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

47. B.Tech. in Nanotechnology

47. (a) Mission of the Department

Mission Stmt – 1	*Actively contribute for the development of nanoscience, engineering and technology through world-class infrastructure, teaching & research*
Mission Stmt – 2	*Establish collaborative research with the institutions of national and international repute*
Mission Stmt – 3	*Encourage industry-academia interactions to translate scientific findings into technological development to meet the societal needs*
Mission Stmt – 4	*Organize and actively participate in workshops, conferences and seminars on advancements in nanoscience and nanotechnology*
Mission Stmt – 5	*Focus on developing skills of students to enhance the employability in various organizations*

47. (b) Program Educational Objectives (PEO)

PEO – 1	*Provide understanding of physical, chemical and biological principles in the multi-disciplinary field of nanoscience and nanotechnology*
PEO – 2	*Develop skills on the synthesis of nanomaterials and fabrication of micro- and nano-structures*
PEO – 3	*Familiarize the graduates with the advanced nanoscale characterization techniques and develop the analytical ability*
PEO – 4	*Enable graduates with professional, scientific research, and computational skills for employment in industries, R & D centres and higher education*
PEO – 5	*Prepare the graduates to take individual and teamwork responsibilities in a multidisciplinary environment*

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

	Mission Stmt. - 1	Mission Stmt. - 2	Mission Stmt. - 3	Mission Stmt. - 4	Mission Stmt. - 5
PEO - 1	3	2	1	3	1
PEO - 2	3	3	2	3	3
PEO - 3	3	3	2	3	2
PEO - 4	3	2	3	2	3
PEO - 5	2	3	3	3	2

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

47. (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	3	2	2	2	2	2	2	3	3	3	3
PEO - 2	3	3	3	3	3	2	2	2	3	3	3	2	3	3	3
PEO - 3	3	3	3	3	3	2	2	2	3	3	3	2	3	3	3
PEO - 4	3	3	3	3	3	2	3	3	2	3	3	3	3	3	3
PEO - 5	3	3	3	2	2	2	3	3	3	3	3	3	3	3	3

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

PSO – Program Specific Outcomes (PSO)

PSO - 1	*Ability to understand materials and their properties at the atomic and nanometer scales, including an understanding of the intimate relationship between the scale and the properties of materials*
PSO - 2	*Ability to apply the learnt nanotechnology principles, analyze, evaluate and design advanced systems & processes*
PSO - 3	*Ability to employ the acquired skills in nanotechnology for the benefit of self and society*

47. (e) Program Structure: B.Tech. in Nanotechnology

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	Behavioural Psychology	2	1	0	3
				Total Credits	**13**

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**

Professional Elective Courses (E)
(Any 6 Courses)

Course Code	Course Title	Hours / Week L	T	P	C
21NTE201T	Carbon Nanotechnology	3	0	0	3
21NTE202P [1]	Vacuum and Thin film technology	2	1	0	3
21NTE203T	Nanotribology	3	0	0	3
21NTE204T	Surfaces and Interfaces	3	0	0	3
21NTE301T	Spectroscopy tools for nanoscale analysis	3	0	0	3
21NTE302P [1]	Lithography Techniques and Fabrication	2	1	0	3
21NTE303T	Sensors and Transducers	3	0	0	3
21NTE304T	Green Nanotechnology	3	0	0	3
21NTE305T	Nano magnetism and Spintronics	3	0	0	3
21NTE306T	2D layered Nanomaterials	3	0	0	3
21NTE307T	Nano catalysts	3	0	0	3
21NTE308T	MEMS and NEMS	3	0	0	3
21NTE309T	Solid State Devices	3	0	0	3
21NTE310T	Nanotechnology in Cosmetics	3	0	0	3
21NTE311T	Nanomedicine	3	0	0	3
21NTE312T	Microelectronics and VLSI	3	0	0	3
21NTE313T	Nanotechnology for Energy Systems	3	0	0	3
21NTE314T	Physics of Electronic Materials	3	0	0	3
21NTE315T	Nanotechnology in food production	3	0	0	3

