DEPARTMENT OF ELECTRICAL ENGINEERING
DEPARTMENTAL COUNCIL/ BOARD OF STUDIES
MEETING FOR AY 2020-21
9TH SEPTEMBER, 2021

BOS Members

S. No.	Name of the Member	Designation
1	Dr. Srimanti Roychoudhury	Associate Professor & Head/EE (Chairman)
2	Professor (Dr.) Suthanthira Vanitha Narayanan	Professor & Dean, Electrical and Electronics Engineering Department, Muthayammal Engineering College, Tamil Nadu
3	Professor (Dr.) Aruna Bharathi, Assistant professor	EEE Department, Sir CRR Engineering college, Andhra Pradesh
4	Mr. Bidhan Samanta	GE Renewables (Industry Expert)
5	Ms. Sunam Saha	Assistant Professor, Dept. of Electrical Engg.
6	Ms. Sreya Ghosh	Assistant Professor, Dept. of Electrical Engg.
7	Dr. Rituparna Mitra	Assistant Professor, Dept. of Electrical Engg.

DEPARTMENT OF ELECTRICAL ENGINEERING

ADAMAS UNIVERSITY

Minutes of Board of Studies (BOS) / Departmental Council (DC) Meeting

09/09/2021

Dr. Srimanti Roychoudhury, Associate Professor and HOD, Dept. of Electrical Engineering (EE), welcomed the external members and discussed the following agenda in presence of all the Board of Studies members.

Item.1: Addition of Value added Courses in syllabus of 3rd,4th,5th and 6th sem have been proposed to be offered in UG Program B. Tech (Electrical Engineering)

Proposition: After taking suggestions from Faculty members, Experts and keeping in mind the increasing focus of cutting-edge technologies and Interdisciplinary Research in the field of Electronics, value added courses need to be introduced.

3rd sem- MATLAB and Simulink
4th sem- MATLAB and Simulink for Electrical Engineering Applications
5th sem- Artificial Intelligence for Electrical Engineering
6th sem- Python for Electrical Engineers

Item. 2: One specialization offered by Electrical Engineering Department has to be removed in for AY2021-22.

Department of Electrical Engineering offered one Specialization: Sustainable Energy in EE Program in AY 2020-21 for the students with 20 strength but as there is no students found so that we have removed these programs.

Item.3: Changes in the content of a few Courses in UG Program B. Tech (Electrical Engineering)

Proposition: The experts suggested including some papers among the mentioned below subjects for improvement of the course. The subjects are: Power system Automation, Robotics, Embedded System, some papers from Bio-Medical Engineering, Industrial safety and Hazards. Some laboratories can be established like PLC and SCADA, PSCAD, OrCAD, PSpice, Raspberry pi, Arduino. The syllabus for Artificial Intelligence needs to be modified module wise.

The meeting concluded with a vote of thanks by the Chair, Dr. Srimanti Roychoudhury. The minute is issued in concurrence with the Dean, SOET. Issued By

Issued By



Dr. Srimanti Roychoudhury

Head of the Department
Department of Electrical Engineering

Date: 09.09.2021

Annexure I

Modified Course Structure A.Y. 2020 – 21 of B. Tech (Electrical Engineering)

Course Structure of B. Tech Programme

B. Tech in Electrical Engineering

First Year:

Semester I								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	MTH11501	Engineering Mathematics – I	3	1	0	4	4
2	Theory	PHY11201	Applied Science	3	0	0	3	3
3	Theory	CSE11001/ GEE11001	Introduction to Programming/ Electrical and Electronics Technology	3	0	0	3	3
4	Theory	ENG11053	HSSM – I (English Communication – I)	3	0	0	3	3
5	Theory	BIT11003	Life Sciences	3	0	0	3	3
6	Practical	PHY12202	Applied Science Lab	0	0	3	3	2
7	Practical	CSE12002/ GEE12002	Programming Lab/ Electrical and Electronics Technology Lab	0	0	3	3	2
8	Practical	CEE12001/ MEE12001	Engineering Drawing and CAD/ Engineering Workshop	0	0	3	3	2
9	Practical	ENG12043	Communication and Collaboration Skill – I	0	0	2	2	1
10	Practical	GEE14003	Capstone Project – I	0	0	2	2	1
11	Theory	DGS11001	Design Thinking	2	0	0	2	2
			Total	**17**	**1**	**13**	**31**	**26**

