ACADEMIC CURRICULA

UNDERGRADUATE/ INTEGRATED POST GRADUATE DEGREE PROGRAMMES

(With exit option of Diploma)

(Choice Based Flexible Credit System)

Regulations 2021

Volume – 1

(Revised on July 2024)

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

(Deemed to be University u/s 3 of UGC Act, 1956)

Kattankulathur, Chengalpattu District 603203,

Tamil Nadu, India

31. B.Tech. in Electronics and Communication Engineering

31. (a) Mission of the Department

Mission Stmt – 1	*Build an educational process that is well suited to local needs as well as satisfies the national and international accreditation requirements.*
Mission Stmt – 2	*Attract the qualified professionals and retain them by building an environment that fosters work freedom and empowerment.*
Mission Stmt – 3	*With the right talent pool, create knowledge and disseminate, get involved in collaborative research with reputed universities and produce competent graduands.*

31. (b) Program Educational Objectives (PEO)

PEO – 1	*Apply the acquired knowledge and skills in solving real-world engineering problems, considering national/global and societal issues such as health, environment, and safety.*
PEO – 2	*Create technologically innovative products that are economically viable and socially relevant.*
PEO – 3	*Develop an attitude toward pursuing knowledge and advanced education for sustained career advancement to adapt to emerging fields.*
PEO – 4	*Demonstrate leadership qualities and effective communication skills to work in a team of enterprising people in a multidisciplinary and multicultural environment with strong adherence to professional ethics.*

31. (c) Mission of the Department to Program Educational Objectives (PEO) Mapping

	Mission Stmt. - 1	Mission Stmt. - 2	Mission Stmt. - 3
PEO - 1	*1*	*2*	*3*
PEO - 2	*3*	*3*	*3*
PEO - 3	*2*	*1*	*3*
PEO - 4	*3*	*3*	*3*

3 – High Correlation, 2 – Medium Correlation, 1 – Low Correlation

31. (d) Mapping Program Educational Objectives (PEO) to Program Outcomes (PO)

	Program Outcomes (PO)												Program Specific Outcomes (PSO)		
	1	2	3	4	5	6	7	8	9	10	11	12			
	Engineering Knowledge	Problem Analysis	Design/development of solutions	Conduct investigations of complex problems	Modern Tool Usage	The engineer and society	Environment & Sustainability	Ethics	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	PSO-1	PSO-2	PSO-3
PEO - 1	*3*	*3*	-	-	-	*3*	*3*	*2*	-	-	-	-	*3*	-	-
PEO - 2	-	-	*3*	*3*	*3*	*3*	-	-	*2*	-	*3*	-	-	*3*	-
PEO - 3	-	-	-	*3*	*3*	-	*2*	*2*	-	*2*	-	*3*	-	*2*	*3*
PEO - 4	-	-	-	-	-	-	-	*3*	*3*	*3*	*3*	-	-	-	*3*

3 – High Correlation, 2 – Medium Correlation, 1 – Low Correlation

PSO – Program Specific Outcomes (PSO)

PSO - 1	*Problem-Solving Skills: Should be able to associate the learning from the courses related to Microelectronics, Signal processing, Microcomputers, Embedded and Communication Systems to arrive at solutions to real world problems.*
PSO - 2	*Professional Skills: Should have the capability to develop competence in using electronic modern design tools (both software and hardware) for the design and analysis of complex electronic systems in furtherance to research activities.*
PSO - 3	*Successful Career and Entrepreneurship: Should be able to understand the need for new skills to accommodate the rapidly changing industry research pattern in this field to have a successful career and to sustain passion and zeal for real-world applications using optimal resources as an entrepreneur.*

31. (e) Program Structure: B.Tech. in Electronics and Communication Engineering

Humanities & Social Sciences including Management Courses (H)

