# **ACADEMIC CURRICULA**

# UNDERGRADUATE DEGREE PROGRAMMES

**Bachelor of Technology** 

(B.Tech. - Four Years)

(Choice Based Flexible Credit System)

Regulations 2018

Volume - 1

(Revised in March 2019)



# SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

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

Kattankulathur, Kancheepuram District 603203, Tamil Nadu, India



# 19. B.Tech. in Computer Science and Engineering with Specialization in Software Engineering

#### 19. (a) Mission of the Department

Mission Stmt - 1	To impart knowledge in cutting edge Computer Science and Engineering technologies in par with industrial standards.
Mission Stmt - 2	To collaborate with renowned academic institutions to uplift innovative research and development in Computer Science and
IVIISSION SUM - 2	Engineering and its allied fields to serve the needs of society
Mission Stmt - 3	To demonstrate strong communication skills and possess the ability to design computing systems individually as well as part of a
IVIISSION SUNC-3	multidisciplinary teams.
Mission Stmt - 4	To instill societal, safety, cultural, environmental, and ethical responsibilities in all professional activities
Mississ Charl E	To produce successful Computer Science and Engineering graduates with personal and professional responsibilities and commitment
Mission Stmt - 5	to lifelong learning

### 19. (b) Program Educational Objectives (PEO)

PEO - 1	Graduates will be able to perform in technical/managerial roles ranging from design, development, problem solving to production support in software industries and R&D sectors.
PEO - 2	Graduates will be able to successfully pursue higher education in reputed institutions.
PEO - 3	Graduates will have the ability to adapt, contribute and innovate new technologies and systems in the key domains of Computer Science and
PEU-3	Eng.
PEO - 4	Graduates will be ethically and socially responsible solution providers and entrepreneurs in Computer Science and other engineering
PEU - 4	disciplines.
PEO - 5	Graduates will be equipped with knowledge in the field of software engineering including scientific principles, analysis techniques, design
PEU-5	methodologies, build and maintain secured software system to meet the demands and challenges of the growing software industry
PEO - 6	Graduates will be an agile software engineer with comprehensive set of skills to solve the dynamic global computing field software
PEU-0	engineering, product development and management engineering.

#### 19. (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	H	H	Н	Н	Н
PEO - 2	- / L D	H	Н	Н	H
PEO-3	H	Н	M	- L	Н
PEO - 4	M	H	M	Н	. Н
PEO-5	Н	H	Н	Н	M
PEO-6	Н	M	Н	Н	Н

H – High Correlation, M – Medium Correlation, L – Low Correlation

# 19. (d) Mapping Program Educational Objectives (PEO) to Program Learning Outcomes (PLO)

						Progra	ım Lear	ning Ou	itcomes	(PLO)					
			25	1	Gra	aduate At	tributes (0	GA)				I.L	Prog Out	gr <mark>am Spe</mark> comes (P	cific (SO)
	Engineering Knowledge	Problem Analysis	Design & Development	Analysis, Design, Research	Modem Tool Usage	Society & Culture	Environment & Sustainability	Ethics	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	PSO - 1	PSO - 2	PSO - 3
PEO - 1	H	H	H	Ĥ	H	H	Н	H	H	H	H	H	H	H	H
PEO - 2	Н	Н	Н	Н	Н	L	L	Н	L	Н	L	Н	Н	Н	Н
PEO - 3	Н	Н	Н	Н	Н	L	L	L	L	L	Н	Н	Н	Н	Н
PEO - 4	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н
PEO - 5	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н
PEO - 6	Н	Н	НС.	Н	Н	H	H De	Н	Н	Н	Н	Н	Н	Н	Н

H – High Correlation, M – Medium Correlation, L – Low Correlation , PSO – Program Specific Outcomes (PSO)

#### PSO – Program Specific Outcomes (PSO)

PSO - 1	Ability to Build secure software systems
PSO - 2	Ability to Solve Problems and reason logically
PSO - 3	Ability to Develop software for desired needs

