

KGISL INSTITUTE OF TECHNOLOGY: COIMBATORE – 641 035
REGULATIONS 2024 (for students admitted from AY 2024-25)
CHOICE BASED CREDIT SYSTEM
B.E. ELECTRONICS AND COMMUNICATION ENGINEERING
CURRICULUM FOR SEMESTERS I - VIII

OVERVIEW OF CREDITS

SEMESTER	HSMC	BSC	ESC	PCC	PEC	OEC	EEC	Total
I	4	10	9	-	-	-	-	23
II	4	9	9	-	-	-	3	25
III	-	4	-	16	-	-	2	22
IV	-	4	-	15	-	-	6	25
V	2	-	-	11	6	-	3	22
VI	-	-	-	7	9	3	4	23
VII	-	-	-	7	-	3	6	16
VIII	-	-	-	-	-	-	10	10
TOTAL	10	27	18	56	15	6	34	166
% OF CATEGORY	6.0%	16.3%	10.8%	33.7%	9.0%	3.6%	20.5%	100%

CATEGORY OF COURSES

HSMC	Humanities Science and Management Course	PEC	Professional Elective Course
BSC	Basic Science Course	OEC	Open Elective Course
ESC	Engineering Science Course	EEC	Employability Enhancement Course
PCC	Professional Core Course	MC	Mandatory Course

TYPE OF COURSES

LIT	Laboratory Integrated Theory	PCD	Personality Character Development
T	Theory	VC	Value Added Course
L	Laboratory Course	COT	Community Outreach and Intervention through Technical Activities
IP	Induction Programme	IT	Industrial Training/ Internship
MC	Mandatory Course	CC	Comprehension Course
NCC	NCC Credit Course	PW	Project Work

S.No.	Category	Suggested Breakup of Credits	Credits
1	Humanities, Social Sciences and Management Courses (HSMC)	10-13	10
2	Basic Science Courses (BSC)	23-27	27
3	Engineering Science Courses (ESC)	18-22	18
4	Professional Core Courses (PCC)	50-62	56
5	Professional Elective Courses (PEC)	15-18	15
6	Open Elective Courses(OEC)	6	6
7	Employability Enhancement Courses(EEC)	30-36	34
8	Mandatory Courses (MC)	Non Credit	Non Credit
	Total	165 - 170	166

SEMESTER – I							
S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UTA161	தமிழர் மரபு /Heritage of Tamils	T	1-0-0	1	1	HSMC
2	24UEN171	Communicative English for Engineers and Professionals – I	LIT	2-0-2	4	3	HSMC
3	24UMA162	Calculus and Laplace Transforms	T	3-1-0	4	4	BSC
4	24UPY171	Physics for Engineering and Technology	LIT	2-0-2	4	3	BSC
5	24UCH172	Applied Chemistry	LIT	2-0-2	4	3	BSC
6	24UCS161	Computational Thinking	T	2-1-0	3	3	ESC
7	24UCS171	Python Programming	LIT	3-0-2	5	4	ESC
8	24UME166	Engineering Graphics	L	0-0-4	4	2	ESC
9	24UPD191	Personality and Character Development	PCD	-	2	-	EEC
10	24UIP181	Induction Programme	IP	-	-	-	MC
11	24UMC001	Mandatory Course I - Yoga and Meditation Fundamentals	MC	1-0-0	1	-	MC
Total Credits						23	

SEMESTER – II							
S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UTA261	தமிழரும் தொழில் நுட்பமும் /Tamils and Technology	T	1-0-0	1	1	HSMC
2	24UEN271	Communicative English for Engineers and Professionals – II	LIT	2-0-2	4	3	HSMC
3	24UMA262	Complex Variable and Ordinary Differential Equations	T	3-1-0	4	4	BSC
4	24UPY262	Physics for Electronics Engineering	T	3-0-0	3	3	BSC
5	24UCH261	Environmental Sciences and Sustainability	T	2-0-0	2	2	BSC
6	24UCS271	Programming in C	LIT	3-0-2	5	4	ESC
7	24UEC273	Circuit Analysis	LIT	2-0-2	4	3	ESC
8	24UME266	Engineering Practices Laboratory	L	0-0-4	4	2	ESC
9	24USD296	Skill Development Course	LIT	2-0-2	4	3	EEC
10	24UPD291	Personality and Character Development	PCD	-	2	-	EEC
11	24UMC002	Mandatory Course II - Emotional Balance and Mental Wellness	MC	1-0-0	1	-	MC
12	24UNC201	NCC Credit Course Level 1	NCC	-	-	1	-
Total Credits						25	