First Year:

Semester II								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	MTH11502	Engineering Mathematics – II	3	1	0	4	4
2	Theory	GEE11001/ CSE11001	Electrical and Electronics Technology/ Introduction to Programming	3	0	0	3	3
3	Theory	MEE11002	Engineering Mechanics	3	1	0	4	4
4	Theory	EVS11107	Environmental Science	3	0	0	3	3
5	Practical	GEE12002/ CSE12002	Electrical and Electronics Technology Lab/ Programming Lab	0	0	3	3	2
6	Practical	MEE12001/ CEE12001	Engineering Workshop/ Engineering Drawing and CAD	0	0	3	3	2
7	Practical	ENG12044	Communication and Collaboration Skill – II	0	0	2	2	1
8	Practical	GEE14004	Capstone Project – II	0	0	2	2	1
9	Practical	IDP14001	Interdisciplinary Project	0	0	5	5	3
			Total	**12**	**2**	**15**	**29**	**23**

Second Year:

Semester III								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	MTH11526	Engineering Mathematics – III (Transform Calculus and Special Functions)	3	0	0	3	3
2	Theory	ECO11505	HSSM – IV (Economics for Engineers)	3	0	0	3	3
3	Theory	EEE11001	Professional Core – I **Electric Circuits**	3	0	0	3	3
4	Theory	EEE11002	Professional Core – II **Electrical and electronic Measurement**	3	0	0	3	3
5	Theory	EEE11003	Professional Core – III **Electrical Machines – I**	3	1	0	4	4
6	Practical	EEE12004	Professional Core – I Lab **Electric Circuits Lab**	0	0	3	3	2
7	Practical	EEE12005	Professional Core – II Lab **Electrical and electronic Measurement Lab**	0	0	3	3	2
8	Practical	EEE12006	Professional Core – III Lab **Electrical Machines – I Lab**	0	0	3	3	2
9	Practical	EIC11001	Venture Ideation	2	0	0	2	2
10	Practical	GEE14005	Capstone Project – III	0	0	2	2	1
11	Practical	SOC14100	Community Service #	-	-	-	-	1
12	Practical		MATLAB and Simulink	2	0	0	0	0
			Total	**19**	**1**	**11**	**29**	**26**

 # CS Activity will be taken up during the summer break after 2nd semester, and will be evaluated in the 3rd semester.

Second Year:

Semester IV								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	**MTH11530**	Engineering Mathematics – IV (Numerical Techniques)	3	0	0	3	3
2	Theory	EEE11007	Professional Core – IV **Electrical Machines – II**	3	0	0	3	3
3	Theory	EEE11008	Professional Core – V **Microprocessor and Microcontroller**	3	0	0	3	3
4	Theory	EEE11009	Professional Core – VI **Analog and Digital Electronics**	3	0	0	3	3
5	Theory	PSG11021	Human Values and Professional Ethics	2	0	0	2	2
6	Practical	**MTH12531**	Numerical Techniques Lab	0	0	3	3	2
7	Practical	EEE12010	Professional Core – IV Lab **Electrical Machines – II Lab**	0	0	3	3	2
8	Practical	EEE12011	Professional Core – V Lab **Microprocessor and Microcontroller Lab**	0	0	3	3	2
9	Practical	EEE12012	Professional Core – VI Lab **Analog and Digital Electronics Lab**	0	0	3	3	2
10	Practical	GEE14006	Capstone Project – IV	0	0	2	2	1
11	Practical		MATLAB and Simulink for Electrical Engineering Applications	2	0	0	0	0
			Total	**16**	**0**	**14**	**28**	**23**