# 19. (e) Program Structure: B.Tech. in Computer Science and Engineering with Specialization in Software Engineering

	Humanities & Social Sciences including Management Courses (H)					Carres	2. Basic Science Courses (B)	
Course	including Management Courses (H)  Course	Hoi	urs/ W	/eek		Course Code	Course	С
Code	Title	L	T	Р	С		Physics: Semiconductor Physics 3 1 2	5
18LEH101J	English	2	0	2	3	18CYB101J		5
18LEH102J						18MAB101T	Calculus and Linear Algebra 3 1 0	4
18LEH103J		1				18MAB102T	Advanced Calculus and Complex Analysis 3 1 0	4
18LEH104J		2	0	2	3		Transforms and Boundary Value Problems 3 1 0	4
18LEH105J							Probability and Queueing Theory 3 1 0	4
18LEH106J		0	0	2	1		Discrete Mathematics for Engineers 3 1 0	4
	General Aptitude  Management Principles for Engineers	2	0	0	2	18BTB101T	Biology   2   0   0     Total Learning Credits	2 <b>32</b>
	Social Engineering	2	0	0	2		l otal Learning Credits	32
	Employability Skills & Practices	0	0	2	1	1	4. Professional Core Courses (C)	
TOT DITEOTT	Total Learning Credits	_	U		12	Course	Course Hours/ Week	
	<u> </u>			_		Code	Title L T P	С
	3. Engineering Science Courses (S)						Data Structures and Algorithms 3 0 2	4
Course	Course	Ηοι	urs/ W	/eek			Object Oriented Design and Programming 3 0 2	4
Code	Title	L	Τ	Р	С	18CSC203J	Computer Organization and Architecture 3 0 2	4
18MES101L	Engineering Graphics and Design	1	0	4	3		Design and Analysis of Algorithms 3 0 2	4
	Basic Electrical and Electronics Engineering	3	1	2	5		Operating Systems 3 0 2	4
	Civil and Mechanical Engineering Workshop	1	0	4	3	18CSC206J	Software Engineering and Project Management 3 0 2	4
	Programming for Problem Solving	3	0	4	5	18CSC207J	Advanced Programming Practice 3 0 2	4
	Analog and Digital Electronics Computer Communications	3	0	2	4		Formal Language and Automata 3 0 0	3
100332023	Computer Communications  Total Learning Credits	2	U	2	3 <b>23</b>		Computer Networks 3 0 2	4
	Total Learning Credits				23		Database Management Systems 3 0 2	4
			i e		ы		Compiler Design 3 0 2	4
	5. Professional Elective Courses (E)					18CSC305J	Artificial Intelligence 3 0 2	4
	(Any 6 Elective Courses)						Comprehension 0 1 0 Competitive Professional Skills-I 0 0 2	1
Course	Course	_	urs/				Competitive Professional Skills-II 0 0 2	1
Code	Title	L	Τ	<u>P</u>		18CSC307L	Competitive Professional Skills-III 0 0 2	1
	Requirements Engineering Software Architecture and Design	3	0	0			Total Learning Credits	51
	Software Modeling and Analysis	3	0	0				
18CSE370T	Design Patterns	3	0	0			6. Open Elective Courses (O)	
	User Interface Design	3	0	0			Course Hours/ Week	
	Visual Programming	3	0	0			Title L T P	С
	Programming in JavaScript	3	0	0	_		IT Infrastructure Management 3 0 0	3
	Software Engineering Tools	3	0	0			Mobile Application Development 3 0 0	3
18CSE459T	Service Oriented Architecture	3	0	0		18CSO103T	System Modeling and Simulation 3 0 0	3
18CSE466T	Software Verification and Validation	3	0	0		18CSO104T	Free and Open Source Softwares 3 0 0	3
	Software Quality Assurance	3	0	0			Android Development 3 0 0	3
	Software Measurements and Metrics	3	0	0			Data Analysis using Open Source Tool 3 0 0	3
	Software Process and Agile Practices	3	0	0			IOS Development 3 0 0	3
	Software Security	3	0	0		100301071	in the second se	12
18CSE4/11	Software Maintenance and Administration	3	0	0	3 18		Total Learning Credits	12
	Total Learning Credits				10		7. Project Work, Seminar, Internship In	
	7 TV 1 V				10		Industry / Higher Technical Institutions (P)	
	1412-	L.		1	- 1	Course	Course Hours/ Week	
						Code	Title L T P	С
							Massive Open Online Course - I	
	8. Mandatory Courses (M)						Industrial Training-I 0 0 2	1
							Seminar - I	
Code	Course Title	L	Т	Р	С		Massive Open Online Course - II	
18PDM101L	Professional Skills and Practices	0	0	2	0	18CSP105L	Industrial Training-II 0 0 2	1
18PDM201L	Competencies in Social Skills	0	0	2	0	18CSP106L	Seminar - II	
	Entrepreneurial Skill Development	U	U	2	U	18CSP107L	Minor Project	3
	Critical and Creative Thinking Skills	0	0	2	0		Internship (4-6 weeks)	J
	Business Basics for Entrepreneurs	U	U	2	U	18CSP109L		10
18PDM301L	Analytical and Logical Thinking Skills	0	0	2	0	18CSP110L	Semester Internsnip	
	Entrepreneurship Management						Total Learning Credits	15
	Constitution of India	1	0	0	0			
	Value Education	1	0	1	0	-	8. Mandatory Courses (M)	
	Physical and Mental Health using Yoga	0	0	2	0	Course	Course Hours/ Week	
18GNM102L		_	_	0	0	Code	Title L T P	С
18GNM103L 18GNM104L		0	0	2	0		Indian Art Form 0 0 2	0
	Indian Traditional Knowledge	1	0	0	0	18CYM101T	Environmental Science 1 0 0	0
TOLLIVITOST	maian Traditional Tallowledge	-	10	U	U	1		