. Basic Science Courses (B)

Course Code	Course Title	Hours / Week L	T	P	C
21MAB101T	Calculus and Linear Algebra	3	1	0	4
21MAB102T	Advanced Calculus and Complex Analysis	3	1	0	4
21CYB101J	Chemistry	3	1	2	5
21BTB103T	Biology	2	0	0	2
21PYB102J	Semiconductor Physics and Computational Methods	3	1	2	5
21MAB201T	Transforms and Boundary Value Problems	3	1	0	4
21MAB202T	Numerical Methods	3	1	0	4
21MAB301T	Probability and Statistics	3	1	0	4
				Total Credits	**32**

Professional Core Courses (C)

Course Code	Course Title	Hours / Week L	T	P	C
21NTC101T	Nanoscience and Nanotechnology	3	0	0	3
21NTC201J	Nanoscale Materials Chemistry	3	0	2	4
21NTC202T	Quantum Mechanics for Nanotechnologists	3	0	0	3
21NTC203T [2]	Thermodynamics and Statistical Mechanics	3	0	0	3
21NTC204J	Advanced Characterization of Nanomaterials	3	0	2	4
21NTC205T	Design and Synthesis of Nanomaterials	3	1	0	4
21NTC206T [2]	Solid State Engineering	3	0	0	3
21CSC206T	Artificial Intelligence	2	1	0	3
21NTC301J	Micro and Nanofabrication	3	0	2	4
21NTC302J	Nanoelectronics	2	0	2	3
21NTC303T [2]	Nanobiotechnology	3	0	0	3
21NTC304T [2]	Nanotoxicology	3	0	0	3
21NTC305L [1]	Nanobiotechnology and Nanotoxicology Laboratory	0	0	6	3
21NTC401J [2]	Polymer and Nanocomposites	2	0	2	3
21NTC402T	Modeling and Computational Tools	3	0	0	3
				Total Credits	**49**

Professional Elective Courses (E)

Course Code	Course Title	Hours / Week L	T	P	C
21NTE316T	Advanced Drug Delivery Systems	3	0	0	3
21NTE317T	Societal Implications of Nanotechnology	3	0	0	3
21NTE401T	Nanotechnology in Tissue Engineering	3	0	0	3
21NTE402T	Micro and Nanofluidics	3	0	0	3
21NTE403T	Nanorobotics	3	0	0	3
21NTE404T	Photovoltaic Technology	3	0	0	3
21NTE405T	Advanced computational Techniques	3	0	0	3
21NTE406T	Nanotechnology Legal Aspects	3	0	0	3
21NTE407T	Micro and Nano Emulsions	3	0	0	3
21NTE408T	Supramolecular Systems	3	0	0	3
21NTE409T	Cancer Nanotechnology	3	0	0	3
21NTE410T	Atomistic Modeling	3	0	0	3
21NTE411T	Nanotechnology in Textiles	3	0	0	3
21NTE412T	Nano photonics	3	0	0	3
				Total Credits	**18**

Open Elective Courses (O) *(Any 3 Courses)*					
Course Code	Course Title	Hours / Week			
		L	T	P	C
21NTO301T	Applications of Nanotechnology	3	0	0	3
21NTO302T	Solid State Electronic Devices	3	0	0	3
21NTO303T	Micro and Nanoelectronics	3	0	0	3
21NTO304T	Environmental Nanotechnology	3	0	0	3
21NTO305T	Medical Nanotechnology	3	0	0	3
21NTO306T	Nanoscale Surface Engineering	3	0	0	3
21NTO307T	Nanocomputing	3	0	0	3
21NTO308T	Smart Sensor Systems	3	0	0	3
21NTO309T	2D Materials and Applications	3	0	0	3
21NTO310T	Nano and Micro Electromechanical Systems	3	0	0	3
21NTO311T	Nanomaterials in Cosmetics and Cosmeceuticals	3	0	0	3
21NTO312T	Societal Implications of Nanotechnology	3	0	0	3
21NTO313T	Nanotechnology in Food Science and Packaging	3	0	0	3
21PYO301T	Astrophysics	3	0	0	3
21PYO302T	Photonics	3	0	0	3
21PYO303T	Quantum Optics	3	0	0	3
21NTO401T	Scientific Research Principles	3	0	0	3
21NTO402T	Micro and Nanofluidic Technology	3	0	0	3
21NTO403T	Thin film Photovoltaics	3	0	0	3
21NTO404T	Nanotechnology in Societal Development	3	0	0	3
21NTO405T	Polymer Engineering	3	0	0	3
21NTO406T	Industrial Nanotechnology	3	0	0	3
21NTO407T	Quantum Computing	3	0	0	3
				Total Credits	09