SEMESTER – III							
S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UMA362	Linear Algebra and Numerical Methods	T	3-1-0	4	4	BSC
2	24UEC301	Signals and Systems	T	3-0-0	3	3	PCC
3	24UEC302	Electrical Engineering and Measurements	T	3-0-0	3	3	PCC
4	24UEC311	Electronic Devices and Circuits	LIT	2-0-2	4	3	PCC
5	24UEC312	Digital Electronics and System Design	LIT	2-0-2	4	3	PCC
6	24UIT311	Data Structures and Algorithms	LIT	3-0-2	5	4	PCC
7		Skill Development Elective – I	L	0-0-4	4	2	EEC
8	24UPD391	Personality and Character Development	PCD	-	2	-	EEC
9	24UVC386	Value Added Course	VC	-	-	2	EEC
Total Credits						22	

SEMESTER – IV							
S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UMA462	Probability and Random Process	T	3-1-0	4	4	BSC
2	24UEC401	Electromagnetic Fields and Waveguides	T	3-0-0	3	3	PCC
3	24UEC402	Control Systems	T	3-0-0	3	3	PCC
4	24UEC411	Analog and Baseband Communication	LIT	2-0-2	4	3	PCC
5	24UEC412	Transmission Lines and Antennas	LIT	2-0-2	4	3	PCC
6	24UEC413	Linear and Digital Integrated Circuits	LIT	2-0-2	4	3	PCC
7		Career Progression Elective	T	3-0-0	3	3	EEC
8		Skill Development Elective – II	L	0-0-4	4	2	EEC
9	24UCO492	Community Outreach and Intervention through Technical Activities	COT	-	1	1	EEC
10	24UPD491	Personality and Character Development	PCD	-	2	-	EEC
11	24UVC486	Value Added Course	VC	-	2	2	EEC
12	24UNC401	NCC Credit Course Level 2	NCC	-	-	2	-
Total Credits						25	

SEMESTER – V							
S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UHV501	Universal Human Values	T	2-0-0	2	2	HSMC
2	24UEC511	Digital Signal Processing	LIT	3-0-2	5	4	PCC
3	24UEC512	Digital Communication	LIT	2-0-2	4	3	PCC
4	24UEC513	Microprocessors and Microcontrollers	LIT	3-0-2	5	4	PCC
5		Professional Elective I	T/LIT	-	-	3	PEC
6		Professional Elective II	T/LIT	-	-	3	PEC
7		Skill Development Elective – III	L	0-0-4	4	2	EEC
8	24UEC593	Industrial Training/ Internship	IT	-	-	1	EEC
9	24UPD591	Personality and Character Development	PCD	-	2	-	EEC
10	24UVC586	Value Added Course	VC	-	2	2	EEC
11		Mandatory Course – III	MC	2-0-0	2	-	MC
Total Credits						22	

SEMESTER – VI							
S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UEC611	Digital VLSI Design	LIT	3-0-2	5	4	PCC
2	24UEC612	Radio Frequency and Microwave Engineering	LIT	2-0-2	4	3	PCC
3		Professional Elective – III	T/LIT	-	-	3	PEC
4		Professional Elective – IV	T/LIT	-	-	3	PEC
5		Professional Elective – V	T/LIT	-	-	3	PEC
6		Open Elective – I	T/LIT	-	-	3	OEC
7		Skill Development Elective – IV	L	0-0-4	4	2	EEC
8	24UCO692	Community Outreach And Intervention through Technical Activities	COT	-	-	2	EEC
9	24UPD691	Personality and Character Development	PCD	-	2	-	EEC
10	24UVC686	Value Added Course	VC	-	2	2	EEC
11		Mandatory Course IV	MC	2-0-0	2	-	MC
12	24UNC601	NCC Credit Course Level 3	NCC	-	-	3	-
Total Credits						23	