## 19. (f) Program Articulation: B.Tech. in Computer Science and Engineering with Specialization in Software Engineering

				P	rog	ram	Lea	arni	ng (	Outo	com	es (	PL(	<b>D</b> )		
					_	Grad						,			PSO	
Course Code	Course Name	Engineering Knowledge	Problem Analysis	Design & Development	Analysis, Design, Research	Modern Tool Usage	Society & Culture	Environment & Sustainability	Ethics	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	PSO - 1	PSO - 2	PSO - 3
18CSS101J	Programming for Problem Solving	Н	Н	М	M	Н	L	L	М	Н	М	L	Н	L	Н	Н
18CSC201J	Data Structures and Algorithms	Н	Н	Н	Н	М	L	L	М	Н	М	М	Н	L	Н	Н
18CSC202J	Object Oriented Design and Programming	Н	Н	Н	Н	Н	М	L	М	Н	Н	М	Н	L	Н	Н
18CSC203J	Computer Organization and Architecture	Н	М	Н	М	L	L	L	М	L	L	L	М	Н	М	М
	Design and Analysis of Algorithms	Н	Н	Н	Н	М	М	L	М	М	М	М	Н	L	Н	Н
	Operating Systems	Н	Н	Н	Н	Н	М	L	М	Н	М	М	Н	Н	Н	М
	Software Engineering and Project Management	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	H	1	Н	М
	Advanced Programming Practice	Н	Н	М	М	Н	L	L	М	Н	М	L	Н	L	Н	Н
	Formal Language and Automata	Н	Н	Н	Н	Ĺ	L	L	L	М	M	L	Н	Н	Н	Н
	Computer Networks	Н	Н	Н	Н	Н	М	L	М	Н	M	М	Н	Н	Н	М
	Database Management Systems	Н	Н	Н	Н	Н	M	L	M	Н	M	M	Н	Н	Н	М
	0 ,								- 10"							
	Compiler Design Artificial Intelligence	H	H	H	H	M	L M	L	L	M	M	L	H	H	H	H
	Competitive Professional Skills-I	Н	Н	Н	Н	Н	L	L	М	H	H	М	Н	Н	Н	Н
	Competitive Professional Skills-II	Н	Н	Н	Н	Н	L	L	M	Н	Н	M	Н	Н	Н	Н
	Competitive Professional Skills-III	Н	Н	Н	Н	Н	L	L	M	Н	Н	M	Н	Н	Н	Н
	Requirements Engineering	Н	Н	М	Н	М	Н	М	Н	Н	Н	M	Н	М	М	Н
	Software Architecture and Design	Н	Н	Н	Н	Н	H	М	Н	Н	Н	M	Н	Н	Н	Н
	Software Modeling and Analysis	Н	Н	М	Н	М	 H	М	Н	Н	Н	М	Н	Н	Н	Н
	Design Patterns	Н	Н	Н	Н	Н	М	L	М	Н	Н	М	Н	L	Н	Н
	User Interface Design	Н	Н	Н	Н	Н	М	L	М	Н	Н	М	Н	L	Н	Н
	Visual Programming	Н	Н	М	М	Н	L	L	М	Н	М	L	Н	М	Н	Н
	Programming in Java Script	Н	Н	М	М	Н	L	L	М	Н	М	L	Н	М	Н	Н
	Software Engineering Tools	H	Н	Н	Н	Н	Н	М	Н	Н	Н	М	Н	Н	Н	Н
18CSE459T	Service Oriented Architecture	Н	Н	М	Н	М	Н	М	Н	Н	Н	М	Н	Н	Н	Н
	Software Verification and Validation	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Μ	Н	Н	Н	Н
	Software Quality Assurance	Н	Н	Н	Н	Н	М	М	Н	Н	Н	М	Н	Н	Н	Н
	Software Measurements and Metrics	Н	Н	Н	Н	Н	М	М	Н	Н	Н	М	Н	Н	Н	Н
	Software Process and Agile Practices	Н	Н	Н	Н	Н	Н	М	Н	Н	Н	М	Н	Н	Н	Н
	Software Security	Н	Н	Н	Н	Н	Н	М	Н	Н	Н	М	Н	Н	Н	Н
	Software Maintenance and Administration	Н	Н	Н	Н	Н	Н	М	Н	Н	Н	М	Н	Н	Н	Н
	Massive Open Online Course - I	Н	М	М	М	М	М	М	М	Н	Н	Н	М	Н	Н	Н
	Industrial Training-I	Н	М	М	М	М	М	М	М	Н	Н	Н	М	Н	Н	Н
	Seminar - I	Н	М	М	М	М	М	М	М	Н	Н	Н	М	Н	Н	Н
18CSP104L	Massive Open Online Course - II	Н	М	М	М	М	М	М	М	Н	Н	Н	М	Н	Н	Н
18CSP105L	Industrial Training-II	Н	М	М	М	М	М	М	М	Н	Н	Н	М	Н	Н	Н
18CSP106L	Seminar - II	Н	М	М	М	М	М	М	М	Н	Н	Н	М	Н	Н	Н
18CSP107L	Minor Project	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н	Н	Н	М	М
18CSP108I	Internship (4-6 weeks)	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н	Н	Н	М	М
	Project Project	Н	Н	Н	Н	Н	М	М	Н	Н	Н	Н	Н	Н	М	М
18CSP110L	Semester Internship	Н	Н	Н	Н	Н	M	М	Н	Н	Н	Н	Н	Н	M	М
10001 110L		Н														
	Program Average	Н	Н	М	Н	М	L	М	L	М	М	М	Н	М	М	М