Course Code	Course Title	Hours / Week L	T	P	C
21LEH101T	Communicative English	2	1	0	3
21LEH102T	Chinese	2	1	0	3
21LEH103T	French				
21LEH104T	German				
21LEH105T	Japanese				
21LEH106T	Korean				
21LEH107T	Spanish				
21LEH108T	Russian				
21GNH101J	Philosophy of Engineering	1	0	2	2
21PDH209T [1]	Social Engineering	2	0	0	2
21GNH401T	Behavioral Psychology	2	1	0	3
	Total Credits				**13**

Basic Science Courses (B)

Course Code	Course Title	Hours / Week L	T	P	C
21PYB101J	Physics: Electromagnetic Theory, Quantum Mechanics, Waves and Optics	3	1	2	5
21CYB101J	Chemistry	3	1	2	5
21MAB101T	Calculus and Linear Algebra	3	1	0	4
21MAB102T	Advanced Calculus and Complex Analysis	3	1	0	4
21MAB201T	Transforms and Boundary Value Problems	3	1	0	4
21MAB203T	Probability and Stochastic Processes	3	1	0	4
21MAB302T	Discrete Mathematics	3	1	0	4
21BTB103T	Biology	2	0	0	2
	Total Credits				**32**

Engineering Science Courses (S)

Course Code	Course Title	Hours / Week L	T	P	C
21MES101L [1]	Basic Civil and Mechanical Workshop	0	0	4	2
21MES102L [1]	Engineering Graphics and Design	0	0	4	2
21EES101T	Electrical and Electronics Engineering	3	1	0	4
21CSS101J	Programming for Problem Solving	3	0	2	4
21CSS201T	Computer Organization and Architecture	3	1	0	4
21DCS201P [1]	Design Thinking and Methodology	1	2	0	3
21CSS303T	Data Science	2	0	0	2
	Total Credits				**21**

Professional Core Courses (C)

Course Code	Course Title	Hours / Week L	T	P	C
21ECC101J	Electronic System and PCB Design	2	0	2	3
21ECC201T [2]	Solid State Devices	3	0	0	3
21ECC202T	Analog and Linear Electronic Circuits	3	0	0	3
21ECC203T	Digital Logic Design	3	0	0	3
21ECC204T [2]	Signal Processing	3	0	0	3
21ECC205T	Electromagnetic Theory and Interference	3	0	0	3
21ECC211L [1]	Devices and Digital IC Laboratory	0	0	4	2
21ECC222L [1]	Analog and Linear Electronic Circuits Laboratory	0	0	4	2
21ECC301P [1]	Microprocessor, Microcontroller, and Interfacing Techniques	3	1	0	4
21ECC302T	Analog and Digital Communication	3	0	0	3
21ECC303T [2]	VLSI Design and Technology	3	0	0	3
21ECC304T [2]	Microwave and Optical Communication	3	0	0	3
21ECC311L [1]	VLSI Design Laboratory	0	0	4	2
21ECC322L [1]	Communication Laboratory	0	0	4	2
21ECC401T [2]	Wireless Communication and Antenna Systems	3	0	0	3
21ECC402P [1]	Computer Communication and Network Security	2	1	0	3
21CSC206T	Artificial Intelligence	2	1	0	3
	Total Credits				**48**

Non Credit Courses (M)

Course Code	Course Title	Hours / Week L	T	P	C
21PDM101L [1]	Professional Skills and Practices	0	0	2	0
21PDM102L [1]	General Aptitude	0	0	2	
21PDM201L [1]	Verbal Reasoning	0	0	2	
21PDM202L [1]	Critical and Creative Thinking Skills	0	0	2	
21PDM301L [1]	Analytical and Logical Thinking Skills	0	0	2	
21PDM302L [1]	Employability Skills and Practices	0	0	2	
21CYM101T [1]	Environmental Science	1	0	0	0
21LEM101T [1]	Constitution of India	1	0	0	0
21LEM102T [1]	Universal Human Values – Introduction	1	0	0	0
21LEM201T [1]	Professional Ethics	1	0	0	0
21LEM202T [1]	Universal Human Values-II: Understanding Harmony and Ethical Human Conduct	2	1	0	3
21LEM301T [1]	Indian Art Form	1	0	0	0
21LEM302T [1]	Indian Traditional Knowledge	1	0	0	0
21GNM101L [1]	Physical and Mental Health using Yoga	0	0	2	0
21GNM102L [1]	National Service Scheme				
21GNM103L [1]	National Cadet Corps				
21GNM104L [1]	National Sports Organization				
	Total Credits				**03**