Engineering Science Courses (S)						
Course Code	Course Title	Hours / Week				
		L	T	P	C	
21MES102L [1]	Engineering Graphics and Design	0	0	4	2	
21MES101L [1]	Basic Civil and Mechanical Workshop	0	0	4	2	
21EES101T	Electrical and Electronics Engineering	3	1	0	4	
21CSS101J	Programming for Problem Solving	3	0	2	4	
21DCS201P [1]	Design Thinking and Methodology	1	2	0	3	
21NTS201T	Materials Science	3	0	0	3	
21CSS303T	Data Science	2	0	0	2	
					Total Credits	20

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	
21NTP302L [1]	Project	0	0	6	3	
21NTP303T [1]	MOOC	3	0	0		
21NTP401L	Major Project	0	0	30	15	
21NTP402L	Major Project	0	0	20	10	
21NTP403L	Internship#	0	0	10	5	
					Total Credits	19

47. (f) Programme Articulation: B.Tech. in Nanotechnology

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
21NTC101T	Nanoscience and Nanotechnology	2.3	2	2.6	3	3	-	-	-	-	-	-	-	2.75	2	-
21NTC201J	Nanoscale materials chemistry	3	1.75	2	-	-	-	-	-	-	-	-	-	2.75	2	-
21NTC202T	Quantum Mechanics for Nanotechnologists	2.5	-	-	2.8	-	-	-	-	-	-	-	-	2.7	2.5	-
21NTC203T	Thermodynamics and Statistical Mechanics	3	3	-	3	-	-	-	-	-	-	-	-	2.5	2.3	-
21NTS201T	Materials Science	3	3	3	3	3	-	-	-	-	-	-	2	3	3	3
21NTC204J	Advanced Characterization of Nanomaterials	3	-	3	2.7	-	-	-	-	-	-	-	-	3	2.5	2
21NTC205T	Design and Synthesis of Nanomaterials	3	-	2.7	2.5	3	-	2	-	-	-	-	-	2.5	2	2
21NTC206T	Solid State Engineering	3	-	2.7	2.5	3	-	2	-	-	-	-	-	2.5	2	2
21NTC301J	Micro and Nanofabrication	2.5	3	2	2.3	2.4	-	2	-	-	-	-	-	2.5	3	2
21NTC302J	Nanoelectronics	2.8	3	2	2.5	3	-	2	-	-	-	-	-	2.5	2.5	2
21NTC303T	Nanobiotechnology	3	-	-	-	-	-	-	-	-	-	-	-	2.5	2	2
21NTC304T	Nanotoxicology	3	-	-	-	-	-	-	-	-	-	-	-	3	2.7	2
21NTC305L	Nanobiotechnology and Nanotoxicology laboratory	-	-	-	3	-	-	-	-	-	-	-	-	3	2	2
21GNP301L	Community Connect	-	-	-	-	-	3	3	3	3	3	3	3	3	3	3
21NTP302L/ 21NTP303T	Project / MOOC	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
21NTC401J	Polymer and Nanocomposites	3	2.5	2.5	2	1.5	-	-	-	-	-	-	-	3	2	2
21NTC402T	Modeling and Computational Tools	3	3	3	3	3	-	-	-	-	-	-	-	3	2	2
21NTP401L	Major Project	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
21NTP403L	Internship	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
21NTE201T	Carbon Nanotechnology	2.4	2	2	2	-	-	-	-	-	-	-	-	3	2	2