SEMESTER – VII							
S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UEC701	Artificial Neural Networks and Deep Learning	T	3-0-0	3	3	PCC
2	24UEC711	Wireless Communication and Networks	LIT	3-0-2	5	4	PCC
3		Open Elective – II	T/LIT	-	-	3	OEC
4	24UEC793	Industrial Training / Internship	IT	-	-	2	EEC
5	24UEC794	Comprehension Course	CC	2-0-0	2	2	EEC
6	24UEC795	Mini Project	PW	0-0-4	4	2	EEC
7	24UVC786	Value Added Course	VC	-	2	2	EEC
Total Credits						16	

SEMESTER – VIII							
S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UEC895	Project Work	PW	0-0-20	20	10	EEC
Total Credits						10	

MANDATORY COURSES

S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CATEGORY
				L-T-P	TCP	
1	24UMC001	Yoga and Meditation Fundamentals	T	1-0-0	1	MC
2	24UMC002	Emotional Balance and Mental Wellness	T	1-0-0	1	MC
3	24UMC003	Ethical behavior and code of conduct for Engineers	T	2-0-0	2	MC
4	24UMC004	Disaster Management	T	2-0-0	2	MC
5	24UMC005	Indian Constitution and Knowledge System	T	2-0-0	2	MC
6	24UMC006	Ergonomics and Industrial Safety	T	2-0-0	2	MC
7	24UMC007	Introduction to Women and Gender Studies	T	2-0-0	2	MC

CAREER PROGRESSION

S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UCPE11	Entrepreneurship Development	T	3-0-0	3	3	EEC
2	24UCPE12	Research Methodology	T	3-0-0	3	3	EEC
3	24UCPE13	Career Development Course	T	3-0-0	3	3	EEC

PROFESSIONAL ELECTIVE COURSES (PEC)

VERTICAL 1: SEMICONDUCTOR CHIP DESIGN

S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UECP01	Low Power IC Design	T	3-0-0	3	3	PEC
2	24UECP02	VLSI Testing and Design For Testability	T	3-0-0	3	3	PEC
3	24UECP03	Mixed Signal IC Design Testing	T	3-0-0	3	3	PEC
4	24UECP04	System on Chip Design	T	3-0-0	3	3	PEC
5	24UECP05	Analog IC Design	T	3-0-0	3	3	PEC
6	24UECP06	Digital IC Design	T	3-0-0	3	3	PEC
7	24UECP07	ASIC Design	T	3-0-0	3	3	PEC
8	24UECP08	CAD for VLSI	T	3-0-0	3	3	PEC
9	24UECP09	Introduction to Nano Electronics	T	3-0-0	3	3	PEC
10	24UECP10	Advanced Digital System Design	T	3-0-0	3	3	PEC

VERTICAL 2: SIGNAL AND IMAGE PROCESSING

S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UECP11	Image Processing	T	3-0-0	3	3	PEC
2	24UECP12	Digital Speech Processing	T	3-0-0	3	3	PEC
3	24UECP13	Advanced Digital Signal Processing	T	3-0-0	3	3	PEC
4	24UECP14	Neural Networks	T	3-0-0	3	3	PEC
5	24UECP15	DSP Integrated Circuits	T	3-0-0	3	3	PEC
6	24UECP16	Multimedia Compression Techniques	T	3-0-0	3	3	PEC
7	24UECP17	Introduction to Computer Vision	T	3-0-0	3	3	PEC
8	24UECP18	Pattern Recognition	T	3-0-0	3	3	PEC
9	24UECP19	Soft Computing and its Applications	T	3-0-0	3	3	PEC

