MINUTES OF THE MEETING OF THE BOARD OF STUDIES

FOR B.E ECE and B.E EE Programs
MEETING No.: 2
DATE: 8th September 2022 TIME: 3:00 PM

The meeting was chaired by Prof. Ankur Gupta, Director MIET and was held in an online mode. At the outset Prof. Gupta welcomed all the members of the Board of Studies and provided a brief overview of the action taken on the resolutions of the last meeting. The agenda items along with their narration and relevant annexures were circulated to the members on 3rd September 2022 over email and were transacted during the meeting.

Members present in the meeting:

1.	**Prof. Ankur Gupta** *Director, MIET*	Chairperson
2.	**Dr. Ravi Kant Saini** *Assistant Professor, EE, IIT Jammu*	Expert Member
3.	**Dr. Kumud Ranjan Jha** *Associate Professor & Head of Department, ECE, SMVDU*	Expert Member
4.	**Dr. Anup Shukla** *Assistant Professor, EE, IIT Jammu*	Expert Member
5.	**Dr. Zakir Hussain Rather** Assistant Professor, Department of Energy Science and Engg., IIT, Bombay	Alumni
6.	**Prof. Shiv Kumar Sharma** *Professor, ECE, MIET*	Member
7.	**Dr. Hanuman Prasad Shukla** *Head of the Department, EE, MIET*	Member
8.	**Mr. Rajinder Tiwari** *Associate Professor, ECE, MIET*	Member
9.	**Dr. S. Zahid Nabi Dar** *Assistant Professor, EE, MIET*	Member
10.	**Ms. Surbhi Sharma** *Assistant Professor, ECE, MIET*	Member
11.	**Ms. Gurpreet Kour** *Assistant Professor, ECE, MIET*	Member
12.	**Ms. Gurpreet Raina** *Assistant Professor, ECE, MIET*	Member
13.	**Dr. Ranjan Walia** *Associate Professor, EE, MIET*	Member
14.	**Dr. Satyendra Kumar Singh** *Assistant Professor, EE, MIET*	Member

15.	**Mr. Bhanu Pratap Singh Jamwal** *Assistant Professor, EE, MIET*	Member
16.	**Mr. Parveen Kumar** *Assistant Professor, EE, MIET*	Member
17.	**Ms. Gurpreet Kour Sodhi** *Assistant Professor, EE, MIET*	Member
18.	**Prof. Ashok Kumar** *Dean Academics Affairs & Head of the Department, ECE, MIET*	Member Secretary

Note: Prof. Parveen Lehana, Department of Electronics, University of Jammu and Mr. Parv Abbott, Deputy Manager, Mitsubishi Electric India Pvt. Ltd could not attend the meeting due to some other commitments.

1. **To confirm the minutes of the 1ˢᵗ meeting of the Board of Studies held on 19ᵗʰ April 2021.**

   Resolved that the minutes of the 1ˢᵗ meeting of the Board of Studies held on 19ᵗʰ April 2021 and circulated to all members on 5ᵗʰ May 2021 be confirmed.

2. **To formulate the curriculum/syllabi for 5ᵗʰ & 6ᵗʰ semesters of the B.E ECE program for 2020-24 batch and beyond.**

   Resolved that the syllabi of the 5th and 6th semesters for the B.E ECE program for 2020-24 batch and beyond be endorsed to the Academic Council for its approval after making the following additions/amendments in the curriculum:

5ᵗʰ Semester	
Course Name & Course Code	**Suggestions from BoS**
Internet-of-Things (ECE-501)	1. To incorporate aspects of machine communication in the curriculum. 2. To incorporate Raspberry Pi in the curriculum of Internet-of-Things. 3. To mention specific IEEE protocols in the fourth unit of Internet-of-Things.
Internet-of-Things Lab (ECE-511)	1. To include Raspberry Pi in lab activities.

The changes have been incorporated and appended as **Annexure I** and the detailed modified curriculum is attached as **Annexure II**

The members further appreciated the following aspects of the proposed curriculum:

1. Introduction of skill enhancement courses including internship course of 3 credits (30 days) after the end of the fourth semester, placement specific courses in 5th and 6th semester.

2. Introduction of IoT and IoT laboratory in the 5th semester keeping in view of its increasing demand in the industry.

3. Introduction of new courses such as Wireless and Mobile Communication, VLSI Circuit Design and Verilog HDL Programming Lab in the 6th semester to equip students with the relevant knowledge and skills.

4. Introduction of Non-credit MOOC course in the 6th semester on new emerging domains.

5. Linkage with Coursera to offer unlimited access for the students on Coursera platform with well-defined learning paths including guided projects and industry certifications.

The semester wise course scheme along with percentage of curriculum changed in those courses is give below in Table 1 and Table 2

| S. No. | Course Code | Course Name | Course Type | Cd | L | T | P | Marks | | | %age Change in Syllabus |
								Sessional	Final Exam	Total	
1	ECE-501	Internet of Things	ESC	4	3	1	0	50	100	150	100
2	ECE-502	Digital Signal Processing	PCC	4	3	1	0	50	100	150	30
3	ECE-503	Microwave Devices & Systems	PCC	4	3	1	0	50	100	150	25
4	HSMC-501	Open Elective-1	OEC	3	2	1	0	50	100	150	100
5	ECE-511	Internet of Things Lab	ESC	2	0	0	4	50	0	50	100
6	ECE-512	Digital Signal Processing Lab	PCC	1	0	0	2	50	0	50	20
7	ECE-513	Microwave Lab	PCC	1	0	0	2	50	0	50	25
8	HSMC-511	Placement Preparation-I	HSMC	2	0	0	4	50	0	50	100
			Total	24*	29					900*	