21NTE202P	Vacuum and Thin film technology	2.5	-	3	2.5	-	-	-	-	-	-	-	-	3	2	
21NTE203T	Nanotribology	2.7	-	1.7	2.5	2	-	-	-	-	-	-	-	3	3	3
21NTE204T	Surfaces and Interfaces	2.6	-	2	2		-	-	-	-	-	-	-	3	2	2
21NTE301T	Spectroscopy tools for nanoscale analysis	3	3	-	3	-	-	-	-	-	-	-	-	3	3	2
21NTE302P	Lithography Techniques and Fabrication	2.5	2	2	-	-	-	-	-	-	-	-	-	2.3	2	-
21NTE303T	Sensors and Transducers	2	-	2.5	2.6	-	-	-	-	-	-	-	-	3	3	
21NTE304T	Green Nanotechnology	2.3	3	2.3	3	2	-	-	-	-	-	-	-	2	2	2
21NTE305T	Nanomagnetism and Spintronics	3	3	-	3	-	-	-	-	-	-	-	-	3	2	2
21NTE306T	2D layered Nanomaterials	2.3	-	2	3	-	-	-	-	-	-	-	-	3	2.7	3
21NTE307T	Nanocatalysts	2.5	2.3	1	3	-	-	3	-	-	-	-	-	3	3	-
21NTE308T	MEMS and NEMS	3	3	3	-	-	-	-	-	-	-	-	-	2.7	2.5	-
21NTE309T	Solid State Devices	3	2	3	2	-	-	-	-	-	-	-	-	2.5	2	-
21NTE310T	Nanotechnology in Cosmetics	3	-	2.5	2	2	-	-	-	-	-	-	-	3	2	2
21NTE311T	Nanomedicine	3	-	-	-	-	-	-	-	-	-	-	-	2	2	-
21NTE312T	Microelectronics and VLSI	2.7	-	-	2.7	-	-	-	-	-	-	-	-	3	3	-
21NTE313T	Nanotechnology for Energy Systems	2.7	-	2	-	-	-	-	-	-	-	-	-	3	2.5	-
21NTE314T	Physics of Electronic Materials	2.6	2	3	2.3	-	-	-	-	-	-	-	-	2.5	2.7	-
21NTE315T	Nanotechnology in food production	2.4	-	2.8	-	-	-	-	-	-	-	-	-	-	3	-
21NTE316T	Advanced Drug Delivery Systems	3	-	1.3	-	-	-	-	-	-	-	-	-	2.5	2	2
21NTE317T	Societal Implications of Nanotechnology	2.8	-	-	-	-	-	-	2.4	-	-	-	-	3	2	-
21NTE401T	Nanotechnology in Tissue Engineering	3	-	-	-	-	-	-		-	-	-	-	3	2	-
21NTE402T	Micro and Nanofluidics	2.8	2.4	-	-	-	-	-	-	-	-	-	-	2	2	2
21NTE403T	Nanorobotics	2		2.7	2.25	-	-	-	-	-	-	-	-		2	2
21NTE404T	Photovoltaic Technology	2.8	2	3	2.3	-	-	-	-	-	-	-	-	3	3	2
21NTE405T	Advanced computational Techniques	3	3	3	3	-	-	-	-	-	-	-	-	2.5	3	2
21NTE406T	Nanotechnology Legal Aspects	2.2	-	-	-	-	2	2.6	2.4	-	-	-	-	-	-	3
21NTE407T	Micro and Nano Emulsions	3	-	2	2	-	-	-	-	-	-	-	-	3	2	2
21NTE408T	Supramolecular Systems	2.5	2.5	2.7	2	1	-	-	-	-	-	-	-	2	-	2
21NTE409T	Cancer Nanotechnology	3	-	-	-	-	-	-	-	-	-	-	-	2.7	-	1.5
21NTE410T	Atomistic modeling	3	3	3	3	2	-	-	-	-	-	-	-	3	2	-
21NTE411T	Nanotechnology in Textiles	3	3	2	2.3	2	3	-	-	-	-	-	-	-	-	-
21NTE412T	Nanophononics	2.8	2.2	-	2.7	-	-	-	-	-	-	-	-	2.5	2.5	2
Program Average			2.8	2.6	2.5	2.6	2.5	2.8	2.6	2.8	3	3	3	3	2.7	2.4

