

**MINUTES OF 3rd MEETING
OF
BOARD OF STUDIES (BOS)**

**DEPARTMENT OF ELECTRICAL
ENGINEERING
(INSTITUTE OF ENGINEERING &
TECHNOLOGY)**



MAY 22ND, 2017

Department of Electrical Engineering
(Institute of Engineering and Technology)
Minutes of the 3rd Board of Studies held on May 22nd, 2017

A meeting of Board of studies of Electrical Engineering Department was held on May 22, 2017 at 11:00 A. M. in the Department library AB-II, GLA University Mathura. The following BoS members were present:

Members Present:

- | | |
|----------------------------|---|
| 1. Prof. V. PremPyara | External Expert, Emeritus professor DEI Agra. |
| U.P. | |
| 2. Mr. AashishBansal | Sr. Manager (Electrical) PL Engineering Ltd. |
| | Guru gram Haryana |
| 3. Prof. Anwaruddin Anwar | Member |
| 4. Prof. ShamshuddinAhamad | Member |
| 5. Dr. Sanjay Maurya | Chairperson & In-charge EED |
| 6. Mr. AbhayChaturvedi | Co-opted member from other department |
| 7. Mr. Subhash Chandra | Member |
| 8. Mr. ApooVaSaxena | Member |
| 9. Dr. AnuragChauhan | Member |
| 10. Mr. RavishankarTiwari | Member & Secretary BoS EED |

The chairman Board of studies welcomes all the members and started proceeding of third meeting of BoS in accordance with the agenda note circulated earlier.

Minutes of the meeting:

Item No. 3.01. To confirm the minutes of 2nd BoS, held on May 21st, 2016

Item No. 3.02. To consider and approve the syllabus of new courses introduced in the existing programme of B. Tech. EE and EN, w.e.f. 2017 as per CBSC system.

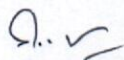
(Annexure I)

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.

Item No. 3.03. To discuss and approve the revised structure and syllabi of M. Tech Energy system.

(Annexure II)

The following suggestions and comments made by the experts for implementation.



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- Include the content on **hydrogen based energy generation, tidal based generation** etc. and also increase the focus on the different types of energy storage systems such as **chemical, electrical, thermal** should be increased and can accommodated in the subjects such as “**Renewable Energy Sources**” and others.
- Some topics of the subjects “**Sustainable buildings**” are related to the architecture which is required to be adjusted.
- The subject “**Energy modeling and project management**” present as elective-III in the structure, should be a compulsory subject.
- Include ultra-capacitors, **environmental aspects of batteries & batteries** sizing in the elective subject “**Batteries & fuel cells**”.

The syllabus of some suggested elective subjects & syllabus of some left elective subjects will be presented in the next BoS for the approval.

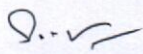
Item No. 3.04. To discuss and approve the courses prepared for B.Tech EE & EN final year. (Available in Annexure III)

The BoS members have discuss the courses in details and suggested the following points.

- Increase the focus on numeric relays, digital relays and static relays in the subjects of “Switch gear & Protection” and “Power System Analysis & Protection”.
- Topic on **GIS & outdoor switch yard** can be include on in EEE 7002 Switch gear & Protection or power System-I or in any other subject of power system group to increase the focus on GIS & outdoor switch yard.
- Include some experiments on load flow and relay coordination in the ETAP in the “EEE 7082 Switchgear & Protection Lab”.
- The expert from Industry & our alumni Mr. Ashish Bansal suggested to include the topics on DCS (Distributed control system) i.e. SCADA & PLC with industrial point of view.
- Topics on “**Introduction to Micro motors**” should be included in the subject of “**Special Electric Machines**”.
- Eliminate the duplicity of topics such as Z- transform etc. from subject **Digital Control System** by comparing them from Basic System Analysis etc.
- Include some experiments of ETAP in the “EEE Electric drive lab”

Item No. 3.05. To discuss and approve the revised courses of B. Tech EE/EN program on the basis of feedback received from various stakeholders (Faculty, Students, Alumni and Employer).