## 19. (g) Implementation Plan: B.Tech. in Computer Science and Engineering with Specialization in Software Engineering

						1					
	Semester - I	1					Semester - II	le.	/14		
Code	Course Title	L	Т	Veek P	С	Code	Course Title	L	ırs/ V	Р	С
18LEH101J		2		2	3		Chinese / French / German / Japanese/ Korean		0	2	3
	Calculus and Linear Algebra	3	1	0	4		Advanced Calculus and Complex Analysis	3	1	0	4
	Physics: Semiconductor Physics Engineering Graphics and Design	3	0	2	5 3	18CYB101J	Programming for Problem Solving	3	0	2	5
	Basic Electrical and Electronics Engineering	3	1	2	5		Civil and Mechanical Engineering Workshop	1	0	4	3
	Professional Skills and Practices	0	0	2	0		General Aptitude	0	0	2	1
	Constitution of India	1	0	0	0		Value Education	1	0	1	0
	Physical and Mental Health using Yoga	0	0	2	0	18GNM102L		<u> </u>	0		-
00/11/1/072	Total Learning Credit		0	_	20	18GNM103L	NCC	0	0	2	0
						18GNM104L	NSO Total Learning Credits				21
	Semester - III						Semester - IV				
		Ног	urs/ V	Veek				Ног	ırs/ V	Veek	_
Code	Course Title	L	Τ	P	С	Code	Course Title	L	T	Р	С
18MAB201T	Transforms and Boundary Value Problems	3	1	0	4	18MAB204T	Probability and Queueing Theory	3	1	0	4
18BTB101T	Biology	2	0	0	2	18CSS202J	Computer Communications	2	0	2	3
18CSS201J	Analog and Digital Electronics	3	0	2	4		Design and Analysis of Algorithms	3	0	2	4
18CSC201J	Data Structures and Algorithms	3	0	2	4	18CSC205J	Operating Systems	3	0	2	4
	Object Oriented Design and Programming	3	0	2	4	18CSC206J	Software Engineering and Project Management	3	0	2	4
1000011027	Computer Organization and Architecture Management Principles for Engineers	3	0	2	2		Management Advanced Programming Practice	3	0	2	4
			U				Competitive Professional Skills-I	0	0	2	1
	Competencies in Social Skills Entrepreneurial Skill Development	- 0	0	2	0		Social Engineering	2	0	0	2
							Critical and Creative Thinking Skills			U	
I OI DIVIZUOL							Chilical and Creative Thirting Skills	0	0	2	0
I DIVIZUOL	Total Learning Credit	S			24		Puningga Paging for Entrapropagura	U	U		
TOT DIVIZUOL	l otal Learning Credit	S		н	24	18PDM204L	Business Basics for Entrepreneurs				0
TO DIVIZUOL	Total Learning Credit	S		3	24	18PDM204L	Business Basics for Entrepreneurs Environmental Science Total Learning Credits	1	0	0	
TOT DIVIZUOL	Semester - V	S		1	24	18PDM204L	Environmental Science	1			0 26
	Semester - V		urs/ V	Veek	25	18PDM204L 18CYM101T	Environmental Science Total Learning Credits Semester - VI	1		0	26
Code	Semester - V Course Title	Hou	Т	Р	С	18PDM204L 18CYM101T	Environmental Science Total Learning Credits  Semester - VI  Course Title	Hou L	0 urs/ W	0 Veek	26 C
Code 18MAB302T	Semester - V  Course Title  Discrete Mathematics for Engineers	Hou L	T 1	P 0	C 4	18PDM204L 18CYM101T Code 18CSC303J	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems	Hou L 3	0 urs/ W T 0	0 Veek P 2	26 C
Code 18MAB302T 18CSC301T	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata	Hou L 3	T 1 0	P 0 0	C 4 3	18PDM204L 18CYM101T Code 18CSC303J 18CSC304J	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems Compiler Design	1 Hou L 3 3	0 urs/ W T 0 0	Veek P 2 2	C 4 4
Code 18MAB302T 18CSC301T 18CSC302J	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks	Hou L 3 3	T 1 0	P 0 0 2	C 4 3 4	18PDM204L 18CYM101T Code 18CSC303J 18CSC304J 18CSC305J	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems  Compiler Design  Artificial Intelligence	Hou L 3 3	0 urs/ W T 0 0	Veek P 2 2 2 2	C 4 4 4
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II	Hot L 3 3 3 0	T 1 0 0	P 0 0 2 2	C 4 3 4 1	18CSC305J 18CSC305J 18CSC305J 18CSC305J 18CSC305J	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems  Compiler Design  Artificial Intelligence  Comprehension	Hou L 3 3 3	0 urs/ W T 0 0	0 Veek P 2 2 2	C 4 4 4 1
