MINUTES OF 5TH MEETING OF **BOARD OF STUDIES (BOS)**

DEPARTMENT OF ELECTRICAL ENGINEERING (INSTITUTE OF ENGINEERING & TECHNOLOGY)

GLA UNIVERSITY
MATHURA
Recognised by UGC Under Section 2(f)
Accredited with A Grade by NAAC

SEPTEMBER 14, 2019

Department of Electrical Engineering

(Institute of Engineering and Technology)

Minutes of the 5th meeting of Board of Studies(BOS) of the Department of Electrical Engineering held on September 14, 2019 at 11.0 am in the Department Library Room No. 4001, AB-II

The 5th meeting of Board of Studies (BoS) (Internal/External Members) of Department of Electrical Engineering was convened on September 14, 2019 at 11.0 am in Department library Room No. 4001, Academic Block – II to discuss various agenda items.

The following were present in the meeting:

1. Prof. V. Prem Pyara (External Expert from Academics)
   Emeritus professor Electrical Engineering Department
   Dayalbag Educational Institute Agra.U.P.

2. Prof. Asheesh Kumar Singh (External Expert from Academics)
   Head EE Dept. MNNIT Allahabad, Prayagraj U.P.

3. Mr. Amol Prasher (External Expert from Industry)
   CA Manager Woodward Inc., Gurugram

Regular Faculty of the Electrical Engineering Department -

4. Dr. Sanjay Maurya
   Associate Professor Department of Electrical Engineering
   IET GLAU Mathura

5. Dr. Subhash Chandra
   Assistant Professor EE Department IET GLAU Mathura

6. Dr. Nibedita Das
   Assistant Professor EE Department IET GLAU Mathura

7. Dr. Abhilash Gupta
   Assistant Professor EE Department IET GLAU Mathura

8. Mr. Ravishankar Tiwari

Secretary BoS EED
Assistant Professor EE Department IET GLAU Mathura

9. Mr. Arvind Yadav
   Assistant Professor EE Department IET GLAU Mathura

10. Mr. Ram Naresh Mishra
    Assistant Professor EE Department IET GLAU Mathura

11. Ms. Akanksha Shukla
    Assistant Professor EE Department IET GLAU Mathura

The following members could not attend the meeting because of their preoccupations

12. Mr. Aashish Bansal (Alumni)
    DGM (Electrical) Dangote Industries Ltd

13. Mr. Shyam Sundar Goyal (Alumni)
14. Deputy Manager CTU Planning PGCIL New Delhi
    Gurgaon, India

15. Mr. Vineet Gupta (External Expert from Industry)
    General Manager Operations; Windmoller & Holscher India Pvt. Ltd. New Delhi

16. Prof. V. K. Deolia Professor & Head
    EC Dept. GLA University, Mathura (Co-opted Member)

Prof. R P Maheshwari
Head of Dept. EE GLA University Mathura (In Chair)

In the beginning of the meeting the Chairman of the BoS welcomed all the members and briefed them about the progress of the Department of Electrical Engineering. The BoS members expressed their high appreciation and satisfaction about the courses and activities of the Department.

The following are the proceedings of the meeting –

ITEM No. 5.01. To confirms the minutes of 4th BoS was held on July, July 15, 2018.

ITEM No. 5.02. To discuss & approve the revised syllabi of B. Tech. EE/EN courses program on the basis of feedback received from various stakeholder (Faculty, Students, Alumni and Employer). (Annexure I)

Programme	No. of courses under consideration for revision	Name of course under consideration for revision
B. Tech. Electrical Engineering/ B.Tech. Electrical & Electronics Engineering	02	• Basic Electrical Engineering, • High Voltage Engineering

The BoS members thoroughly discussed the contents of the above courses thoroughly and approve the revision with minor suggestions implemented.

ITEM No. 5.03. To discuss & approve the revised syllabi of M. Tech. EE program on the basis of feedback received from various stakeholders (Faculty, Students, Alumni and Employer).

(Annexure II)

Programme	No. of courses under consideration for revision	Name of course under consideration for revision
M. Tech. Electrical Engineering	02	• Power System Dynamics & Control • Optimization Techniques

a. The BoS discussed the item and approved the revised syllabus of M.Tech. 1st Year courses modified in two modules and it has reported that there is nearly 20 % change in the syllabus of "**Power System Dynamics**" included the control parts so suggested to rename it as "Power System Dynamics & Control" (Renamed).
b. Discussed and approved the revised syllabus of "**Optimization Techniques**" with revision nearly 20 % change.

ITEM No. 5.04. To discuss & approve the syllabi of new course introduced (program elective courses) as CBCS system for M. Tech. EE., & PhD program

(Annexure III)

Based on the feedback of various stakeholders (Faculty, Alumni, Corporate and students) department presented details of new courses to be introduced. After thorough discussion Board approved the same as per CBCS scheme. Detailed syllabi are available in Annexure III.

