



Minutes of the Meeting

Date of the Meeting : 09.11.2022
Name of the Meeting : Curriculum Review for B.E. Electrical and Electronics based on
Feedback from Stake holders
Venue : EEE Seminar Hall
Time : 02.15 pm – 04.15 pm

Attended by:

S.No	Name	Designation	
1.	Dr.S.Baskar	Professor	P. Baskar
2.	Dr.P.Venkatesh	Professor	P. Venkatesh
3.	Dr.K.Selvi	Professor	K. Selvi
4.	Prof.S.Sivakumar	Associate Professor	S. Sivakumar
5.	Dr.V.Saravanan	Professor	V. Saravanan
6.	Dr.S.Latha	Professor	S. Latha
7.	Dr.C.K.Babulal	Professor	C.K. Babulal
8.	Dr.M.Geethanjali	Professor	M. Geethanjali
9.	Dr.R.Rajan Prakash	Associate Professor	R. Rajan Prakash
10.	Dr.S.A.E.Xavier	Associate Professor	S.A.E. Xavier
11.	Dr.B.Ashok Kumar	Assistant Professor	B. Ashok Kumar
12.	Dr.G.Sivasankar	Assistant Professor	G. Sivasankar
13.	Dr.M.Meenakshidevi	Assistant Professor	M. Meenakshidevi

Stakeholders : , Course handling faculty, Students, Alumni & Employer

Curriculum reviewed : B.E Electrical and Electronics Regulation 2018

Curriculum Proposed : B.E Electrical and Electronics Regulation 2022

Consolidated feedback, suggestion by the stake holders

Stake holder	Suggestions
BoS Members (Industry Persons, Academic Person from IISc, Alumni)	<ul style="list-style-type: none"> ○ Offer the general elective courses in TLP mode ○ Introduction of C++ and data structures in TLP mode ○ C & C++ can be introduced together in third semester ○ Got clarified with CDIO courses ○ Introduce Python, Data science in electives ○ Introduce Data structures and OOPS in combined form ○ Introduce C & C++ with 3 modules in C and 2 modules in C++ ○ Introduce Lab for data structures ○ Offer data structures in sixth semester and Professional communication in fourth semester In view with placement ○ Idea of splitting the project into 4 groups is good ○ Introduce Employment enhance ability courses[C programming, Problem solving, professional communications, projects] ○ Introduce Java and OOPS in elective course ○ Reschedule the C Programming course ○ Offer data structures before the C programming ○ Reschedule the Electrical problem solving using computers
Alumni	<ul style="list-style-type: none"> ● Include more importance to industrial and practical oriented study ● Cover topics such as C, C++, Java, Microcontrollers, Embedded systems, Data structures should be covered ● Provide assignments as practical problems ● Introduce more one credit courses ● Introduce courses like Computer Architecture, RTL and STA (VLSI) Courses, Artificial Intelligence, Electric vehicle, IoT, Python, ,Embedded C, PLC, SCADA,DCS practical courses
Faculty	<ul style="list-style-type: none"> ● Power electronics and drives lab instead of power electronics lab ● Swap Power electronics & drives lab and measurement and instrumentation lab ● Introduce Python programming ● Introduce laboratory for Python & Data structures ● Introduce OOPS & Java course in fifth semester ● Offer Digital systems in Second Semester ● Swap Electrical problem solving using computers with Integrated circuits lab ● Introduce AutoCAD in Engineering graphics course ● Introduce Engineering Exploration course specific to Electrical and Electronics
Student	<p>Supportive courses that can be added from students' perspective.</p> <ul style="list-style-type: none"> ● Battery technologies, ● Wireless Technology ● ETAP in power systems Laboratory. ● Verilog, System verilog , UVM in Digital Electronics laboratory. ● Python focused on data science ● Python/Cloud technologies/Simulink/ETAP ● Python ● C++, ● CAD software

	<ul style="list-style-type: none">• CAD Electrical,• Exposure to Autocad, BIM modeller software's, Keil uvision, Altium
Employer	<ul style="list-style-type: none">• Imparting more IT Skills in the curriculum• Including some Data base language like sql• Imparting Coding knowledge• Enhanced hands on skill• Strong Computer fundamentals

Action taken based on the feedback from the stake holders:

According to the feedback from the stake holders, the following scheduling of courses and tentative elective titles will be proposed for B.E. Electrical and Electronics in Regulation 2022 and the same will be presented in the forthcoming Board of Studies that has been planned on 03.12.2022.