Third Year:

Semester V								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	EEE11013	Professional Core – VII **Power System – I**	3	0	0	3	3
2	Theory	EEE11014	Professional Core – VIII **Control Systems**	3	0	0	3	3
3	Theory	EEE11015	Professional Core – IX **Power Electronics**	3	0	0	3	3
4	Theory	EEE11016/ EEE11017/ EEE11018	Professional Elective – I: A. Special Electrical Machines B. Electromagnetic Field Theory Electric Vehicle	3	0	0	3	3
5	Practical	EEE12019	A. Professional Core Lab: Electrical Machine Design Lab	0	0	3	3	2
6	Practical	EEE12020	Professional Core Lab: Power Systems – II Lab	0	0	3	3	2
7	Practical	EEE12021	Professional Core Lab: Control Systems Lab	0	0	3	3	2
8	Practical	EEE12022	Professional Core Lab: Power Electronics Lab	0	0	3	3	2
9	Practical	GEE14007	Capstone Project–V	0	0	2	2	1
10	Practical		Artificial Intelligence for Electrical Engineering	2	0	0	0	0
			Total	**14**	**0**	**11**	**26**	**21**

Third Year:

Semester VI								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	EEE11023	Professional Core – XI **Power System – II**	3	0	0	3	3
2	Theory	EEE11024	Professional Core – XII **Modern Control Systems**	3	0	0	3	3
3	Theory	EEE11025/ EEE11026/ EEE11027	Professional Elective – II A. Power Generation Economics B. Digital Signal Processing C. Sensors and Transducers	3	0	0	3	3
4	Theory		Open Elective – I	3	0	0	3	3
5	Practical	EEE12028	Professional Core Lab: Power Systems – II Lab	0	0	3	3	2
6	Practical	EEE12029	A. Professional Core Lab: Modern Control Systems Lab	0	0	3	3	2
7	Practical	EEE12030/ EEE12031/ EEE12032	Professional Elective - II Lab: A. Power Generation Economics B. Digital Signal Processing Sensors and Transducers	0	0	3	3	2
8	Practical	EEE15033	Technical Seminar	0	0	2	2	1
9	Practical		Python for Electrical Engineers	2	0	0	0	0
			Total	**14**	**0**	**11**	**23**	**19**

Fourth Year:

Semester VII								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	**MGT11402**	HSSM – V (Industrial Management)	3	0	0	3	3
2	Theory	EEE11034	Professional Core – XIII **Electric Drives**	3	0	0	3	3
3	Theory	EEE11035/ EEE11036/ EEE11037	Professional Elective – III A. HVDC Transmission Systems B. Power System Dynamics C. High Voltage Engineering	3	0	0	3	3
4	Theory		Open Elective – II	3	0	0	3	3
5	Practical	EEE12038	Professional Core Lab: Electric Drives Lab	0	0	3	3	2
6	Practical	EEE14039	Minor Project	0	0	6	6	3
7	Practical	EEE14040	Summer Internship*	--	--	--	--	2
			Total	**12**	**0**	**9**	**21**	**19**

*** Summer Internship will be done at the end of 6th semester and will be evaluated in the 7th semester.**

Fourth Year:

Semester VIII								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Practical	EEE14041	Industry Work Experience/ SIRE**/ Major Project	0	0	12	12 (for major Project only)	4
2	Practical	EEE15042	Comprehensive Viva Voce	-	-	-	-	2
			Total	**0**	**0**	**12**	**12**	**6**

** SIRE: Scientific Investigation & Research Experience

Total Credits = 163

Total Credit Distribution Semester Wise:

Semester	**I**	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**	**Total Credits**
Credits	26	23	26	23	21	19	19	6	**163**

Annexure I

Previous Course Structure of A.Y. 2020 -2021 of B. Tech (Electrical Engineering)

First Year:

Semester I								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	MTH11501	Engineering Mathematics – I	3	1	0	4	4
2	Theory	PHY11201	Applied Science	3	0	0	3	3
3	Theory	CSE11001/ GEE11001	Introduction to Programming/ Electrical and Electronics Technology	3	0	0	3	3
4	Theory	ENG11053	HSSM – I (English Communication – I)	3	0	0	3	3
5	Theory	BIT11003	Life Sciences	3	0	0	3	3
6	Practical	PHY12202	Applied Science Lab	0	0	3	3	2
7	Practical	CSE12002/ GEE12002	Programming Lab/ Electrical and Electronics Technology Lab	0	0	3	3	2
8	Practical	CEE12001/ MEE12001	Engineering Drawing and CAD/ Engineering Workshop	0	0	3	3	2
9	Practical	ENG12043	Communication and Collaboration Skill – I	0	0	2	2	1
10	Practical	GEE14003	Capstone Project – I	0	0	2	2	1
11	Practical	DGS11001	Design Thinking	2	0	0	2	2
			Total	**17**	**1**	**13**	**31**	**26**

Semester II								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	MTH11502	Engineering Mathematics – II	3	1	0	4	4
2	Theory	GEE11001/ CSE11001	Electrical and Electronics Technology/ Introduction to Programming	3	0	0	3	3
3	Theory	MEE11002	Engineering Mechanics	3	1	0	4	4
4	Theory	EVS11107	Environmental Science	3	0	0	3	3
5	Practical	GEE12002/ CSE12002	Electrical and Electronics Technology Lab/ Programming Lab	0	0	3	3	2
6	Practical	MEE12001/ CEE12001	Engineering Workshop/ Engineering Drawing and CAD	0	0	3	3	2
7	Practical	ENG12044	Communication and Collaboration Skill – II	0	0	2	2	1
8	Practical	GEE14004	Capstone Project – II	0	0	2	2	1
9	Practical	IDP14001	Interdisciplinary Project	0	0	5	5	3
			Total	**12**	**2**	**15**	**29**	**23**

Semester III								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	MTH11526	Engineering Mathematics – III (Transform Calculus and Special Functions)	3	0	0	3	3
2	Theory	ECO11505	HSSM – IV (Economics for Engineers)	3	0	0	3	3
3	Theory	EEE11001	Professional Core – I: Electric Circuits	3	0	0	3	3
4	Theory	EEE11002	Professional Core – II: Electrical and Electronic Measurement	3	0	0	3	3
5	Theory	EEE11003	Professional Core – III: Electrical Machines – I	3	1	0	4	4
6	Practical	EEE12004	Professional Core Lab: Electric Circuits Lab	0	0	3	3	2
7	Practical	EEE12005	Professional Core Lab: Electrical and Electronic Measurement Lab	0	0	3	3	2
8	Practical	EEE12006	Professional Core Lab: Electrical Machines – I Lab	0	0	3	3	2
9	Practical	GEE14005	Capstone Project – III	0	0	2	2	1
10	Practical	SOC14100	Community Service#	--	--	--	--	1
11	Practical	EIC11001	Venture Ideation	2	0	0	2	2
			Total	**15**	**1**	**11**	**29**	**26**

CS Activity will be taken up during the summer break after 2nd semester, and will be evaluated in the 3rd semester.

Semester IV								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	MTH11530	Engineering Mathematics – IV (Numerical Techniques)	3	0	0	3	3
2	Theory	EEE11007	Professional Core – IV: Electrical Machines – II	3	0	0	3	3
3	Theory	EEE11008	Professional Core – V: Microprocessor and Microcontroller	3	0	0	3	3
4	Theory	EEE11009	Professional Core – VI: Analog and Digital Electronics	3	0	0	3	3
5	Theory	PSG11021	Human Values and Professional Ethics	2	0	0	2	2
6	Practical	MTH12531	Numerical Techniques Lab	0	0	3	3	2
7	Practical	EEE12010	Professional Core Lab: Electrical Machines – II Lab	0	0	3	3	2
8	Practical	EEE12011	Professional Core Lab: Microprocessor and Microcontroller Lab	0	0	3	3	2
9	Practical	EEE12012	Professional Core Lab: Analog and Digital Electronics Lab	0	0	3	3	2
10	Practical	GEE14006	Capstone Project – IV	0	0	2	2	1
			Total	**14**	**0**	**14**	**28**	**23**