ITEM No. 5.05. To discuss & approve the syllabus of professional elective (PE) subjects for normal and advance learners students. The list of professional elective subjects is as follows –
(Introduced new courses were discussed thoroughly & Passed)

(Annexure IV)

c. Sensors and Transducers
d. Introduction to Renewable Energy Technologies
e. Illumination Science & Engineering
f. Power Generation & Systems Planning
g. Medical Image Processing
h. Solar Energy Systems

For Advance learner

i. Power system Instrumentation
j. PLC & SCADA
k. Design & Installation of solar PV system
l. Electric Vehicles

The points discussed under this item are as follows:

a. The BoS discussed the item and approved the syllabus with suggestion for including latest text books and reference books in the above mentioned subjects.
b. Members suggested to modify the sub-titles of "Illumination Engineering & Science" subject as per electrical engineering (topics are more oriented toward physics) and also include topics related to energy efficiency if the goal of teaching the subject is for concern with energy saving and awareness in industries.
c. BoS member Prof. Asheesh Kumar Singh suggested to include PMU in subject "Power system Instrumentation"
d. Prof. V Prem Pyara suggested that there is duplicity of few topics in 'PLC & SCADA" subjects from Digital Electronics so better to use Review word before these topics.
e. Suggested to include MEMS or Modern/smart intelligent sensors in the 3rd module of subject "Sensors & Transducers.
f. Members suggested for including "Inter device communication" as subtopic in any subjects on the suitable bouquet.
g. BoS suggested to make DSP as prerequisite for Medical Image Processing

ITEM NO. 5.06. To discuss and approve the syllabi of Electrical Machine – II, Special Electrical Machines, Elements of Power System and Power System Analysis, with minor revision of 5 % and less. The BoS discussed the item and approved the syllabi.

ITEM NO. 5.07. To report that the prerequisites from program core subjects have been dropped out.

It has been decided that the prerequisites are not required in the program core courses, so have been removed from the list of respective courses. The BOS thoroughly discuss and approve the same.

ITEM NO. 5.08. 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. 5.09. The BoS suggested and approved the skill development, Entrepreneurship/Employability courses in UG and PG programs. (Annexure V)

a. Members consider and approve the same
b. The details are attached in the Annexure V

The meeting ends with the vote of thanks to the chair.

Prof. R P Maheshwari

HoD Electrical Engineering Department

Copy to: Chairman Academic council
Director IET, GLA University, Mathura
Registrar
All the members of the BOS

ANNEXURE V

List of courses having focus on employability/ entrepreneurship/ skill development offered by the Department (session 2019-20)

S.No.	Name of the Course	Focus on Employability/ Entrepreneurship/ Skill development
1	Engineering Circuit Analysis & Synthesis	Employability
2	Electrical Measurement & Measuring Instruments	Employability
3	Field Theory & Applications	Employability
4	Basic System Analysis	Employability
5	Analog Integrated Circuit	Employability
6	Digital Electronics & Circuits	Employability
7	Electrical Machines – I	Employability
8	Electrical Machines – II	Employability
9	Control System	Employability
10	Elements Of Power System	Employability
11	Power System Analysis	Employability
12	Power Electronics	Employability
13	Microprocessor & Its Applications	Employability
14	Network Lab	Employability
15	Electrical Measurement Lab	Skill development, Employability
16	Analog & Digital Electronics Lab	Skill development, Employability
17	Electrical Machines Lab – I	Skill development, Employability
18	Electrical Machines Lab – II	Skill development, Employability
19	Control System Lab	Skill development, Employability
20	Power System Lab	Skill development, Employability
21	Power Electronics Lab	Skill development, Employability
22	Microprocessor Lab	Skill development, Employability
23	Electrical Machine & Automatic Control	Employability
24	Electrical Machines & Automatic Control Lab	Employability
25	Non-Conventional Energy Resources	Skill development, Employability
26	Introduction to Renewable Energy Technologies	Employability
27	Design & Installation of Solar PV System	Skill development, Employability
28	Solar Energy Systems	Employability
29	Solar Energy Systems Lab	Skill development, Employability

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30	Design & Installation of Solar PV System Lab	Skill development, Employability
31	Design & Installation of Solar PV System Project	Skill development, Employability
32	Electrical Engineering Materials	Employability
33	Electric Drives	Employability
34	Special electric Machines	Employability
35	Electric Vehicles	Employability
36	utilization of electric power & traction	Employability
37	Electric Drives Lab	Employability
38	Computer Aided Electric Machine Design Lab	Employability
39	Electric Vehicles Project	Skill development, Employability
40	Sensors & Transducers	Skill development, Employability
41	Illumination Science & Engineering	Employability
42	PLC & SCADA	Employability
43	Advance Control System	Employability
44	Process Control & Advanced Instrumentation	Employability
45	Digital Control System	Skill development, Employability
46	Process Control & Advanced Instrumentation Lab	Employability
47	PLC& SCADA Lab	Employability
48	PLC & SCADA Project	Employability
49	Electrical Power Generation	Employability
50	Switch Gear & Protection	Employability
51	Intelligent Techniques In Electrical Engineering	Employability
52	Computer Methods in Power Systems	Employability
53	High Voltage Engineering	Employability
54	Power System Operation & Control	Employability
55	Smart Grid	Employability
56	Power System Dynamics & Stability	Skill development, Employability
57	Switch Gear & Protection Lab	Employability
58	Intelligent Techniques In Electrical Engineering Lab	Skill development, Employability
59	Computer Methods in Power Systems Lab	Employability
60	Digital Signal Processing	Employability
61	Biomedical Signal Processing	Employability
62	Analog & Digital Communication	Employability
63	Medical Image Processing	Skill development, Employability

