School of Electrical Engineering

(SELECT)

Curriculum & Syllabi

(Applicable to candidates admitted from the Academic year 2012– 13)

B.TECH. - ELECTRONICS AND ELECTRONICS ENGINEERING

University Core

Sl. No.	Course Code	Course	L	T	P	C	*Prereq/Co-Req/Antireq	Field
1.	ENG101	English for engineers-I	2	0	2	3	PR: ENG001 /Effective English	Humanities
2.	ENG 102	English for engineers-II	2	0	2	3	ENG101	Humanities
3.		Foreign Language	2	0	0	2		Humanities
4.	PHY101	Modern Physics	3	0	2	4	None	Sciences
5.	MAT 101	Multivariable Calculus and Differential Equations	3	1	0	4	None	Sciences
6.	CHY 104	Environmental Studies	3	0	0	3	None	Sciences
7.	CHY 101	Engineering Chemistry	2	1	2	4	None	Sciences
8.	CSE 101	Computer Programming and Problem Solving	2	0	2	3		Engineering
9.	EEE 498	Comprehensive Exam	0	0	0	2		Engineering
10.	MGT 301	Ethics and values	3	0	0	3		Management
		Total Credits				31		

L – Lecture, T – Tutorial, P – Practical, C – total Credits

University Electives

Sl.No.	Course Code+	Course	L	T	P	C	Field
1.	EEE230	Engineering optimization using soft computing	3	0	0	3	Engineering
2.	EEE 311	Industrial Power Electronics	3	0	0	3	Engineering
		Total				6	

L – Lecture, T – Tutorial, P – Practical, C – total Credits

Programme Core

S.No	Course Code	Course Title	L	T	P	C	Prereq/Co-Req/Antireq	Field
1.	PHY104	Semiconductor Device Physics	3	0	0	3	PHY101	Science
2.	MAT105	Differential and Difference Equation	3	1	0	4	MAT101	Science
3.	MAT104	Probability and Statistics	3	1	0	4	MAT101	Science
4.	MAT201	Complex Variables and Partial Differential Equations	3	1	0	4	MAT105	Science

5.	MAT205	Applied Numerical Methods	3	1	0	4	MAT201	Science
6.	MAT212	Resource Management	3	0	0	3	None	Science
7.		Management Course – I	3	0	0	3	None	Management
8.		Management Course – II	3	0	0	3	None	Management
9.		Management Course – III	3	0	0	3	None	Management
10.	EEE105	Basic Electrical Engineering	3	1	0	4	None	Engineering
11.	EEE102	Semiconductor Devices and Circuits	3	0	2	4	EEE105 /EEE101 /ECE102	Engineering
12.	EEE201	Analog Integrated Circuits	3	0	2	4	EEE102/ ECE101	Engineering
13.	MEE101	Engineering Graphics	0	0	4	2	None	Engineering
14.	MEE102	Workshop Practice – I	0	0	2	1	None	Engineering
15.	MEE201	Applied Mechanics and Thermal Engineering	4	0	0	4	None	Engineering
16.	EEE226	Control Systems	3	0	2	4	MAT105, ECE102/ EEE105	Engineering
17.	EEE115	Electromagnetic Field Theory	3	0	0	3	PHY101	Engineering
18.	CSE102	Data Structures and Algorithms	3	0	2	4	CSE101/ ITE101	Engineering
19.	EEE114	DC Machines and Transformers	3	0	2	4	EEE105/ EEE101	Engineering
20.	EEE229	Measurements and Instrumentation	3	0	2	4	EEE105 /EEE101	Engineering
21.	EEE108	Network Theory	3	0	0	3	EEE105 /EEE101 /ECE102	Engineering
22.	EEE116	Digital Logic System Design	3	0	2	4	None	Engineering
23.	EEE228	Power System Engineering	3	0	0	3	EEE114	Engineering
24.	EEE 227	AC Machines	3	1	2	5	EEE114	Engineering
25.	EEE 205	Transform Techniques for signals	3	0	0	3	MAT101 /BCL1 03	Engineering
26.	EEE301	Digital Signal Processing	3	0	2	4	EEE205 /ECE206	Engineering
27.	EEE 302	Power System Analysis	3	1	0	4	EEE 228	Engineering
28.	EEE 303	Microcontroller and its Applications	3	0	2	4	EEE116	Engineering
29.	EEE 304	Power Electronics	3	0	2	4	EEE102	Engineering
30.	EEE 401	Power System Protection and Switchgear	3	0	2	4	EEE302	Engineering
31.	EEE 402	Electric Drives and Control	3	0	2	4	EEE304 & EEE227	Engineering

32.	EEE 499	Project Work	-	-	-	20		Engineering
33.	EEE 399	Industrial Internship	-	-	-	2		Engineering
		Total Credits				134		

L – Lecture, T – Tutorial, P – Practical, C – total Credits

Program Elective

Sl. No.	*Course Code*	*Course Title*	*L*	*T*	*P*	*C*	*PreReq/Co-Req/AntiReq*	*Field*
1.	ITE201	Object Oriented Programming	3	0	0	3	CSE101	Engineering
2.	EEE413	RPC & FACTS	3	0	0	3	EEE302	Engineering
3.	EEE305	Renewable Energy Sources	3	0	0	3	EEE114	Engineering
4.	EEE403	Advanced control theory	3	0	0	3	EEE226	Engineering
5.	EEE404	Power system operation and control	3	0	0	3	EEE302	Engineering
6.	EEE409	High voltage engineering	3	0	0	3	EEE302	Engineering
7.	EEE306	Generation and Utilization of Electrical Energy	3	0	0	3	EEE114	Engineering
8.	EEE405	Special machines	3	0	0	3	EEE227	Engineering
9.	EEE412	Power quality	3	0	0	3	EEE302	Engineering
10.	EEE308	VLSI system Design	3	0	0	3	EEE201	Engineering
11.	EIE302	Embedded Systems Design	3	0	0	3	EEE303	Engineering
12.	EIE313	Digital Image Processing	3	0	0	3	EEE301	Engineering
13.	EEE410	Robotics and automation	3	0	0	3	None	Engineering
14.	EEE408	Neural networks and Fuzzy Logic	3	0	0	3	None	Engineering
15.	EEE307	Biomedical Instrumentation	3	0	0	3	None	Engineering
16.	EEE414	Software systems for Energy Management	3	0	0	3	CSE101& EEE105/ECE102	Engineering
17.	EEE309	Introduction to Electromagnetic Compatibility	3	0	0	3	EEE115	Engineering
26	EEE310	Design of Electrical Apparatus	3	0	0	3	EEE 227	Engineering

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