Open Elective Courses (O)
(Any 3 courses)

Course Code	Course Title	Hours / Week L	T	P	C
21ECO101T	Short Range Wireless Communication	3	0	0	3
21ECO102J	Electronic Circuits and Systems	2	0	2	3
21ECO103T	Modern Wireless Communication Systems	3	0	0	3
21ECO104J	PCB Design and Manufacturing	2	0	2	3
21ECO105T	Fiber Optics and Optoelectronics	3	0	0	3
21ECO106J	Embedded System Design using Arduino	2	0	2	3
21ECO107J	Embedded System Design using Raspberry Pi	2	0	2	3
21ECO108J	3D Printing Hardware and Software	2	0	2	3
21ECO109T	5G Technology – An Overview	3	0	0	3
	Total Credits				**09**

Project Work, Seminar, Internship in Industry / Higher Technical Institutions (P)

Course Code	Course Title	Hours / Week L	T	P	C
21GNP301L [1]	Community Connect	0	0	2	1
21ECP302L [1]	Project	0	0	6	3
21ECP303T [1]	MOOC	3	0	0	
21ECP401L	Major Project	0	0	30	15
21ECP402L	Major Project	0	0	20	10
21ECP403L	Internship#	0	0	10	5
	Total Credits				**19**

Professional Elective Courses (E) *(Any 6 Courses)*					
Course Code	Course Title	Hours / Week			C
		L	T	P	
Sub-Stream: Electronic System Engineering					
21ECE201J	*Python and Scientific Python*	*2*	*0*	*2*	*3*
21ECE202T	*Micro- and Nano-Fabrication Technologies*	*3*	*0*	*0*	*3*
21ECE203J	*Smart Sensors and Devices for Agriculture*	*2*	*0*	*2*	*3*
21ECE204T	*Optoelectronics*	*3*	*0*	*0*	*3*
21ECE205T	*Flexible Electronics*	*3*	*0*	*0*	*3*
21ECE212T	*Control Systems: Theory and Applications*	*3*	*0*	*0*	*3*
21ECE260T	*Industrial Electronics*	*3*	*0*	*0*	*3*
21ECE261T	*Measurements and Instrumentation*	*3*	*0*	*0*	*3*
21ECE262T	*Low Power Sensors Technology*	*3*	*0*	*0*	*3*
21ECE263T	*Micro, Nano Electromechanical Devices*	*3*	*0*	*0*	*3*
21ECE301T	*Nanoscale Electronic Devices*	*3*	*0*	*0*	*3*
21ECE302J	*Real Time Operating Systems*	*2*	*0*	*2*	*3*
21ECE303T	*MEMS Technologies*	*3*	*0*	*0*	*3*
21ECE304T	*Cyber Physical System Framework*	*3*	*0*	*0*	*3*
21ECE305J	*Machine Learning Algorithms*	*2*	*0*	*2*	*3*
21ECE361T	*Consumer Electronics and Trouble shooting*	*3*	*0*	*0*	*3*
21ECE362T	*Quality and Reliability Engineering*	*3*	*0*	*0*	*3*
21ECE363T	*Electronic Packaging*	*3*	*0*	*0*	*3*
21ECE366T	*Digital Integrated Circuits and Synthesis*	*3*	*0*	*0*	*3*
21ECE401T	*Advanced Digital System Design*	*3*	*0*	*0*	*3*
21ECE402T	*Semiconductor Device Modeling*	*3*	*0*	*0*	*3*
21ECE403T	*Microwave Integrated Circuits*	*3*	*0*	*0*	*3*
21ECE404T	*Terahertz Devices and Applications*	*3*	*0*	*0*	*3*
21ECE460T	*Emerging Processor Based System Design*	*3*	*0*	*0*	*3*
21ECE461T	*Semiconductor Memory Design*	*3*	*0*	*0*	*3*
21ECE463T	*Scripting Language for Electronic Design Automation*	*3*	*0*	*0*	*3*
21ECE464T	*Statistical Analysis and Optimization for VLSI*	*3*	*0*	*0*	*3*
21ECE468T	*System and Network on Chip*	*3*	*0*	*0*	*3*