VERTICAL 3: SENSOR TECHNOLOGIES AND IOT

S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UECP20	IoT Processors	T	3-0-0	3	3	PEC
2	24UECP21	IoT Based System Design	T	3-0-0	3	3	PEC
3	24UECP22	Embedded Systems and IoT Design	LIT	2-0-2	4	3	PEC
4	24UECP23	Industrial IoT and Industry 4.0	T	3-0-0	3	3	PEC
5	24UECP24	MEMS Design	T	3-0-0	3	3	PEC
6	24UECP25	Sensors Actuators and Interface Electronics	T	3-0-0	3	3	PEC
7	24UECP26	Adhoc and Wireless Sensor Network	T	3-0-0	3	3	PEC
8	24UECP27	IoT Protocols and Industrial Sensors	T	3-0-0	3	3	PEC
9	24UECP28	AI Integrated Processors	T	3-0-0	3	3	PEC
10	24UECP29	Embedded Automotive Systems	T	3-0-0	3	3	PEC

VERTICAL 4: RF AND SPACE TECHNOLOGIES

S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UECP30	Satellite Communication	T	3-0-0	3	3	PEC
2	24UECP31	RF Systems and Antenna Design	T	3-0-0	3	3	PEC
3	24UECP32	5G Mobile Communication and Networks	T	3-0-0	3	3	PEC
4	24UECP33	Smart Antennas	T	3-0-0	3	3	PEC
5	24UECP34	Remote Sensing	T	3-0-0	3	3	PEC
6	24UECP35	Avionics Systems	T	3-0-0	3	3	PEC
7	24UECP36	Cognitive Radio Communication	T	3-0-0	3	3	PEC
8	24UECP37	Radar Technologies	T	3-0-0	3	3	PEC
9	24UECP38	Millimeter Wave and Microwave Communication	T	3-0-0	3	3	PEC
10	24UECP39	Radio Frequency Engineering	T	3-0-0	3	3	PEC

VERTICAL 5: HIGH SPEED COMMUNICATION

S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UECP40	Wireless Broadband Networks	T	3-0-0	3	3	PEC
2	24UECP41	High Performance Communication Networks	T	3-0-0	3	3	PEC
3	24UECP42	Software Defined Radio Networks	T	3-0-0	3	3	PEC
4	24UECP43	Massive MIMO Networks	T	3-0-0	3	3	PEC
5	24UECP44	Advanced Wireless Communication Techniques	T	3-0-0	3	3	PEC
6	24UECP45	Molecular Communication	T	3-0-0	3	3	PEC
7	24UECP46	Optical Communication and Networks	T	3-0-0	3	3	PEC
8	24UECP47	Wireless Networks	T	3-0-0	3	3	PEC
9	24UECP48	Optoelectronics	T	3-0-0	3	3	PEC

VERTICAL 6: EMERGING TECHNOLOGIES

S. NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS	CATEGORY
				L-T-P	TCP		
1	24UECP49	Wearable Devices	T	3-0-0	3	3	PEC
2	24UECP50	Medical Imaging Systems	T	3-0-0	3	3	PEC
3	24UECP51	Brain Computer Interface and Applications	T	3-0-0	3	3	PEC
4	24UECP52	Body Area Networks	T	3-0-0	3	3	PEC
5	24UECP53	Underwater Navigation Systems	T	3-0-0	3	3	PEC
6	24UECP54	Robotics and Automation	T	3-0-0	3	3	PEC
7	24UECP55	Ocean Observation Systems	T	3-0-0	3	3	PEC
8	24UECP56	Bio-inspired Computing	T	3-0-0	3	3	PEC
9	24UECP57	Medical IoT	T	3-0-0	3	3	PEC

OPEN ELECTIVES

B. TECH. ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

S.NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS /WEEK		CREDITS
				L-T-P	TCP	
1	24UADO01	Introduction to Artificial Intelligence and Machine Learning	T	3-0-0	3	3
2	24UADO02	Introduction to Data Science	T	3-0-0	3	3
3	24UADO03	Introduction to Big Data Analytics	T	3-0-0	3	3
4	24UADO04	Data Visualization Techniques	T	3-0-0	3	3
5	24UADO05	Introduction to Devops Tools	T	3-0-0	3	3
6	24UADO06	Fundamentals of Storage Technologies	T	3-0-0	3	3
7	24UADO07	Basics of Cloud Services	T	3-0-0	3	3

B.E. CSE (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)

