


**SCHEME OF INSTRUCTION & EXAMINATION**  
**B.E. (Electrical and Electronics Engineering) III – SEMESTER**

S. No	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration In Hrs	
<b>Theory Courses</b>										
1	ES302CE	Engineering Mechanics	3	1	-	4	30	70	3	4
2	BS205MT	Mathematics – III	3	1	-	4	30	70	3	4
3	PC401EE	Electrical Circuit Analysis	3	-	-	3	30	70	3	3
4	PC402EE	Electromagnetic Fields	3	-	-	3	30	70	3	3
5	PC403EE	Electrical Machines – I	3	1	-	4	30	70	3	4
6	PC403EC	Analog Electronic Circuits	3	-	-	3	30	70	3	3
<b>Practical / Laboratory Courses</b>										
7	PC451EE	Electrical Circuits Lab	-	-	2	2	25	50	3	1
8	PC452EE	Computer Aided Electrical Drawing Lab	-	-	2	2	25	50	3	1
9	PC453EC	Analog Electronic Circuits Lab	-	-	2	2	25	50	3	1
<b>Total</b>			<b>18</b>	<b>3</b>	<b>6</b>	<b>27</b>	<b>255</b>	<b>570</b>	<b>-</b>	<b>24</b>

HS: Humanities and Social Sciences    BS: Basic Science    ES: Engineering Science  
 MC: Mandatory Course    PC: Professional Core    PE: Professional Elective  
 L: Lecture    T: Tutorial    P: Practical    D: Drawing  
 CIE: Continuous Internal Evaluation    SEE: Semester End Evaluation (Univ. Exam)    EE: Electrical Engg.

**Note:**

1. Each contact hour is a clock hour.
2. The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.

  
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**SCHEME OF INSTRUCTION & EXAMINATION  
B.E. (Electrical and Electronics Engineering) IV – SEMESTER**

S. No	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration In Hrs	
<b>Theory Courses</b>										
1	HS102EG	Effective Technical Communication in English	2	-	-	2	30	70	3	2
2	PC408EE	Power Systems – I	3	-	-	3	30	70	3	3
3	ES305ME	Energy Sciences and Engineering	2	-	-	2	30	70	3	2
4	PC409EE	Electrical Machines – II	3	1	-	4	30	70	3	4
5	PC410EE	Digital Electronics and Logic Design	3	-	-	3	30	70	3	3
6	PC411EE	Power Electronics	3	-	-	3	30	70	3	3
<b>Practical / Laboratory Courses</b>										
7	PC455EE	Electrical Machines Lab – I	-	-	2	2	25	50	3	1
8	PC456EE	Power Electronics Lab	-	-	2	2	25	50	3	1
9	PC457EE	Digital Electronics and Logic Design Lab	-	-	2	2	25	50	3	1
<b>Total</b>			<b>16</b>	<b>01</b>	<b>06</b>	<b>23</b>	<b>330</b>	<b>570</b>	<b>-</b>	<b>20</b>

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**SCHEME OF INSTRUCTION & EXAMINATION  
B.E. (Electrical and Electronics Engineering) VI-SEMESTER**

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
<b>Theory Courses</b>										
1	PC240EE	Power Systems – II	3	-	-	3	30	70	3	3
2	PC241EE	Electrical Measurements and Instrumentation	3	1	-	4	30	70	3	4
3	PC242EE	Digital Signal Processing and Applications	3	1	-	3	30	70	3	4
4	PC243EE	Utilization of Electrical Energy	3	-	-	3	30	70	3	3
5	OE2_EE	Open Elective - I	3	-	-	3	30	70	3	3
6	OE2_EE	Open Elective – II	3	-	-	3	30	70	3	3
<b>Practical/ Laboratory Courses</b>										
7	PC266EE	Electrical Machines Lab – II	-	-	2	2	25	50	3	1
8	PC267EE	Measurements and Instrumentation Lab	-	-	2	2	25	50	3	1
9	PC268EE	Microprocessors and Microcontrollers Lab	-	-	2	2	25	50	3	1
10	PC901EE	Summer Internship*	Six Weeks during Summer Vacation							
			18	1	06	25	255	570	-	23

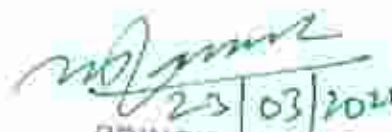
Open Elective – I & II		
1.	OE201EE	Electrical Energy Conservation and Auditing
2.	OE202EE	Reliability Engineering
3.	OE203EE	Non-Conventional Energy Sources
4.	OE204EE	Illumination and Electric Traction Systems

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 EE: Electrical Engineering

**Note:**

- Each contact hour is a clock hour
- The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.
- The students have to undergo a Summer Internship of six-week duration after VI-Semester and credits will be awarded in VII-Semester after evaluation.

