its Applications	Employability/ Skill development
139	Reliability & Maintenance	Skill development
140	Advanced Heat Transfer Processes	Employability/ Skill development
141	Composite Materials & its Applications	Employability/ Skill development
142	Advanced Welding Processes And Applications	Employability/ Skill development
143	Industrial Automation and Robotics	Employability/ Skill development
144	Advanced Mechanics of Solids	Skill development
145	Research Methodology	Skill development
146	Research Publication & Ethics	Skill development


H.O.D

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