

**New Curriculum for Four-Year Bachelor of Electrical Engineering
Course
Department of Electrical Engineering**

1st Year 1st Semester						
Code	Subject	Pds / week		Credit	Marks	
		L	S		Exam	Sessional
Hum/T/A	HUMANITIES-A	3	0	3	100	-----
EE/T/111	PRINCIPLES OF ELECTRICAL ENGINEERING-I	4	0	3	100	-----
EE/Math/T/112	MATHEMATICS-IF	3	0	3	100	-----
EE/Math/T/113	MATHEMATICS-IIF	3	0	3	100	-----
AM/ME/T/1A	ENGINEERING MECHANICS	3	0	3	100	-----
Ph/T/1A	PHYSICS-IA	3	0	3	100	
Ph/S/1	PHYSICS LABORATORY-I	0	3	3	-----	100
BED/ME/S/1	BASIC ENGINEERING DRAWING	0	3	3	-----	100
WS/ME/S/6A	WORKSHOP PRACTICE-VI (Carpentry and Fitter Shop)	0	3	3	-----	100
WS/ME/S/10	WORKSHOP PRACTICE-X (Forging and Welding)	0	3	3	-----	100
	Sub- Total	19	12		600	400
	Total	31			1000	

1 st Year 2 nd Semester						
Code	Subject	Pds / week		Credit	Marks	
		L	S		Exam	Sessional
EE/T/121	PRINCIPLES OF ELECTRICAL ENGINEERING-II	4	0	3	100	-----
EE/ET/T/122	ELECTRONICS-I	3	0	3	100	-----
EE/Math/T/123	MATHEMATICS-IIIF	3	0	3	100	-----
AM/ME/T/3	STRENGTH OF MATERIALS	3	0	3	100	-----
EE/ME/T/124	THERMODYNAMICS AND HEAT POWER ENGINEERING	3	0	3	100	-----
Ph/T/2B	PHYSICS-IIB	3	0	3	100	
Ph/S/2	PHYSICS LABORATORY-II	0	3	3		100
AED/ME/S/1	ADVANCED ENGINEERING DRAWING	0	3	3	-----	100
WS/ME/S/12B	WORKSHOP PRACTICE-XII (Machine Shop)	0	3	3	-----	100
EE/S/121	COMPUTER FUNDAMENTALS	0	3	3	-----	100
	Sub- Total	19	12		600	400
	Total	31			1000	

2 nd Year 1 st Semester						
Code	Subject	Pds / week		Credit	Marks	
		L	S		Exam	Sessional
EE/T/211	CIRCUIT THEORY	3	0	3	100	-----
EE/T/212	BASICS OF NUMERICAL METHODS AND PROGRAMMING	4	0	3	100	-----
EE/T/213	ELECTRICAL MEASUREMENT & MEASURING INSTRUMENTS	3	0	3	100	-----
EE/ET/T/214	ELECTRONICS-II	3	0	3	100	-----
EE/T/215	ELECTRICAL MACHINES-I	3	0	3	100	-----
EE/ME/T/216	PRIME MOVERS FOR ELECTRICAL SYSTEMS	4	0	3	100	
EE/S/211	E. E. LABORATORY – I	0	3	3	-----	100
EE/ME/S/212	M. E. LABORATORY – I	0	3	3	-----	100
MDD/ME/S/1	MACHINE DESIGN AND DRAWING(using CAD)	0	3	3	-----	100
	Sub- Total	20	9		600	300
	Total	29			900	

2 nd Year 2 nd Semester						
Code	Subject	Pds / week		Credit	Marks	
		L	S		Exam	Sessional
EE/T/221	ELECTRICAL INSTRUMENTATION	3	0	3	100	-----
EE/T/222	ELECTRICAL MACHINES-II	3	0	3	100	-----
EE/T/223	ELECTRICAL ENGINEERING MATERIALS	3	0	3	100	-----
EE/T/224	SIGNALS & SYSTEMS	3	0	3	100	-----
EE/T/225	POWER SUPPLY SYSTEMS	3	0	3	100	-----
EE/T/226	SEQUENTIAL SYSTEMS & MICROPROCESSORS	3	0	3	100	-----
EE/S/221	E. E. LABORATORY – II	0	3	3	----- -	100
EE/S/222	COMPUTER PROGRAMMING LABORATORY	0	3	3	-----	100
EE/ET/S/223	ELECTRONICS LABORATORY	0	3	3	----- -	100
EE/ME/S/224	M. E. LABORATORY – II	0	3	3	----- -	100
Sub- Total		18	12		600	400
Total		30			1000	

3 rd Year 1 st Semester						
Code	Subject	Pds / week		Credit	Marks	
		L	S		Exam	Sessional
EE/T/311	DIGITAL SIGNAL PROCESSING	3	0	3	100	-----
EE/T/312	ELECTRICAL MACHINES-III	3	0	3	100	-----
EE/T/313	POWER SYSTEM PLANNING AND DESIGN	3	0	3	100	-----
EE/T/314	LINEAR CONTROL SYSTEM	3	0	3	100	-----
EE/T/315	FIELD THEORY	3	0	3	100	-----
EE/T/316	PROGRAMMABLE LOGIC & MICROCONTROLLER	3	0	3	100	-----
EE/S/311	E. E. LABORATORY – III	0	3	3	-----	100
EE/S/312	ELECTRICAL MACHINE DESIGN – I	0	3	3	-----	100
EE/S/313	MICROPROCESSOR AND MICROCONTROLLER LABORATORY	0	3	3	-----	100
Sub- Total		18	9		600	300
Total		27			900	