47. (g) Implementation Plan: B.Tech. in Nanotechnology

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
21PYB102J	Semiconductor Physics and Computational Methods	3	1	2	5
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
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	22

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
21NTC101T	Nanoscience and Nanotechnology	3	0	0	3
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	21

Semester - III

Course Code	Course Title	Hours / Week L	T	P	C
21MAB201T	Transforms and Boundary Value Problems	3	1	0	4
21NTC201J	Nanoscale Materials Chemistry	3	0	2	4
21NTC202T	Quantum Mechanics for Nanotechnologists	3	0	0	3
21NTC203T [2]	Thermodynamics and Statistical Mechanics	3	0	0	3
21PDH209T [1]	Social Engineering	2	0	0	2
21NTS201T	Materials Science	3	0	0	3
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	22

Semester - IV

Course Code	Course Title	Hours / Week L	T	P	C
21MAB202T	Numerical Methods	3	1	0	4
21CSC206T	Artificial Intelligence	2	1	0	3
21NTC204J	Advanced Characterization of Nanomaterials	3	0	2	4
21NTC205T	Design and Synthesis of nanomaterials	3	1	0	4
21DCS201P [1]	Design Thinking and Methodology	1	2	0	3
E	Professional Elective – I				3
21NTC206T [2]	Solid State Engineering	3	0	0	3
21PDM202L [1]	Critical and Creative Thinking Skills	0	0	2	0
				Total Credits	24

Semester - V

Course Code	Course Title	Hours / Week L	T	P	C
21MAB301T	Probability and Statistics	3	1	0	4
21NTC301J	Micro and Nanofabrication	3	0	2	4
21NTC302J	Nanoelectronics	2	0	2	3
21NTC303T [2]	Nanobiotechnology	3	0	0	3
E-1	Professional Elective - II	3	0	0	3
O	Open Elective – I	3	0	0	3
21PDM301L [1]	Analytical and Logical Thinking Skills	0	0	2	0
21LEM301T [1]	Indian Art Form	1	0	0	0
21GNP301L [1]	Community Connect	0	0	2	1
				Total Credits	21

Semester - VI

Course Code	Course Title	Hours / Week L	T	P	C
21CSS303T	Data Science	2	0	0	2
21NTC304T [2]	Nanotoxicology	3	0	0	3
21NTC305L [1]	Nanobiotechnology and Nanotoxicology Laboratory	0	0	6	3
E-2	Professional Elective – III	3	0	0	3
E-3	Professional Elective - IV	3	0	0	3
21NTP302L [1]	Project	0	0	6	3
21NTP303T [1]	MOOC	3	0	0	
O	Open Elective – II	3	0	0	3
21PDM302L [1]	Employability Skills and Practices	0	0	2	0
21LEM302T [1]	Indian Traditional Knowledge	1	0	0	0
				Total Credits	20