  
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 23/03/2024  
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**SCHEME OF INSTRUCTION & EXAMINATION**  
**B.E. (Electrical and Electronics Engineering) V – SEMESTER**

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
<b>Theory Courses</b>										
1	PC235EE	Electrical Machines – II	3	1	-	4	30	70	3	4
2	PC236EE	Power Systems – I	3	-	-	3	30	70	3	3
3	PC237EE	Linear Control Systems	3	-	-	3	30	70	3	3
4	PC238EE	Microprocessors and Microcontrollers	3	-	-	3	30	70	3	3
5	PC239EE	Signals and Systems	3	-	-	3	30	70	3	3
6	PE1__EE	Professional Elective - I	3	-	-	3	30	70	3	3
<b>Practical/ Laboratory Courses:</b>										
7	PC263EE	Electrical Circuits Lab	-	-	2	2	25	50	3	1
8	PC264EE	Control Systems Lab	-	-	2	2	25	50	3	1
9	PC265EE	Power Electronics Lab	-	-	2	2	25	50	3	1
			<b>18</b>	<b>01</b>	<b>06</b>	<b>25</b>	<b>255</b>	<b>570</b>	<b>-</b>	<b>22</b>

<b>Professional Elective – I</b>		
1.	PE101EE	Electric Distribution System
2.	PE102EE	Renewable Energy Sources
3.	PE103EE	Hybrid Electric Vehicles

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 CIE: Continuous Internal Evaluation      SEE: Semester End Evaluation (Univ. Exam)  
 EE: Electrical Engineering

**Note:**

1. Each contact hour is a clock hour
2. The duration of the practical class is two hours, however it can be extended wherever necessary, to enable the student to complete the experiment.

  
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**FACULTY OF ENGINEERING**  
**Scheme of Instructions and Examination**  
(AICTE Model Curriculum for the Academic Year 2020-21)

and  
**Syllabi**

**B.E. V and VI Semester**

of

**Four Year Degree Programme**

in

**Electrical and Electronics Engineering**

(With effect from the academic year 2020 - 21)

(As approved in the faculty meeting held on XX-XX-2020)



Issued by

**Dean, Faculty of Engineering**

**Osmania University, Hyderabad – 500 007**

**2020**

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23/03/20

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**SCHEME OF INSTRUCTION & EXAMINATION**  
**B.E. VII - Semester**  
**(ELECTRICAL AND ELECTRONICS ENGINEERING)**

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
<b>Theory Courses</b>										
1	PC 701 EE	Power System Operation and Control	3	1	-	4	30	70	3	3
2	PC 702 EE	Electric Drives and Static Control	3	1	-	4	30	70	3	3
3	PC 703 EE	Electrical Machine Design	3	1	-	4	30	70	3	3
4		Open Elective - II	3	-	-	3	30	70	3	3
5		Open Elective - III	3	-	-	3	30	70	3	3
<b>Practical/ Laboratory Courses</b>										
6	PC 751 EE	Electrical Simulation Lab	-	-	2	2	25	50	3	1
7	PC 752 EE	Microprocessor and Microcontrollers Lab	-	-	2	2	25	50	3	1
8	PW 761 EE	Project Work - I	-	-	4	4	50	-	-	2
9	PW 762 EE	Summer Internship	-	-	-	-	50	-	-	2
			15	03	08	26	300	450		21

Open Elective - II			Open Elective - III		
S. No.	Course Code	Course Title	S. No.	Course Code	Course Title
1	OE 771 CE	Green Building Technologies	1	OE 781 CE	Road Safety Engineering
2	OE 772 CS	Data Science Using R Programming	2	OE 782 IT	Software Engineering
3	OE 773 EC	Fundamentals of IoT	3	OE 783 EC	Principles of Electronic Communications
4	OE 774 EE**	Non-Conventional Energy Sources	4	OE 784 EE**	Illumination and Electric Traction systems
5	OE 775 ME	Entrepreneurship	5	OE 785 ME	Mechatronics

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PE: Professional Elective

L: Lectures

T: Tutorials

P: Practical

D: Drawing

CIE: Continuous Internal Evaluation

SEE: Semester End Examination (Univ. Exam)

Note: 1) Each contact hour is a Clock Hour

2) The practical class can be of two and half hour (clock hours) duration as per the requirement of a particular laboratory.

Note-2: \* The students have to undergo a Summer Internship of four weeks' duration after VI semester and credits will be awarded in VII semester after evaluation.

\*\* Subject is not offered to the students of EEE and EIE Department.



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**SCHEME OF INSTRUCTION & EXAMINATION**  
**B.E. VIII - SEMESTER**  
**(ELECTRICAL AND ELECTRONICS ENGINEERING)**

S. No.	Course Code	Course Title	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
<b>Theory Courses</b>										
1	PC 801 EE	Utilization of Electrical Energy	3	-	-	3	30	70	3	3
2		Professional Elective - III	3	-	-	3	30	70	3	3
3		Professional Elective - IV	3	-	-	3	30	70	3	3
4		Professional Elective - V	3	-	-	3	30	70	3	3
<b>Practical/Laboratory Courses</b>										
5	PC 851 EE	Power Systems Lab	-	-	2	2	25	50	3	1
6	PW 961 EE	Project Work - II	-	-	16	16	50	100	-	8
			<b>12</b>	<b>-</b>	<b>18</b>	<b>30</b>	<b>195</b>	<b>430</b>		<b>21</b>

Professional Elective - III			Professional Elective - IV		
S. No.	Course Code	Course Title	S. No.	Course Code	Course Title
1	PE 821 EE	Power System Reliability	1	PE 831 EE	Advanced Control Systems
2	PE 822 EE	Electric Vehicle and Hybrid Electric Vehicle	2	PE 832 EE	Electrical Estimation Costing & Safety
3	PE 823 EE	Machine Modelling Analysis	3	PE 833 EE	Advanced Power Electronics
4	PE 824 EE	High Voltage DC Transmission	4	PE 834 EE	Power Quality
Professional Elective - V					
1	PE 841 EE	Smart Grid Technologies			
2	PE 842 EE	Energy Management Systems and SCADA			
3	PE 843 EE	Special Electrical Machines			
4	PE 844 EE	Power Electronics Applications to Renewable Energy			
5	PE 845 EE	Electrical Substation Design and Equipment			

PC: Professional Course

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