Programme	No. of courses under consideration for revision	Name of course under consideration for revision
B. Tech. Electrical Engineering/ B.Tech. Electrical & Electronics Engineering	03	<ul style="list-style-type: none"> Digital Electronics Electrical circuit theory Analog Electronics


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The members have thoroughly discussed & approved the revision with minor suggestions as follows.

(Annexure IV)

- a. The members suggested to add the contents related to the GATE Level minimization, parity check, and various types of memories in detail in the syllabus of "**Digital Electronics**".
- b. In the syllabus of "**Electrical circuit theory**" some addition of topics such as Transient analysis, advantage of 3 phase over single phase, compensation theorem and Isomorphism are required. It is required to mention the "Basics of 3 phase supply" in place of generation of three phase supply. The name of book "Introduction to modern network synthesis" should be replaced by another book "Network Analysis" by M E VanValkenburg. Add "William H. Hayt & Jack E. Kemmerly Engineering Circuit Analysis" McGraw-Hill Book Company Inc. 1971 in the reference books.
- c. The revised syllabus of "**Analog Electronics**" has been thoroughly discussed and approved.

Item No. 3.06. The BoS suggested and approved the skill development, Entrepreneurship/ Employability courses in UG and PG programs.

(Annexure V)

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

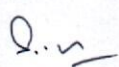
Item No. 3.07. Based on the feedback of various stakeholders (Faculty, Alumni, Corporate and students) department presented details of new courses to be introduced as per CBCS system. After thorough discussion Board approved the same.

(Annexure

VI)

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	<ul style="list-style-type: none">• Basic Electrical Engineering• Electrical Engineering Lab

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


Dr. Sanjay Kumar Maurya
(Incharge EED)

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Electrical Engg.

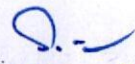
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Copy to: Chairman Academic council

Director IET, GLA University, Mathura
Registrar
All the members of the BoS

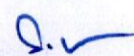
ANNEXURE V

**List of courses having focus on employability/ entrepreneurship/ skill development offered by the
Department (session 2017-18)**

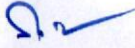
S.No.	Name of the Course	Focus on Employability/ Entrepreneurship/ Skill development
3	Basic Electrical Engineering	Employability
4	Electrical Engineering Lab	Employability
5	Electrical Circuit Theory	Employability
6	Electrical & Electronics Measurement & instruments	Skill development/Employability
7	Electrical & Electronics Engineering Materials	Skill development/Employability
8	Electric Circuit Lab	Skill development/Employability
9	Electrical & Electronics Measurement & Instruments Lab	Employability
10	Simulation Lab-I	Employability
11	Engineering Circuit Analysis & Synthesis	Employability
12	Analog Electronics	Employability
13	Electrical Machines-I	Skill development/Employability
14	Basic System Analysis	Skill development/Employability
15	Simulation Lab-II	Skill development/Employability
16	Analog Electronics Lab	Employability
17	Electrical Machines Lab-I	Employability
18	Electrical Machines-II	Employability
19	Power System-I	Employability
20	Control System	Skill development/Employability
21	Digital Electronics	Employability
22	Digital electronics Lab	Skill development/Employability
23	Control System Lab	Employability
24	Electrical Machines Lab-II	Employability
25	Power Electronics	Employability
26	Power System-II	Employability
27	Electrical Power Generation	Skill development/Employability
28	Microprocessor	Skill development/Employability
29	Power electronics Lab	Skill development/Employability
30	Power System Lab	Employability
31	Microprocessor Lab	Employability


