

M.Tech. (Digital Systems & Computer Electronics)
Course Structure and Syllabus
Academic Regulations: 2017-18

I YEAR - I Semester

Sl. No.	Code	Subject	L	T	P	Credits	Internal marks	External marks
1.	6U101	Digital System Design	3	1	-	3	25	75
2.	6U102	Advanced Data Communications	3	1	-	3	25	75
3.	6U103	Advanced Microprocessors and Microcontrollers	3	1	-	3	25	75
4.	6T101	VLSI Technology and Design	3	1	-	3	25	75
5.		Elective-I	3	1	-	3	25	75
6.		Elective-II	3	1	-	3	25	75
7.	6U104	Research Methodology	2	-	-	2	25	75
8.	6U171	VLSI Technology and Design Lab	-	-	4	2	25	75
9.	6U172	Literature Review Seminar -1	-	-	3	1	100	-
10.	6U173	Comprehensive Viva-Voce-1	-	-	-	1	50	50
		Total	20	6	7	24	350	650

I YEAR - II Semester

Sl. No.	Code	Subject	L	T	P	Credits	Internal marks	External Marks
1.	6U201	Advanced Computer Architecture	3	1	-	3	25	75
2.	6T204	Low Power VLSI Design	3	1	-	3	25	75
3.	6U202	Design of Fault Tolerant Systems	3	1	-	3	25	75
4.	6T202	Embedded Real Time Operating Systems	3	1	-	3	25	75
5.		Open Elective	3	1	-	3	25	75
6.		Elective-III	3	1	-	3	25	75
7.	6U271	Embedded Systems Lab	-	-	4	2	25	75
8.	6U272	Literature Review Seminar -2	-	-	3	1	100	-
9.	6U273	Project Seminar-1(Abstract)	-	-	3	2	100	-
10.	6U274	Comprehensive Viva-Voce-2	-	-	-	1	50	50
		Total	18	6	10	24	425	575

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II YEAR – I Semester

Sl. No.	Code	Subject	L	T	P	Credits	Internal Marks	External Marks
1.	6U371	Project Seminar-2 (Design and Development)	-	-	-	4	100	-
2.	6U372	Project Work (Part I) Project Status Report	-	-	-	20	Grading*	-
Total			-	-	-	24	100	-

*Grading – Excellent/ Good/ Satisfactory/ Unsatisfactory

II YEAR – II Semester

Sl. No.	Code	Subject	L	T	P	Credits	Internal Marks	External Marks
1.	6U471	Project Seminar-3 (Implementation/ Execution)	-	-	-	2	100	-
2.	6U472	Pre submission Seminar	-	-	-	2	100	-
3.	6U473	Project Work and Dissertation	-	-	-	20	-	Grading*
Total			-	-	-	24	200	-

*Grading – Excellent/ Good/ Satisfactory/ Unsatisfactory

ELECTIVE I

- 1) 6U105 - Advanced Digital Signal Processing
- 2) 6UC01 - Image & Video Processing
- 3) 6U106 - Advanced Computer Networks
- 4) 6T103 - Hardware Software Co-Design
- 5) 6T109 - Internet of Things

ELECTIVE II

- 1) 6T102 - CPLD & FPGA Architectures and Applications
- 2) 6U107 - Internetworking
- 3) 6U108 - Digital Control Systems
- 4) 6U109 - Embedded system Design
- 5) 6T106 - Hardware Description Languages and FPGA Based Design

OPEN ELECTIVE

- 1) 6ZC13 - Entrepreneurship and Innovation
- 2) 6ZC03 - Banking Operation, Insurance and Risk Management
- 3) 6H233 - Ethics, Morals, Gender sensitization and Yoga
- 4) 6ZC04 - Network security and cryptography

ELECTIVE III

- 1) 6T201 - System on Chip Architecture
- 2) 6U203 - CMOS Analog & Mixed Signal Design
- 3) 6U204 - Digital Signal Processors and Architectures
- 4) 6U205 - Device Modeling
- 5) 6U206 - Adhoc & Wireless Sensor Networks