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective – 1	Hou L 3 3 3 0	T 1 0 0 0	P 0 0 2 2 2 0	C 4 3 4 1 3	18CSC305J 18CSC305J 18CSC305J 18CSC305J 18CSC305J	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II	Hou L 3 3 3 0 0	0 urs/W T 0 0 0	0 Veek P 2 2 2 0 2	C 4 4 1 1 1
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective – 1 Professional Elective – 2	Hot L 3 3 3 0 0 3 3 3 3	T 1 0 0 0 0	P 0 0 2 2 2 0 0	C 4 3 4 1 3 3 3	18CSC305J 18CSC305J 18CSC305J 18CSC305J 18CSC305J	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective – 3	Hou L 3 3 3 0 0 0 3 3	0 T 0 0 0 0 1 1 0	0 Week P 2 2 2 0 2	C 4 4 1 1 1 3
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective - 1 Professional Elective - 2 Open Elective - 1	Hou L 3 3 3 0	T 1 0 0 0 0	P 0 0 2 2 2 0	C 4 3 4 1 3	18CSC305J 18CSC305J 18CSC305J 18CSC305J 18CSC305J	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective - 3 Professional Elective - 4	Hou L 3 3 3 0 0 0 3 3 3	0 T 0 0 0 0 1 0 0	0 Week P 2 2 2 0 0 0 0	C 4 4 1 1 1 3 3 3
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L	Semester - V Course Title Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective – 1 Professional Elective – 2 Open Elective – 1 Massive Open Online Course - I	Hou L 3 3 3 3 0 0 3 3 3 3 3 3 3	T 1 0 0 0 0 0	P 0 0 2 2 2 0 0 0 0	C 4 3 4 1 3 3 3 3 3	Temporary   Temp	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective - 3 Professional Elective - 4 Open Elective - 2	Hou L 3 3 3 0 0 0 3 3	0 T 0 0 0 0 1 1 0	0 Week P 2 2 2 0 2	C 4 4 1 1 1 3
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L 18CSP101L 18CSP102L	Semester - V Course Title Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective – 1 Professional Elective – 2 Open Elective – 1 Massive Open Online Course - I Industrial Training-I	Hot L 3 3 3 0 0 3 3 3 3	T 1 0 0 0 0	P 0 0 2 2 2 0 0	C 4 3 4 1 3 3 3	18PDM204L 18CYM101T Code 18CSC303J 18CSC304J 18CSC305J 18CSC306L 18CSC306L	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective - 3 Professional Elective - 4 Open Elective - 2 Massive Open Online Course - II	Hou L 3 3 3 0 0 0 3 3 3	0 urs/W T 0 0 0 0 0 0 0 0 0	0  Week P 2 2 2 0 0 0 0	C 4 4 4 1 1 1 3 3 3 3 3 3
Code 18MAB302T 18CSC301T 18CSC306L 18CSC306L 18CSP101L 18CSP102L 18CSP103L	Semester - V  Course Title  Discrete Mathematics or Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective – 1 Professional Elective – 2 Open Elective – 1 Massive Open Online Course - I Industrial Training-I Seminar - I	Hotel L 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	T 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 2 2 0 0 0 0 2	C 4 3 4 1 3 3 3 3 3	18CYM101T  Code 18CSC303J 18CSC304J 18CSC305J 18CSC306L  18CSC306L	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective - 3 Professional Elective - 4 Open Elective - 2 Massive Open Online Course - II Industrial Training-II	Hou L 3 3 3 0 0 0 3 3 3	0 T 0 0 0 0 1 0 0	0 Week P 2 2 2 0 0 0 0	C 4 4 4 1 1 1 3 3 3
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L 18CSP101L 18CSP103L 18CSP103L 18PDM301L	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective – 1 Professional Elective – 2 Open Elective – 1 Massive Open Online Course - I Industrial Training-I Seminar - I Analytical and Logical Thinking Skills	Hou L 3 3 3 3 0 0 3 3 3 3 3 3 3	T 1 0 0 0 0 0	P 0 0 2 2 2 0 0 0 0	C 4 3 4 1 3 3 3 3 3	Code   18CSC303J   18CSC304J   18CSC306L   18CSC906L   18CSC905J   18CSC905J	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective - 3 Professional Elective - 4 Open Elective - 2 Massive Open Online Course - II Industrial Training-II Seminar - II	Hou L 3 3 3 0 0 0 3 3 3 3 0 0	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0    Veek   P   2   2   0   0   0   0     0     2     2     1	C 4 4 4 1 1 3 3 3 3 3 1 1