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64	Medical Image Processing Lab	Employability
65	Switchgear & Protection	Employability
66	Switchgear & protection Lab	Employability
67	Power system Operation & Control	Employability
68	Advance Control System	Employability
69	Power Quality in Power distribution Systems	Employability
70	Digital Signal Processing	Employability
71	Special electric machines	Employability
72	Restructured Power System	Employability
73	Bio medical Signal Processing	Employability
74	High Voltage Engineering	Employability
75	Artificial intelligence & its applications to power system	Employability
76	Power System Dynamics & Stability	Employability
77	Smart Grid	Employability
78	Digital Control System	Employability
79	Utilization of Electric power & traction	Employability
80	Bio-medical Instrumentation	Employability
81	Analog & Digital Comm.	Employability
82	Digital image processing	Employability
83	Digital Signal Processing	Employability
84	Minor Project	Skill development, Employability
85	Digital Signal Processing Lab	Skill development, Employability
86	Industrial Training	Employability
87	Electrical Instrumentation & Process Control	Employability
88	Antenna & Wave Propagation	Employability
89	Electrical Instrumentation Lab	Skill development, Employability
90	Project	Employability
91	Microwave Engineering	Employability
92	Satellite Communication	Employability
93	Computer Aided Power system analysis	Employability
94	Power system Dynamics & Control	Employability
95	Advanced Electric Drives	Employability
96	Power Electronic Devices & Converters	Employability
97	Optimization Techniques	Employability

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98	Advanced Simulation Lab.	Employability
99	Analog & digital control system	Employability
100	Advanced Power System Operation & Control	Employability
101	Microcontroller and Application	Skill development, Employability
102	Minor Project	Employability
103	Seminar	Employability
104	Advanced Power Electronics	Employability
105	HVDC Transmission & Flexible AC transmission systems	Skill development, Employability
106	Solid State Control of Electric Drives	Employability, Employability
107	Power electronic circuit modeling & Simulation	Employability, Employability
108	Power system Transients	Employability
109	Advanced Protective Relaying	Employability
110	Electrical Insulation in Power apparatus & systems	Employability
111	Power quality and conditioning	Employability
112	Advance Protective Relaying	Employability
113	Dissertation-I	Employability
114	Dissertation-II	Employability
115	Introduction To Hybrid & Electric Vehicles	Employability
116	High performance AC Drives	Employability
117	Renewable & Distributed generation systems	Employability
118	Industrial drives & Automation	Employability
119	Smart grid and phasor Measurement Techniques	Employability
120	EHV/UHV power transmission engineering	Employability
121	Power System Restructuring & Deregulation	Employability
122	Power system Planning & Reliability	Employability
123	Industrial drives & Automation	Employability
124	EHV/UHV power transmission engineering	Employability
125	Power system Planning & Reliability	Employability
126	Basic Electrical Engineering	Skill development
127	Electrical Engineering Lab	Skill development
128	Basic Mechanical Engineering	Skill development
129	Engineering Drawing	Skill development
130	Electrical Simulation Lab	Skill development
131	English Language Lab I	Skill development

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132	Computer Programming	Skill development
133	Electronics Engineering	Skill development
134	Electrical Technology	Skill development
135	Electrical technology Lab	Skill development
136	Electronics Lab – I	Employability
137	Computer programming lab	Employability
138	Engineering Mathematics – I	Employability
139	English Language Skills For Communication I	Employability
140	Engineering Physics	Employability
141	Engineering Physics Lab	Employability
142	Engineering Mathematics – II	Employability
143	English Language Skills For Communication – II	Skill development, Employability
144	Engineering Chemistry	Skill development
145	English Language Lab – II	Entrepreneurship
146	Engineering Chemistry Lab	Skill development
147	English For Professional Purposes - I	Skill development, Employability
148	Engineering Mathematics – III	Skill development, Employability
149	Soft Skills-I	Skill development, Employability
150	Basic Course in Entrepreneurship	Enterprenuership, Employability
151	English For Professional Purposes – II	Skill development, Employability
152	Soft Skills-II	Skill development, Employability
153	Soft Skills-III	Skill development, Employability
154	Soft Skills-IV	Skill development, Employability
155	Power System Dynamics	Skill development, Employability
156	Advanced Power Electronics	Employability
157	Renewable & Distributed Generation Systems	Employability
158	Computer Aided Power System Analysis	Employability
159	Optimization Techniques	Employability
160	Research Methodology	Skill development, Employability

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