Professional Elective Courses (E)					
Course Code	Course Title	Hours / Week			C
		L	T	P	
Sub-Stream: Communication System Engineering					
21ECE220T	*Wireless and Optical Sensors*	*3*	*0*	*0*	*3*
21ECE221T	*Radar and Navigational Aids*	*3*	*0*	*0*	*3*
21ECE222T	*Adhoc and Sensor Networks*	*3*	*0*	*0*	*3*
21ECE223T	*Satellite Communication and Broadcasting*	*3*	*0*	*0*	*3*
21ECE224T	*Cryptography and Network Security*	*3*	*0*	*0*	*3*
21ECE225T	*Optical Systems and Networks*	*3*	*0*	*0*	*3*
21ECE320T	*Software Defined Networks*	*3*	*0*	*0*	*3*
21ECE321T	*RF and Microwave Semiconductor Devices*	*3*	*0*	*0*	*3*
21ECE322T	*Data analytics using R*	*3*	*0*	*0*	*3*
21ECE323T	*Cyber Security*	*3*	*0*	*0*	*3*
21ECE324T	*Advanced Mobile Communication Systems*	*3*	*0*	*0*	*3*
21ECE420T	*Information Theory and Coding*	*3*	*0*	*0*	*3*
21ECE421T	*Wireless Communication Networks*	*3*	*0*	*0*	*3*
Sub-Stream: Signal Processing					
21ECE240T	*Wavelets and Signal Processing*	*3*	*0*	*0*	*3*
21ECE241J	*Audio and Speech Processing*	*2*	*0*	*2*	*3*
21ECE242J	*Pattern Recognition and Neural Networks*	*2*	*0*	*2*	*3*
21ECE340J	*Digital Image and Video Processing*	*2*	*0*	*2*	*3*
21ECE341J	*DSP System Design*	*2*	*0*	*2*	*3*
21ECE364T	*Digital Signal Processors, Architectures and Applications*	*3*	*0*	*0*	*3*
21ECE440T	*Adaptive Signal Processing*	*3*	*0*	*0*	*3*
21ECE441T	*Machine Perception with Cognition*	*3*	*0*	*0*	*3*
21ECE442T	*Multimedia Compression Techniques*	*3*	*0*	*0*	*3*
				Total Credits	**18**

31. (f) Programme Articulation: B.Tech. in Electronics and Communication Engineering