S.NO.	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS /WEEK		CREDITS
				L-T-P	TCP	
1	24UAMO01	Fundamentals of Artificial Intelligence	T	3-0-0	3	3
2	24UAMO02	Principles of Machine Learning	T	3-0-0	3	3
3	24UAMO03	Fundamentals of Deep Learning	LIT	2-0-2	4	3
4	24UAMO04	Virtualization and Container Technologies	LIT	2-0-2	4	3
5	24UAMO05	Python Frameworks for Web Applications	LIT	2-0-2	4	3
6	24UAMO06	Fundamentals of Natural Language Processing	T	3-0-0	3	3
7	24UAMO07	AI for Mechanical Engineering	T	3-0-0	3	3
8	24UAMO08	AI for food processing	T	3-0-0	3	3
9	24UAMO09	AI for Game Development	T	3-0-0	3	3

B. TECH. COMPUTER SCIENCE AND BUSINESS SYSTEMS

S.NO.	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS /WEEK		CREDITS
				L-T-P	TCP	
1.	24UCBO01	Modern Web Applications	T	3-0-0	3	3
2.	24UCBO02	Applied Design Thinking	T	3-0-0	3	3
3.	24UCBO03	Human Computer Interaction	T	3-0-0	3	3
4.	24UCBO04	Social Information Network	T	3-0-0	3	3
5.	24UCBO05	Artificial Intelligence and Expert Systems	T	3-0-0	3	3
6.	24UCBO06	Usability Design of Software Applications	T	3-0-0	3	3
7.	24UCBO07	Data Mining and Analytics	T	3-0-0	3	3

B.E COMPUTER SCIENCE AND ENGINEERING

S.NO.	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS
				L-T-P	TCP	
1	24UCSO01	Fundamentals of Data Structures	LIT	2-0-2	4	3
2	24UCSO02	Principles of Computer Networks	LIT	2-0-2	4	3
3	24UCSO03	Video Creation and Editing	LIT	2-0-2	4	3
4	24UCSO04	Fundamentals of Database Systems	LIT	2-0-2	4	3
5	24UCSO05	Basics of Web Development	LIT	2-0-2	4	3
6	24UCSO06	Introduction to Digital Currency	T	3-0-0	3	3

B.E. COMPUTER SCIENCE AND ENGINEERING (CYBER SECURITY)

S.NO.	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS
				L-T-P	TCP	
1.	24UCYO01	Cybersecurity Fundamentals	T	3-0-0	3	3
2.	24UCYO02	Information Security Management	T	3-0-0	3	3
3.	24UCYO03	Incident Response and Forensics	T	3-0-0	3	3
4.	24UCYO04	Cyber Law and Ethics	T	3-0-0	3	3
5.	24UCYO05	Security Operations	T	3-0-0	3	3
6.	24UCYO06	Introduction to Open Source Intelligence.	T	3-0-0	3	3

B.Tech. INFORMATION TECHNOLOGY

S.NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS/ WEEK		CREDITS
				L-T-P	TCP	
1.	24UITO01	Functional Programming	T	3-0-0	3	3
2.	24UITO02	Fundamentals of Cryptography	T	3-0-0	3	3
3.	24UITO03	Software Engineering	T	3-0-0	3	3
4.	24UITO04	Concepts of Object Oriented Programming	LIT	2-0-2	4	3
5.	24UITO05	Fundamentals of Computer Vision	T	3-0-0	3	3
6.	24UITO06	Foundations of Block chain	T	3-0-0	3	3
7.	24UITO07	Game Theory and Mechanism Design	T	3-0-0	3	3

B.E. MECHANICAL ENGINEERING

S.NO	COURSE CODE	COURSE TITLE	COURSE TYPE	PERIODS / WEEK		CREDITS
				L-T-P	TCP	
1	24UMEO01	Fundamentals of Additive Manufacturing	T	3-0-0	3	3
2	24UMEO02	Renewable Energy Systems	T	3-0-0	3	3
3	24UMEO03	Principles of Safety Management	T	3-0-0	3	3
4	24UMEO04	Introduction to Mechatronics Systems	T	3-0-0	3	3
5	24UMEO05	Product Design and Development	T	3-0-0	3	3
6	24UMEO06	Fundamentals of Electrical Vehicle Technology	T	3-0-0	3	3