Sem	Theory / Theory cum Practical / Practical								CDIO courses	Audit Courses (Mandatory Non-credit)	Credit
	1	2	3	4	5	6	7	8			
I	22MA110 Calculus for Engineers (BSC-4)	22PH120 Physics (BSC-3)	22CH130 Chemistry (BSC-3)	22EG140 Technical English (HSMC-2)	22ME160 Engineering Graphics (ESC-4)	22EG170 English Lab. (HSMC-1)	22PH180 Physics Lab. (BSC-1)	22CH190 Chemistry Lab. (BSC-1)	22EE150 Engineering Exploration (EEE Specific) (ESC-2)		21
II	22EE210 Matrices and Transforms (BSC-4)	22EE220 Materials Science for Electrical Engineering (ESC-3)	22EE230 Electric Circuit Analysis (PCC-3)	22EE240 Electromagnetic Fields (PCC-3)	22EE250 Digital Systems (PCC-3)	22EE260 Electronic devices and circuits (PCC-3)	22EE270 Electrical Workshop (ESC-1)	22EE280 Electronic Devices and Circuits (PCC Lab 1)		Audit Course 1	21
III	22EE310 Numerical methods and Complex variables (BSC-4)	22EE320 DC Machines and Transformers (PCC-3)	22EE330 Linear Integrated Circuits (PCC-3)	22EE340 Signals and Systems (PCC-3)	22EE350 Problem Solving Using Computers (ESC-3)		22EE370 DC Machines and Transformers Lab (PCC Lab 1)	22EE380 Integrated Circuits Lab (PCC Lab 1)	22ES390 Design Thinking (ESC-3)		21
IV	22EE410 Probability and	22EE420 AC Machines (PCC-3)	22EE430 Measurements and Instrumentation (PCC-3)	22EE440 Control Systems (PCC-3)	22EE450 Power Electronics (PCC-3)	22EE460 Data Structures Elective(ESC-3)	22EE470 Electrical Problem solving using	22EE480 AC Machines Lab (PCC Lab 1)	22EE490 Project Management (HSMC-3)	Audit Course 2	24

	Random Process (BSC-4)						computers (PCC Lab 1)					
V	22EE510 Generation, Transmission and Distribution (PCC-3)	22EE520 Micro Controllers (PCC-3)	22EE530 Electric drives (PCC-3)	22EE540 Power System Analysis (PCC-3)	Interdisciplinary Elective (OE-3)	22EE550 Object Oriented Programming PE (ESC-3)	22EE570 Measurement and Control Lab (PCC Lab1)	22EE580 Microcontrollers lab (PCC Lab 1)	22EE590 Project -1 (P-3)			23
VI	22EE610 Accounting and Finance HSMC-3	22EEPXX PEC-PSE-1 (3)	22EEPXX PEC-PSE-2 (3)	22EEPXX PEC-PSE-3 (3)	Basic Science Elective (OE-3)	22EG660 Professional Communication HSMC-2	22EE670 Power Electronics and Drives Lab (PCC Lab-1)(1)	22EE680 Electric Power Systems lab (PCC Lab 1)	22EE690 Project -2 (P-3)			22
VII	22EEPXX PEC-PSE-4 (3)	22EEPXX PEC-PSE-5 (3)	22EEPXX PEC-PSE-6 (3)	22EEPXX PEC-PSE-7 (3)	22EEPXX PEC-PEES-1 (3)		22EE770 Energy Management System Lab (PCC Lab 1)		22EE790 Project -3 (P-3)			19
VIII	22EEPXX PEC-PEES - 2 (3)	22EEPXX PEC-PEES - 3(3)							22EE890 Project -4 (P-3)			9

In addition to the above scheduling of courses, the following Elective Courses have been proposed for B.E. Electrical and Electronics, Regulation 2022 and will be presented in the upcoming Board of Studies Meeting. The electives are grouped SIG.

Electrical Energy Systems	Analog and Digital Electronic Systems	Control and Automation	Power Electronics and Drives
Design of Electrical Installations	Bio-medical Instrumentation	Control System Design	Flexible AC Transmission Systems
Smart Grid	ASIC Design	Industrial Instrumentation	Power Quality
Thermal power plant instrumentation & control	Real Time Operating System	Control System Design	Power Electronics for Renewable Energy Systems
High Voltage Engineering	Machine Learning	Industrial Instrumentation	Electric Vehicles
Energy Storage Systems	VLSI Design	Soft Computing	HVDC Transmission
Power System Operation and Control	Computer Organization	Operation Research	Battery Technology
Electrical Machine Design	Internet of Things		Simulation of Power Electronic Systems
Switchgear and Protection	FPGA based System Design		
Wind and Solar Technology	Digital Signal Processing		
Operation and Maintenance of Electrical equipment	Embedded Systems Design		
Energy Audit and Management in Electric Utilities			
Power System Stability			



BoS Coordinator



Program Coordinator

Note:

To be circulated among Faculty members.

The faculty members are requested to design the curriculum, syllabus based on the comments from the stakeholders



H.D.E.E.