Course Code	Course Name	Program Outcomes (PO)												PSO		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		Engineering Knowledge	Problem Analysis	Design/development of solutions	Conduct investigations of complex problems	Modern Tool Usage	The engineer and society	Environment & Sustainability	Ethics	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	PSO-1	PSO-2	PSO-3
21ECC101J	Electronic System and PCB Design	3	2.5	2.67		3						2		2.8	2.5	
21ECC201T	Solid State Devices	3	2										1	1		
21ECC202T	Analog and Linear Electronic Circuits	2	2	3												3
21ECC203T	Digital Logic Design	3	2	2		3								3		
21ECC204T	Signal Processing	2	2.2	3	3											2.2
21ECC205T	Electromagnetic Theory and Interference	2.4	2.6													
21ECC211L	Devices and Digital IC Laboratory	3	2			1								1		
21ECC222L	Analog and Linear Electronic Circuits Laboratory	2		2		3										
21ECC301P	Microprocessor, Microcontroller, and Interfacing Techniques		3	3		3								2.7		
21ECC302T	Analog and Digital Communication	3	2.5	3		3							2	2.5	3	2.5
21ECC303T	VLSI Design and Technology		2.4	2.25										2	2	
21ECC304T	Microwave and Optical Communication	2.8	2	2	3									3	2	
21ECC311L	VLSI Design Laboratory	3	3			1								1		
21ECC322L	Communication Laboratory	2		2.5	3						3			3	2	
21ECC401T	Wireless Communication and Antenna Systems	3	2.3										2			3
21ECC402P	Computer Communication and Network Security	2.67	3	2												3
21ECE201J	Python and Scientific Python		2.7	3	2	3				3				3		2.7
21ECE202T	Micro- and Nano-Fabrication Technologies	3		2	2									3		2
21ECE203J	Smart Sensors and Devices for Agriculture	3		2		2		3					2	2		2
21ECE204T	Optoelectronics	2.8	2.7	2.67	2.67											2.4
21ECE205T	Flexible Electronics	3	3										3			
21ECE212T	Control Systems: Theory and Applications	3	2.8											1		
21ECE220T	Wireless and Optical Sensors	3	1	1.5												2
21ECE221T	Radar And Navigational Aids	2.8	2	3										2.3	2	
21ECE222T	Adhoc and Sensor Networks	3		2	3		3						2	1.5	2.3	
21ECE223T	Satellite Communication and Broadcasting	2.5	2	2.5										2.3	2	3
21ECE224T	Cryptography and Network Security	2.6	3	2												
21ECE225T	Optical Systems and Networks	3	2	2.5	2.5					3						3
21ECE240T	Wavelets and Signal Processing	2	2	2.25	1									1		2
21ECE241J	Audio and Speech Processing	3	2	2		3	1									2
21ECE242J	Pattern Recognition and Neural Networks	1.5	1	2.3	3	3									2	2.5
21ECE260T	Industrial Electronics	2.75	2	2	3									1.7	2	
21ECE261T	Measurements and Instrumentation	3	2	2	2								2	1		
21ECE262T	Low Power Sensors Technology	2.2		3										2.7		
21ECE263T	Micro, Nano Electro Mechanical Devices	2.4	2	2.75										3	2.7	3
21ECE301T	Nanoscale Electronic Devices	3	2.5			2.5								2		2.5
21ECE302J	Real Time Operating Systems	3	3	3		2								2		
21ECE303T	MEMS Technologies	2.2	2	3										2	2.8	
21ECE304T	Cyber Physical System Framework	3	2.2	3		3				3						
21ECE305J	Machine Learning Algorithms	3	1.3		3	1.8								1.4		
21ECE320T	Software Defined Networks	3												2.3	2	1
21ECE321T	RF and Microwave Semiconductor Devices	3	1.8	1.5										2		1
21ECE322T	Data Analytics using R		3	3		2								3		3
21ECE323T	Cyber Security		3	3										3		
21ECE324T	Advanced Mobile Communication Systems	3	2	2	2.5					3			3		2	
21ECE340J	Digital Image and Video Processing	2.6	2.3	2.3	3									2.6	2.5	1
21ECE341J	DSP System Design	1	2.3	3	2.5											2
21ECE361T	Consumer Electronics and Trouble shooting	2.75	2	2	3									1.7	2.5	
21ECE362T	Quality and Reliability Engineering	3	1.5	2												2
21ECE363T	Electronic Packaging	3	2										2.3	2.3		
21ECE364T	Digital Signal Processors, Architectures and Applications	2.2		3										2	2	