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L 18CSP101L 18CSP102L 18CSP103L 18CSP103L 18CPDM301L	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective - 1 Professional Elective - 2 Open Elective - 1 Massive Open Online Course - I Industrial Training-I Seminar - I Analytical and Logical Thinking Skills Entrepreneurship Management	Hotel L 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	T 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 2 2 0 0 0	C 4 4 3 4 1 1 3 3 3 3 1 1 0 0	Code  18CSC303J 18CSC304J 18CSC305J 18CSC306L  18CSP104L 18CSP105L 18CSP106L 18CSP106L 18CSP106L	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective – 3 Professional Elective – 4 Open Elective – 2 Massive Open Online Course - II Industrial Training-II Seminar - II Employability Skills and Practices	Hou L 3 3 3 0 0 0 3 3 3 3 0 0 0 0 0 0 0 0 0	0 urs/W T 0 0 0 0 1 0 0 0 0 0	0  Week P 2 2 0 0 0 2 0 0 2	CC 4 4 4 4 1 1 3 3 3 3 3 1 1 1 1
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L 18CSP101L 18CSP102L 18CSP103L 18CSP103L 18CPDM301L	Semester - V Course Title Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective – 1 Professional Elective – 2 Open Elective – 1 Massive Open Online Course - I Industrial Training-I Seminar - I Analytical and Logical Thinking Skills Entrepreneurship Management Indian Traditional Knowledge	Hou L 3 3 3 3 0 0 3 3 3 3 3 0 0 0 0 0 0 0 0	T 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 2 2 0 0 0 0 2	C 4 4 3 4 4 1 1 3 3 3 3 1 1 0 0 0 0	Code  18CSC303J 18CSC304J 18CSC305J 18CSC306L  18CSP104L 18CSP105L 18CSP106L 18CSP106L 18CSP106L	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective – 3 Professional Elective – 4 Open Elective – 2 Massive Open Online Course - II Industrial Training-II Seminar - II Employability Skills and Practices Indian Art Form	Hou L 3 3 3 0 0 0 3 3 3 3 0 0	T 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0    Veek   P   2   2   0   0   0   0     0     2     2     1	CC 44 44 11 11 33 33 3 11 11 0
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L 18CSP101L 18CSP102L 18CSP1031 18CSP1031 18CSP1031 18CSP1031	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective - 1 Professional Elective - 2 Open Elective - 1 Massive Open Online Course - I Industrial Training-I Seminar - I Analytical and Logical Thinking Skills Entrepreneurship Management	Hou L 3 3 3 3 0 0 3 3 3 3 3 0 0 0 0 0 0 0 0	T 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 2 2 0 0 0	C 4 4 3 4 1 1 3 3 3 3 1 1 0 0	Code  18CSC303J 18CSC304J 18CSC305J 18CSC306L  18CSP104L 18CSP105L 18CSP106L 18CSP106L 18CSP106L	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective – 3 Professional Elective – 4 Open Elective – 2 Massive Open Online Course - II Industrial Training-II Seminar - II Employability Skills and Practices	Hou L 3 3 3 0 0 0 3 3 3 3 0 0	0 urs/W T 0 0 0 0 1 0 0 0 0 0	0  Week P 2 2 0 0 0 2 0 0 2	C 4 4 4 1 1 3 3 3 3 3 1 1
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L 18CSP101L 18CSP102L 18CSP1031 18CSP1031 18CSP1031 18CSP1031	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata  Computer Networks  Competitive Professional Skills-II Professional Elective – 1 Professional Elective – 2  Open Elective – 1 Massive Open Online Course - I Industrial Training-I Seminar - I Analytical and Logical Thinking Skills Entrepreneurship Management Indian Traditional Knowledge  Total Learning Credit	Hou L 3 3 3 3 0 0 3 3 3 3 3 0 0 0 0 0 0 0 0	T 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 2 2 0 0 0	C 4 4 3 4 4 1 1 3 3 3 3 1 1 0 0 0 0	Code  18CSC303J 18CSC304J 18CSC305J 18CSC306L  18CSP104L 18CSP105L 18CSP106L 18CSP106L 18CSP106L	Total Learning Credits  Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective – 3 Professional Elective – 4 Open Elective – 2 Massive Open Online Course - II Industrial Training-II Seminar - II Employability Skills and Practices Indian Art Form Total Learning Credits	Hou L 3 3 3 0 0 0 3 3 3 3 0 0	0 urs/W T 0 0 0 0 1 0 0 0 0 0	0  Week P 2 2 0 0 0 2 0 0 2	CC 44 44 11 11 33 33 3 11 11 0