Table 1: Course Scheme of 5th Semester ECE Department

| S. No. | Course Code | Course Name | Course Type | Cd | L | T | P | Marks | | | %age Change in Syllabus |
								Sessional	Final Exam	Total	
1	ECE-601	Wireless and Mobile Communication	PCC	4	3	1	0	50	100	150	50
2	ECE-602	VLSI Circuit Design	PCC	4	3	1	0	50	100	150	35
3	ECE-603	Computer Networks	ESC	4	3	1	0	50	100	150	40
4	ECE-604	Control System	PCC	3	2	1	0	50	100	150	20
5	ECE-611	PCB Design Lab	PCC	1	0	0	2	50	0	50	20
6	ECE-612	Verilog HDL Programming Lab	PCC	1	0	0	2	50	0	50	30
7	ECE-613	Computer Networks Lab	ESC	2	0	0	4	50	0	50	100
8	NCC-601	MOOC	NCC	0	2	0	0	-	-	S/NS *	100
9	HSMC-611	Placement Preparation-II	HSMC	2	0	0	4	50	0	50	100
			Total	21		27				800	

Table 2: Course Scheme of 6th semester ECE Department

3. **To formulate the curriculum/syllabi for 5th & 6th semesters of the B.E EE program for 2020-24 batch and beyond.**

Resolved that the syllabi of the 5th and 6th semesters for the B.E EE program for 2020-24 batch and beyond be endorsed to the Academic Council for its approval after incorporating the following additions/amendments in the curriculum:

5th Semester	
Course Name & Course Code	**Suggestions from BoS**
Internet-of-Things (ECE-501)	1. To incorporate aspects of machine communication in the curriculum. 2. To incorporate Raspberry Pi in the curriculum of Internet-of-Things. 3. To mention specific IEEE protocols in the fourth unit of Internet-of-Things.
Internet-of-Things Lab (ECE-511)	To include Raspberry Pi in lab activities.
6th Semester	
Course Name & Course Code	**Suggestions from BoS**
Power system-I (EE-601) (Textbooks)	The textbooks mentioned in the curriculum of Power System need to be changed to those of foreign authors and quality publishers.
Control System (EE-603) (Textbooks)	The textbooks mentioned in the curriculum of the Control System need to be changed and quality books to be prescribed.
Smart Grid (EE-604)	1. To redesign the curriculum with focus on Smart Grid in Section A and Microgrid in Section B.

	2. To remove the topics specific to hybrid electric vehicles from the Unit 2 of the existing curriculum and possibly include a new course on EVs in the 7th semester.

The changes have been incorporated and appended as **Annexure III** and the detailed modified curriculum is attached as **Annexure IV**

The members further appreciated the following aspects of the proposed curriculum:

1. Introduction of skill enhancement courses including internship course of 3 credits (30 days) after the end of the fourth semester, placement specific courses in 5th and 6th semester.

2. Introduction of Python Programming, Python Programming Lab, Internet of Things and Internet of Things Lab in the 5th semester keeping in view of its increasing demand in the industry.

3. Introduction of a new course on Smart Grid in the 6th semester.

4. Non-credit MOOC course in the 6th semester on new emerging domains has been introduced.

5. Linkage with Coursera to offer unlimited access for the students on Coursera platform with well-defined learning paths including guided projects and industry certifications.

The semester wise course scheme along with percentage of curriculum changed in those courses is give below in Table 3 and Table 4

S. No.	Course Code	Course Name	Course Type	Cd	L	T	P	Marks			%age change in Syllabus
								Sessional	Final Exam	Total	
1	COM-501	Python Programming	ESC	4	3	1	0	50	100	150	100
2	EE-501	Electrical Measurements and Instrumentation	PCC	4	3	1	0	50	100	150	35
3	ECE-501	Introduction to Internet of Things	ESC	4	3	1	0	50	100	150	100
4	HSMC-501	Open Elective-I	OEC	3	3	0	0	50	100	150	100
5	EE-511	Electrical Measurements and Instrumentation Lab	PCC	1	0	0	2	50	0	50	30
6	COM-511	Python Programming Lab	ESC	1	0	0	2	50	0	50	100
7	ECE-511	Internet of Things Lab	ESC	2	0	0	4	50	0	50	100
8	HSMC-511	Placement Preparation-I	HSMC	2	0	0	4	50	0	50	100
	Total			24*		27				900*	

Table 3: Course Scheme of 5th Semester EE Department

| S. No. | Course Code | Course Name | Course Type | Cd | L | T | P | Marks | | | %age change in syllabus |
								Sessional	Final Exam	Total	
1	EE-601	Power System-I	PCC	4	3	1	0	50	100	150	40
2	EE-602	Power Electronics	PCC	4	3	1	0	50	100	150	25
3	EE-603	Control System	PCC	4	3	1	0	50	100	150	20
4	EE-604	Smart Grid	PCC	3	3	0	0	50	100	150	100
5	EE-611	Power Electronics Lab	PCC	2	0	0	4	50	0	50	25
6	EE-612	Power System-I Lab	PCC	1	0	0	2	50	0	50	30
7	EE-613	Control System Lab	PCC	1	0	0	2	50	0	50	20
8	HSMC-611	Placement Preparation-II	HSMC	2	0	0	4	50	0	50	100
9	NCC-501	MOOC	NCC	0	2	0	0	-	-	S/NS*	100
Total				21	27					800	

Table 4: Course Scheme of 6th Semester EE Department

The meeting concluded with a vote of thanks.

Prof. Ankur Gupta

Director, MIET

Copy to:

- Esteemed members of the BoS
- AR, MIET for putting up the recommendations of the BoS to the Academic Council
- Office Copy