Course Code	Course Name	Program Outcomes (PO)												PSO		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		Engineering Knowledge	Problem Analysis	Design/development of solutions	Conduct investigations of complex problems	Modern Tool Usage	The engineer and society	Environment & Sustainability	Ethics	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	PSO-1	PSO-2	PSO-3
21ECE366T	*Digital Integrated Circuits and Synthesis*	*3*	*2*	*3*	*1*	*2*								*1.5*	*2.7*	
21ECE401T	*Advanced Digital System Design*	*3*	*2*	*2.2*		*3*								*1*		*1*
21ECE402T	*Semiconductor Device Modeling*	*3*	*2*	*3*												*2*
21ECE403T	*Microwave Integrated Circuits*	*3*	*2*	*1.67*												*2*
21ECE404T	*Terahertz Devices and Applications*	*3*	*2.8*	*2*	*2*			*2*						*2.3*	*2*	*3*
21ECE420T	*Information Theory and Coding*		*3*	*3*											*2*	
21ECE421T	*Wireless Communication Networks*	*3*	*2.8*	*2*	*2*			*2*						*2.3*	*2*	*3*
21ECE440T	*Adaptive Signal Processing*	*3*	*2.2*	*2.75*										*2*	*1.5*	*1*
21ECE441T	*Machine Perception with Cognition*	*2.6*	*2*	*3*	*3*									*2*	*3*	
21ECE442T	*Multimedia Compression Techniques*	*3*	*2*	*2.3*										*1*	*1*	*2*
21ECE460T	*Emerging Processor based System Design*		*2*	*2.4*	*1.66*	*1.5*									*2*	*2*
21ECE461T	*Semiconductor Memory Design*	*2.8*	*2*											*1.8*		
21ECE463T	*Scripting Language for Electronic Design Automation*	*-*	*2*	*3*	*2.66*	*2*										*2*
21ECE464T	*Statistical Analysis and Optimization for VLSI*	*1*	*2*	*3*	*2.5*											*1.8*
21ECE468T	*System and Network on Chip*		*2.5*	*3*	*2*	*2*								*3*		*2*
21GNP301L	*Community Connect*						*3*		*3*	*3*	*2*					
21ECP302L	*Project*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*
21ECP303T	*MOOC*	*3*	*2*											*3*		
21ECP401L	*Major Project*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*
21ECP402L	*Major Project*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*
21ECP403L	*Internship*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*	*3*
Program Average		*2.69*	*2.24*	*2.48*	*2.44*	*2.37*	*2.00*	*2.33*		*3.00*	*3.00*	*2.00*	*2.15*	*2.08*	*2.18*	*2.19*

31. (g) Implementation Plan: B.Tech. in Electronics and Communication Engineering

Semester – I

Course Code	Course Title	Hours / Week L	T	P	C
21LEH101T	Communicative English	2	1	0	3
21MAB101T	Calculus and Linear Algebra	3	1	0	4
21PYB101J	Physics: Electromagnetic Theory, Quantum Mechanics, Waves and Optics	3	1	2	5
21MES102L [1]	Engineering Graphics and Design	0	0	4	2
21EES101T	Electrical and Electronics Engineering	3	1	0	4
21CYM101T [1]	Environmental Science	1	0	0	0
21PDM101L [1]	Professional Skills and Practices	0	0	2	0
21LEM101T [1]	Constitution of India	1	0	0	0
				Total Credits	**18**

Semester – II

Course Code	Course Title	Hours / Week L	T	P	C
21LEH102T	Chinese	2	1	0	3
21LEH103T	French				
21LEH104T	German				
21LEH105T	Japanese				
21LEH106T	Korean				
21LEH107T	Spanish				
21LEH108T	Russian				
21GNH101J	Philosophy of Engineering	1	0	2	2
21MAB102T	Advanced Calculus and Complex Analysis	3	1	0	4
21CYB101J	Chemistry	3	1	2	5
21ECC101J	Electronic System and PCB Design	2	0	2	3
21CSS101J	Programming for Problem Solving	3	0	2	4
21BTB103T	Biology	2	0	0	2
21MES101L [1]	Basic Civil and Mechanical Workshop	0	0	4	2
21PDM102L [1]	General Aptitude	0	0	2	0
21GNM101L [1]	Physical and Mental Health using Yoga	0	0	2	0
21GNM102L [1]	National Service Scheme				
21GNM103L [1]	National Cadet Corps				
21GNM104L [1]	National Sports Organization				
				Total Credits	**25**