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L 18CSP101L 18CSP102L 18CSP103L 18CSP103L 18CSP103L	Semester - V Course Title Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective – 1 Professional Elective – 2 Open Elective – 1 Massive Open Online Course - I Industrial Training-I Seminar - I Analytical and Logical Thinking Skills Entrepreneurship Management Indian Traditional Knowledge	Hou L 3 3 3 3 0 0 3 3 3 3 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 0 2 2 0 0 0 0 2 2 0 0 0 0 0 0 0 0	C 4 4 3 4 4 1 1 3 3 3 3 1 1 0 0 0 0	Code  18CSC303J 18CSC304J 18CSC305J 18CSC306L  18CSP104L 18CSP105L 18CSP106L 18CSP106L 18CSP106L	Environmental Science Total Learning Credits  Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective – 3 Professional Elective – 4 Open Elective – 2 Massive Open Online Course - II Industrial Training-II Seminar - II Employability Skills and Practices Indian Art Form	Hou L 3 3 3 0 0 0 3 3 3 3 0 0 0 0 0 0 0 0 0	0 T 0 0 0 0 1 0 0 0 0	0  Week P 2 2 0 0 0 0 0 2 2 2 0 0 0 0 0 0 0 0 0	CC 44 44 44 11 11 33 33 3 11 11 00 255
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L 18CSP101L 18CSP102L 18CSP103L 18PDM301L 18PDM301L 18PDM301L 18PDM301L 18PDM301L	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective - 1 Professional Elective - 2 Open Elective - 1 Massive Open Online Course - I Industrial Training-I Seminar - I Analytical and Logical Thinking Skills Entrepreneurship Management Indian Traditional Knowledge Total Learning Credit  Semester - VII Course Title	Hot   L   3   3   3   3   3   3   3   3   3	0 0 0 0 0 0 0 0	P 0 0 0 2 2 0 0 0 0 2 2 0 0 0 0 0 0 0 0	C 4 3 3 4 1 1 3 3 3 3 1 1 0 0 0 22	Code	Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective - 3 Professional Elective - 4 Open Elective - 2 Massive Open Online Course - II Industrial Training-II Seminar - II Employability Skills and Practices Indian Art Form  Total Learning Credits  Semester - VIII  Course Title	Hou L 3 3 3 0 0 0 3 3 3 3 0 0 0 0 0 0 0 0 0	0  urs/ W  T  0  0  0  0  0  0  0  0  Irs/ W	0  Veek P 2 2 0 0 0 0 2 2 2 0 Veek P	CC 44 44 11 11 33 33 3 11 11 0
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L 18CSP101L 18CSP103L 18CSP103L 18PDM301L 18PDM301L 18LEM109T  Code	Semester - V Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective - 1 Professional Elective - 2 Open Elective - 1 Massive Open Online Course - I Industrial Training-I Seminar - I Analytical and Logical Thinking Skills Entrepreneurship Management Indian Traditional Knowledge Total Learning Credit  Semester - VII Course Title  Professional Elective - 5	Hou L 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0 0	P 0 0 0 2 2 0 0 0 0 2 2 0 0 0 0 0 0 0 0	C 4 4 3 4 4 1 1 3 3 3 3 1 1 0 0 0 22 C C 3	Temporary   Temp	Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective - 3 Professional Elective - 4 Open Elective - 2 Massive Open Online Course - II Industrial Training-II Seminar - II Employability Skills and Practices Indian Art Form  Total Learning Credits  Semester - VIII Course Title	Hou L 3 3 3 0 0 0 3 3 3 3 0 0 0 0 0 0 0 0 0	0  urs/ W  T  0  0  0  0  0  0  0  0  Irs/ W	0  Week P 2 2 0 0 0 0 0 2 2 2 0 0 0 0 0 0 0 0 0	CC 4 4 4 4 1 1 1 3 3 3 3 1 1 1 0 0 25
Code 18MAB302T 18CSC301T 18CSC302J 18CSC306L 18CSP101L 18CSP103L 18CSP103L 18PDM301L 18PDM302L 18LEM109T	Semester - V Course Title Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective - 1 Professional Elective - 2 Open Elective - 1 Massive Open Online Course - I Industrial Training-I Seminar - I Analytical and Logical Thinking Skills Entrepreneurship Management Indian Traditional Knowledge Total Learning Credit  Semester - VII Course Title  Professional Elective - 5 Professional Elective - 6	Hou L 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 0 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C 4 4 3 4 4 1 3 3 3 3 1 1 0 0 0 22 C C 3 3 3 3	Temporary   Temp	Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective - 3 Professional Elective - 4 Open Elective - 2 Massive Open Online Course - II Industrial Training-II Seminar - II Employability Skills and Practices Indian Art Form  Total Learning Credits  Semester - VIII  Course Title	1 Hou L 3 3 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0  urs/ W  T  0  0  0  0  0  0  0  0  Irs/ W	0  Veek P 2 2 0 0 0 0 2 2 2 0 Veek P	26 4 4 4 1 1 1 3 3 3 3 1 1 0 2 5