Semester V								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	EEE11013	Professional Core – VII: Power Systems – I	3	0	0	3	3
2	Theory	EEE11014	Professional Core – VIII: Control Systems	3	0	0	3	3
3	Theory	EEE11015	Professional Core – IX: Power Electronics	3	0	0	3	3
4	Theory	EEE11016/ EEE11017/ EEE11018	Professional Elective – I: C. Special Electrical Machines D. Electromagnetic Field Theory E. Electric Vehicle	3	0	0	3	3
5	Practical	EEE12019	Professional Core Lab: Electrical Machine Design Lab	0	0	3	3	2
6		EEE12020	Professional Core Lab: Power Systems – II Lab	0	0	3	3	2
7	Practical	EEE12021	Professional Core Lab: Control Systems Lab	0	0	3	3	2
8	Practical	EEE12022	Professional Core Lab: Power Electronics Lab	0	0	3	3	2
9	Practical	GEE14007	Capstone Project – V	0	0	2	2	1
			Total	**12**	**0**	**11**	**26**	**21**

Semester VI								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	EEE11023	Professional Core – XI: Power Systems – II	3	0	0	3	3
2	Theory	EEE11024	Professional Core – XII: Modern Control Systems	3	0	0	3	3
3	Theory	EEE11025/ EEE11026/ EEE11027	Professional Elective – II: A. Power Generation Economics B. Digital Signal Processing C. Sensors and Transducers	3	0	0	3	3
4	Theory		Open Elective – I	3	0	0	3	3
5	Practical	EEE12028	Professional Core Lab: Power Systems – II Lab	0	0	3	3	2
6	Practical	EEE12029	Professional Core Lab: Modern Control Systems Lab	0	0	3	3	2
7	Practical	EEE12030/ EEE12031/ EEE12032	Professional Elective - II Lab: C. Power Generation Economics D. Digital Signal Processing E. Sensors and Transducers	0	0	3	3	2
8	Practical	EEE15033	Technical Seminar	0	0	2	2	1

Total	**12**	**0**	**11**	**23**	**19**

Semester VII								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	MGT11402	HSSM – V (Industrial Management)	3	0	0	3	3
2	Theory	EEE11034	Professional Core – XIII: Electric Drives	3	0	0	3	3
3	Theory	EEE11035/ EEE11036/ EEE11037	Professional Elective - II Lab: A. HVDC Transmission Systems B. Power System Dynamics C. High Voltage Engineering	3	0	0	3	3
4	Theory		Open Elective – II	3	0	0	3	3
5	Practical	EEE12038	Professional Core Lab: Electric Drives Lab	0	0	3	3	2
6	Practical	EEE14039	Minor Project	0	0	6	6	3
7	Practical	EEE14040	Summer Internship*	--	--	--	--	2
Total				**12**	**0**	**9**	**21**	**19**

* Summer internship will be done at the end of 6th semester and will be evaluated in the 7th semester.

Semester VIII								
Sl. No.	**Type**	**Course Code**	**Course Title**	**L**	**T**	**P**	**Contact Hrs/Wk**	**Credits**
1	Theory	EEE14041	Industry Work Experience/ SIRE**/ Major Project	0	0	12	12 (for Major Project only)	4
2	Theory	EEE15042	Comprehensive Viva Voce	--	--	--	--	2
			Total	**0**	**0**	**12**	**12**	**6**

** SIRE: Scientific Investigation & Research Experience

Total Credits = 163

Total Credit Distribution Semester Wise:

Semester	**I**	**II**	**III**	**IV**	**V**	**VI**	**VII**	**VIII**	**Total Credits**
Credits	26	23	26	23	21	19	19	6	**163**