3 rd Year 2 nd Semester						
Code	Subject	Pds / week		Credit	Marks	
		L	S		Exam	Sessional
EE/T/321	INTRODUCTION TO STATISTICAL & PROBABILISTIC METHODS	3	0	3	100	-----
EE/T/322	POWER ELECTRONICS	3	0	3	100	-----
EE/T/323	POWER SYSTEM PERFORMANCE	3	0	3	100	-----
EE/T/324	PROCESS INSTRUMENTATION & CONTROL	3	0	3	100	-----
EE/T/325	ELECTRICAL UTILISATION & ILLUMINATION ENGINEERING	3	0	3	100	-----
EE/T/326	HIGH VOLTAGE ENGINEERING	3	0	3	100	-----
EE/S/321	E. E. LABORATORY – IV	0	3	3	-----	100
EE/S/322	ELECTRICAL MACHINE DESIGN – II	0	3	3	-----	100
EE/S/323	POWER SYSTEM DESIGN	0	3	3	-----	100
EE/S/324	MODELING AND DIGITAL SIMULATION LABORATORY	0	3	3	-----	100
Sub- Total		18	12		600	400
Total		30			1000	

4 th Year 1 st Semester						
Code	Subject	Pds / week		Credit	Marks	
		L	S		Exam	Sessional
EE/T/411	PRINCIPLES OF COMMUNICATION ENGINEERING & COMPUTER NETWORKS	3	0	3	100	-----
EE/T/412	POWER SYSTEM PROTECTION & SWITCHGEAR	4	0	3	100	-----
EE/T/413	ELECTRIC DRIVES	3	0	3	100	
EE/T/414	ELECTIVE PAPER– I	4	0	3	100	-----
EE/S/411	E.E. LABORATORY – V	0	3	3		100
EE/S/412	ELECTIVE PROJECT & COMPUTATION – I	0	3	3	-----	100
EE/S/413	SEMINAR – I	0	3	3	-----	100
EE/S/414	ELECTRICAL MACHINE DESIGN – III	0	3	3	-----	100
EE/S/415	GENERAL VIVA VOCE	0	0	3	100	
	Sub- Total	14	12		500	400
	Total	26			900	

4 th Year 2 nd Semester						
Code	Subject	Pds / week		Credit	Marks	
		L	S		Exam	Sessional
EE/Gen/T/421	ECONOMICS AND INDUSTRIAL MANAGEMENT	4	0	3	100	-----
EE/T/422	ELECTIVE PAPER– II	4	0	3	100	-----
EE/T/423	SPECIAL PAPER - I	3	0	3	100	
EE/T/424	SPECIAL PAPER - II	3	0	3	100	-----
EE/S/421	E.E. LABORATORY – VI	0	3	3		100
EE/S/422	ELECTIVE PROJECT & COMPUTATION – II	0	3	3	-----	100
EE/S/423	SEMINAR – II	0	3	3	-----	100
EE/S/424	POWER ELECTRONICS DESIGN	0	3	3	-----	100
Sub- Total		14	12		400	400
Total		26			800	

NOTES:

1. Students have to select **any one** of the following Specializations. The Elective subjects, ‘Elective Project and Computation’, and the ‘Seminar’ will be assigned accordingly
 - (a) CONTROL SYSTEMS
 - (b) HIGH VOLTAGE ENGINEERING
 - (c) ELECTRICAL MACHINES & DRIVES
 - (d) ELECTRICAL MEASUREMENTS & INSTRUMENTATION
 - (e) ELECTRICAL POWER SYSTEMS
 - (f) ILLUMINATION ENGINEERING

2. Subjects for Elective Paper-I

- (a) DIGITAL CONTROL TECHNIQUES (Code: EE/T/414A)
- (b) HIGH VOLTAGE TECHNIQUE – I (Code: EE/T/414B)
- (c) SPECIAL ELECTRICAL MACHINES & DRIVES
(Code: EE/T/414C)
- (d) ADVANCED INSTRUMENTATION-I (Code: EE/T/414D)
- (e) ADVANCED POWER SYSTEMS ANALYSIS (Code: EE/T/414E)
- (f) ADVANCED ILLUMINATION ENGINEERING (Code: EE/T/414F)

3. Subjects for Elective Paper-II

- (a) ADVANCED CONTROL THEORY (Code: EE/T/422A)
- (b) HIGH VOLTAGE TECHNIQUE – II (Code: EE/T/422B)
- (c) ADVANCED ELECTRICAL MACHINE MODELLING &
ANALYSIS (Code: EE/T/422C)
- (d) ADVANCED INSTRUMENTATION-II (Code: EE/T/422D)
- (e) ADVANCED TOPICS IN POWER SYSTEMS (Code: EE/T/422E)
- (f) ADVANCED LIGHTING DESIGN (Code: EE/T/422F)

4. SPECIAL PAPER - I

Students have to select any one of the following:

- (a) NONLINEAR AND OPTIMAL CONTROL (Code: EE/T/423A)
- (b) CONDITION MONITORING OF ELECTRICAL SYSTEMS
(Code: EE/T/423B)
- (c) RELIABILITY ENGINEERING (Code: EE/T/423C)
- (d) ENERGY SYSTEMS (Code: EE/T/423D)

5. SPECIAL PAPER – II

Students have to select any one of the following:

- (a) ADVANCED COMPUTING TECHNIQUES (Code: EE/T/424A)

(b) INTRODUCTION TO NANO- BIOTECHNOLOGY
(Code: EE/T/424B)

(c) PRINCIPLES OF SOFTWARE ENGG. (Code: EE/T/424C)

(d) BIO-MEDICAL INSTRUMENTATION (Code: EE/T/424D)