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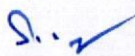
32	Switchgear & Protection	Employability
33	Electric Drives	Employability
34	Electric Drives Lab	Employability
35	Switchgear & protection Lab	Employability
36	Electrical Instrumentation & Process Control	Skill development/Employability
37	Power system Operation & Control	Employability
38	Electrical Instrumentation Lab	Employability
39	Digital Control System	Employability
40	Power System Dynamics & Stability	Employability
41	Digital Signal Processing	Employability
42	Special electric machines	Employability
43	Advance Control System	Employability
44	Utilization of Electric power & traction	Employability
45	Bio-medical Instrumentation	Employability
46	Smart Grid	Employability
47	Bio medical Signal Processing	Employability
48	High Voltage Engineering	Employability
49	Artificial intelligence & its applications to power system	Employability
50	Telemetry & Data Transmission	Employability
51	Industrial instrumentation	Employability
52	Restructured Power system	Employability
53	Power Quality in Power distribution Systems	Employability
54	Energy Conservation & Management	Employability
55	Non-Conventional Energy Resources	Skill development/Employability
56	Instrumentation(Not for EC students)	Skill development/Employability
57	Minor Project	Skill development/Employability
58	Major Project	Employability
59	Industrial Training	Employability
60	Computer aided Power system analysis	Employability
61	Power system Dynamics	Employability
62	Advanced Electric Drives	Employability
63	Power Electronic Devices and Converters	Employability
64	Optimization Techniques	Employability
65	Advanced Simulation Lab.	Employability


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66	Analog & digital control system	Employability
67	Advanced Power System Operation & Control	Employability
68	Microcontroller and Application	Employability
69	Power quality and conditioning	Employability
70	Electrical Insulation in Power apparatus & systems	Employability
71	HVDC Transmission & Flexible AC transmission system	Employability
72	Power System Transients	Employability
73	Advance Protective Relaying	Employability
74	Smart grid and phasor Measurement Techniques	Employability
75	EHV/UHV power transmission engineering	Employability
76	Power System Restructuring & Deregulation	Employability
77	Power system Planning & Reliability	Employability
78	Advanced Power Electronics	Employability
79	Solid State Control of Drives	Employability
80	Power electronic circuit modeling & Simulation	Employability
81	Introduction to Hybrid & Electric Vehicles	Employability
82	High performance AC Drives	Employability
83	Renewable & Distributed generation systems	Skill development/Employability
84	Industrial drives & Automation	Skill development/Employability
85	Desertation I	Skill development
86	Desertation II	Skill development
87	Engineering Mathematics- I	Skill development
88	Engineering Physics	Skill development
89	Engineering Chemistry	Skill development
90	Fundamentals of Computer and Programming	Skill development
91	Basic Mechanical Engineering	Employability
92	Applied Mechanics	Employability
93	Electrical Engineering	Skill development
94	Electronics Engineering	Skill development
95	English Language Skills for Communication - I	Skill development
96	English Language Lab - I	Skill development
97	Engineering Drawing	Skill development/Employability
98	Computer Programming Lab - I	Skill development
99	Electrical and Electronics Lab	Skill development


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100	Applied Mechanics Lab	Skill development
101	Engineering Mathematics-II	Skill development
102	Problem Solving using Computers	Skill development
103	English Language Skills for Communication - II	Skill development
104	English Language Lab – II	Skill development/Employability
105	Engineering Chemistry Lab	Skill development/Employability
106	Engineering Physics Lab	Skill development
107	Computer Programming Lab - II	Entrepreneurship, Skill development
108	Introduction to Entrepreneurship	Entrepreneurship, Skill development
109	Industrial Economics	Skill development
110	Soft skill I	Skill development
111	Soft skill II	Skill development
112	Soft skill III	Skill development
113	Soft skill IV	Skill development
114	Mathamatics III	Entrepreneurship, Skill development
115	Advanced Electric Drives	Entrepreneurship, Skill development
116	Research Methodology	Skill development
117	Analog & digital control system	Entrepreneurship, Skill development


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