## B.Tech (Electrical and Electronics Engineering) OVERALL CREDIT STRUCTURE

Undergraduate Core (UC)		Undergraduate Elective (UE)	
Category	Credit	Category	Credit
DC	118	DE	50 (Minimum)
BS	38	HM	12(Minimum)
ES	40	OC	50 (Balance)
HM	12	UN	00 (Courses)
Total	208	Total	112
Grand Total UC+UE			320

Course Code	Course	L-T-P	Credit
Basic Sciences (BS)			
SCL102	Applied Mathematics-I	3-2-0	8
SCL103	Applied Mathematics-II	3-2-0	8
SCL201	Applied Mathematics-III**	3-0-0	6
SCL104	Applied Physics	3-0-2	8
SCL105	Applied Chemistry	3-0-2	8
	Total		38

Departmental Core (DC)		L-T-P	Credit
SCL202	Electronic and Electromagnetic	3-0-0	6
	Materials*		
EEL202	Basic Electrical Circuits*	3-0-2	8
EEL203	Electrical Machines*	3-0-2	8
EEL204	Network Theory*	3-2-0	8
EEL205	Measurement & Instrumentation**	3-0-2	8
ECL201	Electronic Circuits*	3-0-2	8
ECL202	Digital Circuits*	3-0-2	8
ECL203	Signals and Systems*	3-2-0	8
EEL301	Power System*	3-2-0	8
EEL302	Control System**	3-0-2	8
EEL303	Power Electronics***	3-0-2	8
EEL309	Electric Drives**	3-0-2	8
ECL301	Linear Integrated Circuits***	3-0-2	8
ECL305	Microcontroller & Interfacing**	3-0-2	8
EEL401	Switchgear & Protection***	3-0-2	8

Engineering Arts and Sciences (ES)		L-T-P	Credit
CEL101	Engineering Mechanics	3-0-2	8
EEL101	Elementary Electrical Engineering	3-0-2	8
MEL101	Engineering Drawing	3-0-2	8
CSL101	Computer Programming	3-0-2	8
MEP101	Mechanical Workshop	0-0-2	2
EEP101	Electrical Workshop	0-0-2	2
CEL102	Environmental Science	2-0-0	4
Total			40

Humanities and Management (Core) (HM)		L-T-P	Credit
HMP102	Spoken English	1-0-2	4
HMP103	Written English	1-2-0	4
HML101	Social Science	2-0-0	4
	Total		12

Non Credit Requirement		L-T-P	Credit
NCN101	NCC#	-	0
NCN102	NSS#	-	0
NCN103	NSO#	-	0
SPB101	Sports-1#	0-0-4	0
SPB102	Sports-II#	0-0-4	0
EED201	Project	-	0
EED301	Literature Review Paper Writing	-	0
EET201	Practical Training	-	0
HMD201	Community Project	-	0

#A student has to opt at least one from NCC, NSS, NSO and sports (I & II both).

Note: Students are required to opt the core courses in the order (\*, \*\*, \*\*\*)

Departmental Elective (DE)		L-T-P	Credit
ECL205	Electromagnetic Waves	3-2-0	8
CSL204	Introduction to Object Oriented	3-0-2	8
	Methodology		
EEL304	Switched Mode Power Converters	3-2-0	8
EEL305	Soft Computing Techniques	3-0-2	8
EEL306	Power Quality Issues and Solutions	3-0-0	6
EEL307	Electrical and Industrial Safety	3-0-0	6
EEL308	Industrial Instrumentation	3-0-2	8
EEL310	Control System Design	3-2-0	8
EEL312	Electrical Energy System	3-0-0	6
EEL313	Electrical Distribution System	3-0-0	6
EEL314	High Voltage Engineering	3-0-0	6
EEL315	Electrical Utilization & Traction	3-0-0	6
ECL304	Digital Signal Processing	3-0-2	8
EEL402	Special Electrical Machines Design	2-0-2	6
EEL403	Optimal Control Theory	3-2-0	8
EEL404	Computer Control and Automation	3-0-0	6
	of Power Systems		
EEL405	FACTS	3-0-0	6
EEL406	Discrete Data and Digital Control	3-2-0	8
EEL407	Power Plant Engineering	3-0-0	6
EEL409	Process Control and	3-0-2	8
	Instrumentation		
EEL410	HVDC	3-0-0	6
EEL411	Power System Economics &	3-0-0	6
	Management		
MEL411	Robotics	3-0-2	8
ECL405	Adaptive Signal Processing	3-2-0	8
ECL410	Image Processing	3-2-0	8
ECL412	VLSI Technology	3-0-2	8
ECL415	Biomedical Instrumentation	3-0-0	6
SCL402	Linear Algebra	3-0-0	6
SCL403	Probability Theory & Statistics	3-0-0	6
EED401	Major Project Part-I	-	2
EED402	Major Project Part-II	-	6