### **ELECTRICAL ENGINEERING**

	Semester I	Semester – II										
Course code	Course Name	Credit Structure				Course Code	Course Name		Credit Structure			
		L	T	P	C			L	T	P	C	
CS 101	Computer Programming & Utilization	2	0	2	6	CH 103	Chemistry	2	1	0	6	
EE 111	Introduction to Electrical Systems (DIC-I)	3	0	0	6	MA 106 And MA 108	Linear Algebra and Ordinary Differential Equations I	3 3	1 1	0	4 4	
MA 105	Calculus	3	1	0	8							
PH 103	Electricity and Magnetism	2	1	0	6	EE 112	Introduction to Electronics (DIC-II)	3	0	0	6	
ME 113	Workshop Practice	0	1	3	4	IC 102	Data Analysis and Interpretation	2	1	0	6	
PH 117	Physics Lab	0	0	3	3	CH 117	Chemistry Lab.	0	0	3	3	
NC 101#	National Cadet Corps (NCC)	0	0	0	P/NP	ME 119	Engineering Graphics and Drawing	0	1	3	5	
NO 101#	National Sports Organization (NSS)	0	0	0	P/NP	NC 102#	National Cadet Corps (NCC)	0	0	0	P/NP	
NS 101#	National Service Scheme (NSS)	0	0	0	P/NP	NO 102#	National Sports Organization (NSS)	0	0	0	P/NP	
						NS 102#	National Service Scheme (NSS)	0	0	0	P/NP	
					33						34	

#### **ELECTRICAL ENGINEERING**

### ELECTRICAL ENGINEERING COURSE CURRICULUM FOR THE NEW PROGRAMME (B.Tech.) w.e.f. 2007 BATCH

<b>C</b>		Semester III							Semester –IV						
Course code	Course Name	Credit Structure				Course Code	Course Name	Credit Structure							
		L	T	P	C			L	T	P	С				
MA 205 MA 207	Mathematics II (Complex Analysis + DE II)	3	1 1	0	4 4	EE 210	Signals and Systems	2	1	0	6				
HS 101	Economics	3	0	0	6	EE 204	Analog Circuits	2	1	0	6				
EE 225	Network Theory	2	1	0	6	EE 222	Electrical Machines and Power Electronics	2	1	0	6				
EE 207	Electronic Devices	2	1	0	6	EE 224	Digital Systems	2	1	0	6				
EE 236	Electronic Devices Lab	0	0	3	3	EE 230	Analog Lab	0	0	3	3				
IC 211	Experimentation and Measurements Lab	0	0.5	3	4	EE 214	Digital Circuits Lab	0	0	3	3				
						EE 234	Machines Lab	0	0	4	4				
					33						34				
COURSES	S FOR HONOR REQUIREMENT					COURSES	FOR HONOR REQUIREMENT			1					
	Honors Elective E1	3	0	0	6		Honors Elective E2	3	0	0	6				
COURSES	S FOR MINOR REQUIREMENT					COURSES	S FOR MINOR REQUIREMENT								
EE 221	Digital Electronics	2	1	0	6	EE 232	Analog Electronics	2	1	0	6				

# Electrical Engineering COURSE CURRICULUM FOR THE NEW PROGRAMME (B.Tech.) w.e.f. 2007 BATCH

	Semester V	Semester –VI									
Course code	Course Name	Credit Structure				Course Code	Course Name	Credit Structure			
		L	T	P	C			L	T	P	C
EE 309	Microprocessors	2	0	2	6	EE 302	Control Systems	2	1	0	6
HS 301/ HS 303/ HS 305/ HS 307	Philosophy/ Psychology/ Literature/ Sociology	3	0	0	6	CS 303	Digital Signal Processing	2	1	0	6
EE 308	Communication Systems	2	1	0	6	EE 328	Digital Communications	2	1	0	6
EE 301	EM Waves	2	1	0	6	EE 334	Power Systems	2	1	0	6
EE 325	Probability and Random Processes	2	1	0	6	EE 340	Communications Lab	0	0	3	3
						EE 324	Control Systems Lab	0	0	3	3
					30						30
COURSE	ES FOR HONOR REQUIREMENT					COURSES	S FOR HONOR REQUIREMENT				
	Honors Elective E3	3	0	0	6		Honors Elective E4	3	0	0	6
COURSE	ES FOR MINOR REQUIREMENT					COURSES	S FOR MINOR REQUIREMENT				
EE 327	Signal Processing	2	1	0	6	EE 342	Control and Communications	2	1	0	6

## ELECTRICAL ENGINEERING COURSE CURRICULUM FOR THE NEW PROGRAMME (B.Tech.) w.e.f. 2007 BATCH

Semester VII						Semester –VIII						
Course code	Course Name	C	redit S	Struct	ure	Course Code	Course Name	C	Credit Structure			
		L	T	P	C			L	T	P	C	
ES 200 And HS 200	Environmental Studies: Science and Engg	3	0	0	3		Institute Elective II	2	1	0	6	
HS 200	And Environmental Studies	3	0	0	3							
	Institute Elective I	2	1	0	6		Dept./Open Elective III	3	0	0	6	
	Dept. Elective I	3	0	0	6		Dept./Open Elective IV	3	0	0	6	
	Dept. Elective II	3	0	0	6		Dept. Elective V & Dept. Elective VI OR	3 3	0	0	6	
						EE 492	BTP II	0	0	12	12	
EE 491	BTP - I	0	0	6	6							
					30						30	
COURSE	ES FOR HONOR REQUIREMENT					COURSES FOR HONOR REQUIREMENT						
	Honors Elective E5	2	1	0	6		Honors Elective E6	2	1	0	6	
COURSE	ES FOR MINOR REQUIREMENT					COURSES	S FOR MINOR REQUIREMENT					
	Power Electronics	2	1	0	6	EE 203	Electronic Devices	2	1	0	6	

### **Elective List For B.Tech. Electrical Engineering**

- 1. EE 429 Discrete Data and Digital Control
- 2. EE 442 Advanced Network Analysis
- 3. EE 420 Information Theory and Coding
- 4. EE 449 VLSI Technology
- 5. EE 318 Electronic Design Laboratory (6 CREDITS, 0 0 6 6)
- 6. EE 492 B. Tech Project II (12 CREDITS)
- 7. EE 605 Error Correcting Codes
- 8. EE 606 Fibre Optic Communication
- 9. EE 609 Radiating Systems
- 10. EE 620 Physics of Transistors
- 11. EE 622 Optimal Control Systems
- 12. EE 634 Simulation of Circuits and Devices
- 13. EE 649 Finite Fields and their Applications
- 14. EE 446 Electric Drives I
- 15. EE 659 A First Course in Optimization
- 16. EE 660 Application of Power Electronics to Power Systems
- 17. EE 661 Physical Electronics
- 18. EE 666 High Power Semiconductor Devices
- 19. EE 440 Speech Processing
- 20. EE 701 Introduction to MEMS
- 21. EE 713 Circuit Simulation in Power Electronics
- 22. EE 714 Behavioral Theory of Systems
- 23. EE 722 Restructured Power Systems
- 24. EE 724 Nanoelectronics
- 25. EE 725 Computational Electromagnetics