Guidelines for choosing Courses under PEC

CLUSTER	PEC- I	PEC- II	PEC- III	PEC- IV	PEC- V	
	RF AND SPACE TECHNOLOGIES	HIGH SPEED COMMUNICATION	SEMICONDUCTOR CHIP DESIGN	SIGNAL AND IMAGE PROCESSING	SENSOR TECHNOLOGIES AND IOT	EMERGING TECHNOLOGIES
Cluster A	24UECP30 Satellite Communication	24UECP40 Wireless Broadband Networks	24UECP01 Low Power IC Design	24UECP11 Image Processing	24UECP20 IoT Processors	24UECP50 Medical Imaging Systems
	24UECP32 5G Mobile Communication and Networks	24UECP41 High Performance Communication Networks	24UECP03 Mixed Signal IC Design Testing	24UECP12 Digital Speech Processing	24UECP21 IoT Based System Design	24UECP57 Medical IoT
	24UECP36 Cognitive Radio Communication	24UECP42 Software Defined Radio Networks		24UECP13 Advanced Digital Signal Processing	24UECP22 Embedded Systems and IoT Design	24UECP52 Body Area Networks
	24UECP38 Millimeter Wave and Microwave Communication	24UECP43 Massive MIMO Networks				24UECP54 Robotics and Automation
Cluster B	24UECP31 RF Systems and Antenna Design	24UECP44 Advanced Wireless Communication Techniques	24UECP04 System on Chip Design	24UECP15 DSP Integrated Circuits	24UECP23 Industrial IoT and Industry 4.0	24UECP53 Underwater Navigation Systems
	24UECP33 Smart Antennas	24UECP45 Molecular Communication	24UECP05 Analog IC Design	24UECP16 Multimedia Compression Techniques	24UECP24 MEMS Design	24UECP55 Ocean Observation Systems
	24UECP39 Radio Frequency Engineering		24UECP06 Digital IC Design		24UECP25 Sensors Actuators and Interface Electronics	
			24UECP07 ASIC Design		24UECP26 Adhoc and Wireless Sensor Network	
Cluster C	24UECP35 Avionics Systems	24UECP46 Optical Communication and Networks	24UECP02 VLSI Testing and Design For Testability	24UECP14 Neural Networks	24UECP27 IoT Protocols and Industrial Sensors	24UECP56 Bio-inspired Computing
	24UECP37 Radar Technologies	24UECP47 Wireless Networks	24UECP08 CAD for VLSI	24UECP17 Introduction to Computer Vision	AI Integrated Processors	24UECP51 Brain Computer Interface and Applications
Cluster D		24UECP48 Optoelectronics	24UECP09	24UECP18 Pattern	24UECP29 Embedded	24UECP49 Wearable

			Introduction to Nano Electronics	Recognition	Automotive Systems	Devices
Cluster E	24UECP34 Remote Sensing		24UECP10 Advanced Digital System Design	24UECP19 Soft Computing and its Applications		
Pre-requisite Courses	24UEC411 Analog and Baseband Communication		24UEC311 Electronic Devices and Circuits	24UEC301 Signals and Systems	24UEC513 Microprocessors and Microcontrollers	
	24UEC412 Transmission Lines and Antennas		24UEC312 Digital Electronics and System Design	24UEC511 Digital Signal Processing		
			24UEC413 Linear and Digital Integrated Circuits			

Criteria for Choosing Courses for Professional Electives

PEC – I : Any course from any cluster is fine

PEC - II : Any course from any cluster is fine

PEC - III : Any course from any cluster is fine

PEC - IV: Any course from any cluster is fine

PEC - V: Any course from any cluster is fine

Open elective - Course Preferences list

S.No	Departments	Course Preference
1	AI & DS	24UADO01 to 24UADO07
2	AI & ML	24UAMO01 to 24UAMO06, 24UAMO08, 24UAMO09
3	CSBS	24UCBO01 to 24UCBO07
4	CSE	24UCSO01 to 24UCSO06
5	CYS	24UCYO01 to 24UCYO06
6	IT	24UITO01 to 24UITO07
7	Mechanical	24UMEO02, 24UMEO06