Semester – III

Course Code	Course Title	Hours / Week L	T	P	C
21MAB201T	Transforms and Boundary Value Problems	3	1	0	4
21PDH209T [1]	Social Engineering	2	0	0	2
21CSS201T	Computer Organization and Architecture	3	1	0	4
21ECC201T [2]	Solid State Devices	3	0	0	3
21ECC203T	Digital Logic Design	3	0	0	3
21ECC205T	Electromagnetic Theory and Interference	3	0	0	3
21ECC211L [1]	Devices and Digital IC Laboratory	0	0	4	2
21LEM201T [1]	Professional Ethics	1	0	0	0
21PDM201L [1]	Verbal Reasoning	0	0	2	0
21LEM202T [1]	Universal Human Values-II: Understanding Harmony and Ethical Human Conduct	2	1	0	3
				Total Credits	**24**

Semester – IV

Course Code	Course Title	Hours / Week L	T	P	C
21MAB203T	Probability and Stochastic Processes	3	1	0	4
21ECC202T	Analog and Linear Electronic Circuits	3	0	0	3
21ECC204T [2]	Signal Processing	3	0	0	3
21ECC222L [1]	Analog and Linear Electronic Circuits Laboratory	0	0	4	2
21CSC206T	Artificial Intelligence	2	1	0	3
E	Professional Elective-I				3
21DCS201P [1]	Design Thinking and Methodology	1	2	0	3
21PDM202 [1]	Critical and Creative Thinking Skills	0	0	2	0
				Total Credits	**21**

Semester – V

Course Code	Course Title	Hours / Week L	T	P	C
21MAB302T	Discrete Mathematics	3	1	0	4
21ECC301P [1]	Microprocessor, Microcontroller, and Interfacing Techniques	3	1	0	4
21ECC303T [2]	VLSI Design and Technology	3	0	0	3
21ECC311L [1]	VLSI Design Laboratory	0	0	4	2
E	Professional Elective – II				3
O	Open Elective – I				3
21GNP301L [1]	Community Connect	0	0	2	1
21PDM301L [1]	Analytical and Logical Thinking Skills	0	0	2	0
21LEM301T [1]	Indian Art Form	1	0	0	0
				Total Credits	**20**

Semester – VI

Course Code	Course Title	Hours / Week L	T	P	C
21CSS303T	Data Science	2	0	0	2
21ECC302T	Analog and Digital Communication	3	0	0	3
21ECC304T [2]	Microwave and Optical Communication	3	0	0	3
21ECC322L [1]	Communication Laboratory	0	0	4	2
E	Professional Elective – III				3
E	Professional Elective – IV				3
O	Open Elective – II				3
21ECP302L [1]	Project	0	0	6	3
21ECP303T [1]	MOOC	3	0	0	
21PDM302L [1]	Employability Skills and Practices	0	0	2	0
21LEM302T [1]	Indian Traditional Knowledge	1	0	0	0
				Total Credits	**22**

