

ELECTRICAL ENGINEERING

B.TECH.					Template No. EE-1			
C	SEMESTER							
	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th
O	MTH101A [11]	MTH102A [11]	COM200 [05]	EE210A [11]	EE320A [11]	DE-1 [09]**	HSS-4 (Level-2) [09]	DE-3 [09]
U	PHY101A [03]	PHY103A [11]	EE200A [11]	EE250A [11]	EE330A [11]	DE-2 [09]**	OE-2 [09]	DE-4 [09]
R	PHY102A [11]	CHM101A [03]	ESC201A [14]	ESO203A [13]	EE370A [11]	EE340A [11]	OE-3 [09]	HSS-5 (Level-2) [09]
S	LIF101A [06]	ESC101A [14]	ESO/SO [8]*	HSS-2 (Level-1) [11]	EE380A (Lab) [12]	EE381A [12]	OE-4 [09]	OE-5 [09]
E	ENG112A/HSS-1 (Level-1) [11]	CHM102A [08]	SO-1 [06] (MSO202A)	SO-3 [11] MSO201A	OE-1 [09]	HSS-3 (Level 2) [09]	OE/DE/UGP-3 (EE491A) [09]	OE-6 [09]
S	PE101A [03]	PE102A [03]	SO-2 [06] (MSO203B)	TA202A [06]	EE390A [02]	OE/DE/UGP-2 (EE392A) [09]	-	UGP-4 [09] (EE492A) (Extra Credits)
	TA101A [09]	-	TA201A [06]	-	UGP-1 [04] (EE391A) (Extra Credits)	-	-	-
	54	50	56*	63	56/60	59	45	45/54

MINIMUM CREDIT REQUIREMENT FOR GRADUATION:

Institute Core (IC)	: 124	Credits
Department Compulsory (DC)	: 103	Credits
**Department Elective (DE)	: 36	Credits
Open Elective (OE)	: 54	Credits
*UGP2-3/DE/OE	: 18	Credits
*ESO/SO	: 44	Credits
HSS (Level-I)	: 22	Credits
HSS (Level-II)	: 27	Credits
Total	: 428	Credits

Basket – A

EE311A [09]
EE321A [09]
EE360A [09]
EE301A [09]

REMARKS:

- 1) *The open ESO/SO slot may be filled by any ESO/SO course of 8 credits or more.
- 2) **DE-1 and DE-2 (both) should be selected from Basket-A.
- 3) *Out of the 18 credits for UGP-2 and UGP-3, only 09 credits may be added as OE credits (where the other 09 may be added as DE credits) OR all 18 credits may be added as DE credits.
- 4) UGP-1 & UGP-4 are optional and do not count towards degree requirements.
- 5) UGP-1, 2, 3 and 4 (EE391A, EE392A, EE491A and EE492A) may be taken in any order from the 5th to 8th semester.
- 6) Upto 36 OE credits may be waived from the minimum requirements for students opting for either Dual Degree or Double Major programme.

BT-MT (PG Part – Category A) (from the same department)					Template No.EE-2
C O U R S E S	7 th	8 th	SUMMER	9 th	10 th
	DE PG-1 [09]	PG-3 [09]	M.Tech. Thesis [09] (EE699A)	PG-6 [09]	M.Tech. Thesis [36] (EE699A)
	DE PG-2 [09]	PG-4 [09]	-	M.Tech. Thesis [27] (EE699A)	-
		PG-5 [09]			
	18	27	09	36	36

MINIMUM CREDIT REQUIREMENT IN M.TECH PART FOR GRADUATION:

PG Component : 54 Credits
Thesis Component : 72 Credits

REMARKS:

- 1) In the 7th semester, in addition to the courses listed above for the PG requirement, students will be expected to complete their UG requirements by taking HSS-4 (level 2), OE-2 and OE-3 (total of 27 credits). In the 8th semester, in addition to the courses listed above for the PG requirements, students will be expected to complete their UG requirements by taking HSS-5 (level 2), DE-3 and OE-5 (total of 27 credits).
- 2) BT-MT students are NOT permitted to take EE491A (UGP-3) and EE492A (UGP-4) as part of their UG curriculum.
- 3) Upto 36 credits (from a combination of OE, DE, UGP2-3/DE/OE credits as listed in the BT template minimum requirements) may be used to fulfill requirements for the BT-MT dual degree programme. These will be waived from the BT programme and counted towards PG requirements. The total minimum BT-MT dual degree (category A) credit requirement will be 518.
- 4) PG-3, 4, 5 & 6 are to be taken with the permission of thesis supervisor.

DOUBLE MAJOR		Template No. EE-3
C O U R S E S	Odd Semester	Even Semester
	Pre-Requisites	
	ESO203A [13]	MSO201A [11]
	MSO202a [06]	
	MSO203b [06]	
	Mandatory EE Courses	
	EE200A [11]	EE210 / EE250 [11]
	EE320A [11]	Any ONE combination from Basket – B [33-41]
	EE330A [11]	EE DE PG [09] (optional)
	EE370A [11]	-
	EE380A [12]/ EE480A [10]	
	EE DE PG [09] / EE391A [04] / EE492A [09] (Optional)	
	-	
	54-65	44-61

TOTAL MANDATORY CREDITS FOR SECOND MAJOR IN ELECTRICAL ENGINEERING: 98 CREDITS

REMARKS:

- 1) All PG courses should be taken in consultation with the EE DJGC.
- 2) Upto 36 OE credits may be waived from the parent department BT/BS graduation requirements when they are used to fulfill requirements for the double major.

Basket – A

EE321A [09]
EE301A [09]
EE340A [11]
EE311A [09]
EE360A [09]
EE381 [12]/
EE481 [06]

Basket – B

1. 3 PG Courses + 1 Course from Basket – A
2. 2 PG Courses + 2 Courses from Basket – A
3. 1 PG Course + 3 Courses from Basket – A
4. 1 PG Course + 2 Course from Basket – A
+ UGP-3 (EE491A)
5. 2 PG Courses + 1 Course from Basket – A
+ UGP-3 (EE491A)

MINOR				Template No.EE-4	
Title	MICROELECTRONICS/ DIGITAL SYSTEMS	POWER	COMMUNICATIONS & SIGNAL PROCESSING	CONTROLS	RF & PHOTONICS
C O U R S E S	EE200A [11]	EE200A [11]	EE200A [11]	EE200A [11]	EE200A [11]
	EE210A [11]	EE330A [11]	EE320A [11]	EE250A [11]	EE340A [11]
	EE311A [09]/ EE370A [11]	EE360A [09]	EE321A [09]/ EE301A [09]	EE650A [09]	EE612A [09]/ EE642A [09]/ EE648A [09]
	31/33	31	31	31	31

CHM 201	Chemistry
Com-S 200	Communication Skills
ESO 202	Thermodynamics or
ESO 214	Nature & Properties of Materials
EE 200	Signals, Systems and Networks
TA 201	Introduction to Manufacturing
MTH 203	Mathematics III
ESO 209	Probability & Statistics
ESO 210	Introduction to Electrical Engg.
EE 210	Microelectronics - I
EE 250	Control System Analysis
HSS	
EE 320	Principles of Communication
EE 330	Power Systems
EE 370	Digital Electronics & Micro-processor Technology
EE 380	Electrical Engineering Lab. - I
HSS	
OE	Open Elective
EE 340	Electromagnetic Theory
EE 381	Electrical Engineering Lab. - II
SE	Science Elective
	Three courses out of the following four:
EE 301	Digital Signal Processing
EE 311	Microelectronics II
EE 321	Communication Systems
EE 360	Power Electronics
SE	Science Elective
OE	Open Elective
DE	Department Elective
DE	Department Elective
EE 491	Project-I
HSS	
DE	Department Elective
OE	Open Elective
OE	Open Elective
EE 492	Project - II