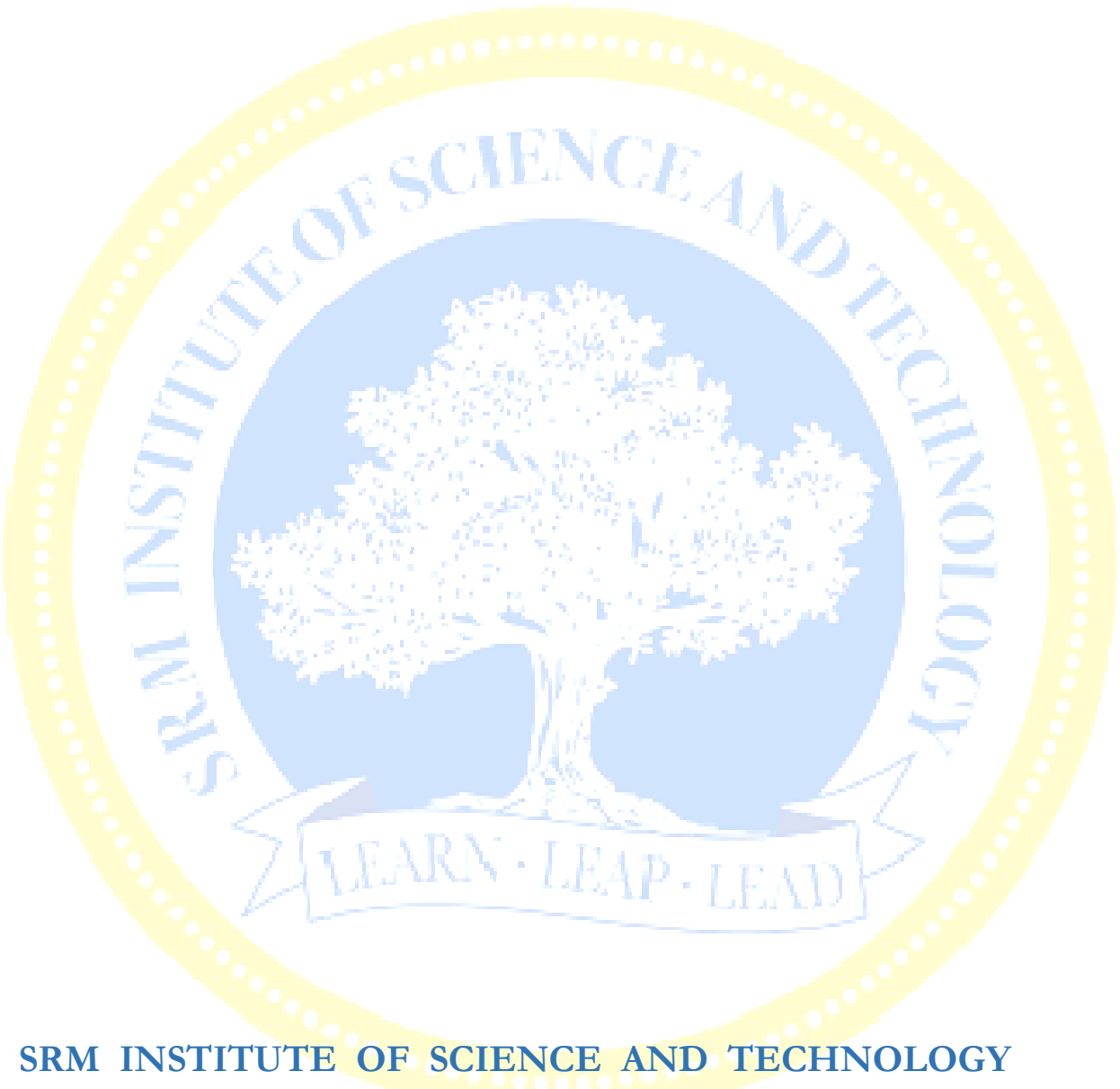
Semester - VII

Course Code	Course Title	Hours / Week L	T	P	C
21GNH401T	Behavioural Psychology	2	1	0	3
E-4	Professional Elective – V	3	0	0	3
E-5	Professional Elective - VI	3	0	0	3
21NTC401J [2]	Polymer and Nanocomposites	2	0	2	3
21NTC402T	Modeling and Computational Tools	3	0	0	3
O	Open Elective – III	3	0	0	3
				Total Credits	18

Semester - VIII

Course Code	Course Title	Hours / Week L	T	P	C
21NTP401L	Major Project	0	0	30	15
21NTP402L	Major Project	0	0	20	10
21NTP403L	Internship#	0	0	10	5
				Total Credits	15

#Students have to register either 21NTP401L or 21NTP402L and 21NTP403L 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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