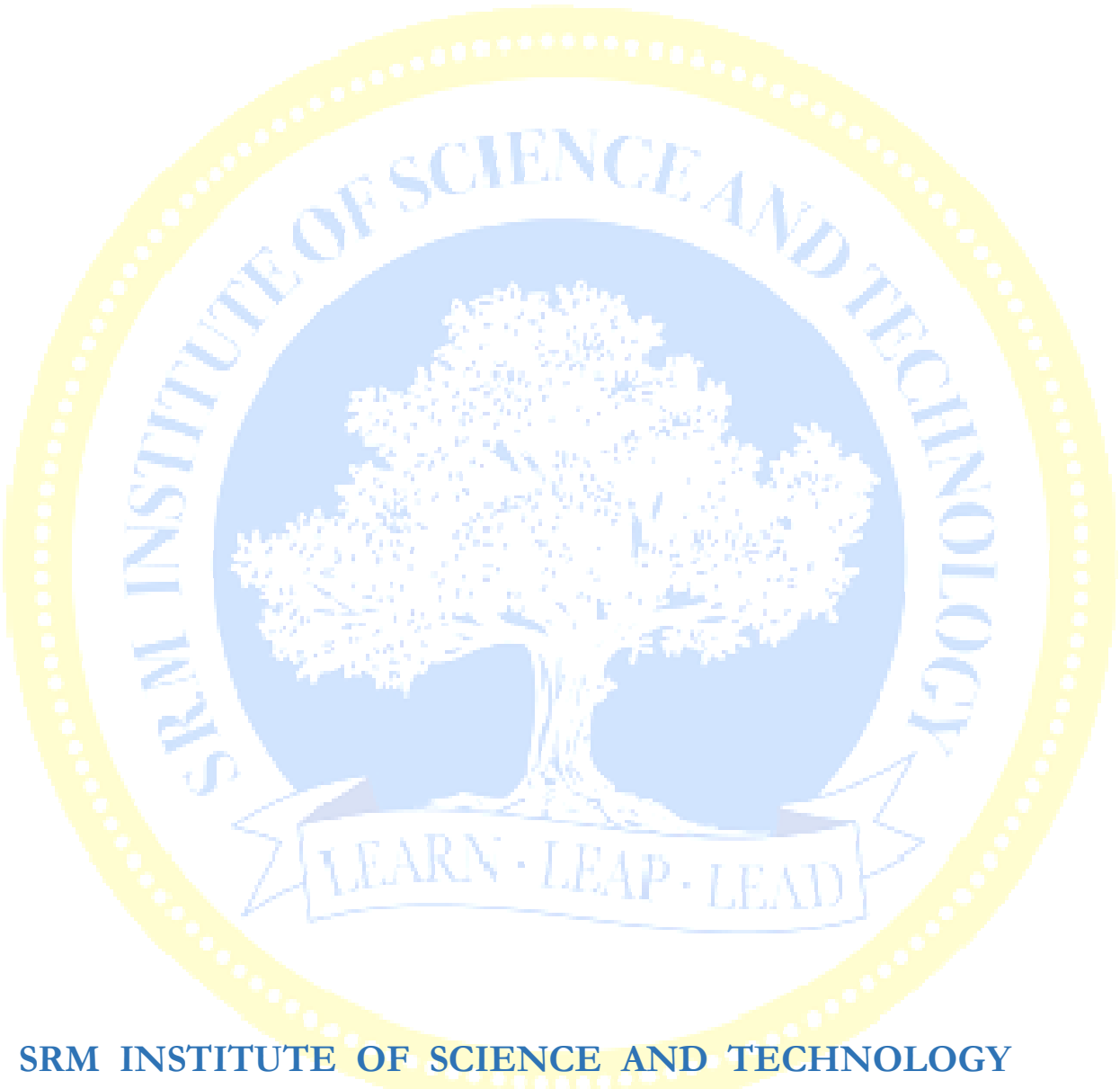
Semester – VII

Course Code	Course Title	Hours / Week L	T	P	C
21GNH401T	Behavioral Psychology	2	1	0	3
21ECC401T [2]	Wireless Communication and Antenna Systems	3	0	0	3
21ECC402P [1]	Computer Communication and Network Security	2	1	0	3
E	Professional Elective – V				3
E	Professional Elective – VI				3
O	Open Elective –III				3
				Total Credits	**18**

Semester - VIII

Course Code	Course Title	Hours / Week L	T	P	C
21ECP401L	Major Project	0	0	30	15
21ECP402L	Major Project	0	0	20	10
21ECP403L	Internship#	0	0	10	5
				Total Credits	**15**

#Students have to register either 21ECP401L or 21ECP402L and 21ECP403L both in eighth semester



SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

(Deemed to be University u/s 3 of UGC Act, 1956)

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