Code    8MAB302T     8CSC301T     8CSC306L     8CSP101L     8CSP102L     8CSP103L     8PDM301L     8PDM302L     8LEM109T    Code	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective – 1 Professional Elective – 2 Open Elective – 1 Massive Open Online Course - I Industrial Training-I Seminar - I Analytical and Logical Thinking Skills Entrepreneurship Management Indian Traditional Knowledge Total Learning Credit  Semester - VII  Course Title  Professional Elective – 5 Professional Elective – 6 Open Elective – 3	Hou L 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0 0	P 0 0 0 2 2 0 0 0 0 2 2 0 0 0 0 0 0 0 0	C 4 4 3 4 4 1 1 3 3 3 3 1 1 0 0 0 22 C C 3	Temporary   Temp	Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective - 3 Professional Elective - 4 Open Elective - 2 Massive Open Online Course - II Industrial Training-II Seminar - II Employability Skills and Practices Indian Art Form  Total Learning Credits  Semester - VIII Course Title	1 Hou L 3 3 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0  urs/ W  T  0  0  0  0  0  0  0  0  Irs/ W	0  Veek P 2 2 0 0 0 0 2 2 2 0 Veek P	20 44 44 11 33 33 3 11 10 0 25
Code  8MAB302T  8CSC301T  8CSC306L  8CSC306L  8CSC9101L  8CSP101L  8CSP102L  8CSP103L  8PDM301L  8PDM302L  8LEM109T  Code	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective – 1 Professional Elective – 2 Open Elective – 1 Massive Open Online Course - I Industrial Training-I Seminar - I Analytical and Logical Thinking Skills Entrepreneurship Management Indian Traditional Knowledge Total Learning Credit  Semester - VII Course Title  Professional Elective – 5 Professional Elective – 6 Open Elective – 3 Minor Project	Hou L 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 0 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C 4 4 3 4 4 1 3 3 3 3 1 1 0 0 0 22 C C 3 3 3 3	Temporary   Temp	Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective - 3 Professional Elective - 4 Open Elective - 2 Massive Open Online Course - II Industrial Training-II Seminar - II Employability Skills and Practices Indian Art Form  Total Learning Credits  Semester - VIII Course Title	1 Hou L 3 3 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0  urs/ W  T  0  0  0  0  0  0  0  0  1  T  1  1  1  1  1  1  1  1  1  1  1	0  Veek P 2 2 0 0 0 0 2 2 2 0 Veek P	20 44 44 11 33 33 3 11 10 0 25
Code  8MAB302T  8CSC301T  8CSC306L  8CSC306L  8CSC9101L  8CSP101L  8CSP102L  8CSP103L  8PDM301L  8PDM302L  8LEM109T  Code	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective – 1 Professional Elective – 2 Open Elective – 1 Massive Open Online Course - I Industrial Training-I Seminar - I Analytical and Logical Thinking Skills Entrepreneurship Management Indian Traditional Knowledge Total Learning Credit  Semester - VII  Course Title  Professional Elective – 5 Professional Elective – 6 Open Elective – 3 Minor Project Internship (4-6 weeks)	Hot L 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C 4 4 3 4 4 1 1 3 3 3 3 3 1 1 C C C 3 3 3 3 3 3 3 3	Temporary   Temp	Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective - 3 Professional Elective - 4 Open Elective - 2 Massive Open Online Course - II Industrial Training-II Seminar - II Employability Skills and Practices Indian Art Form  Total Learning Credits  Semester - VIII Course Title	1 Hou L 3 3 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0  urs/ W  T  0  0  0  0  0  0  0  0  1  T  1  1  1  1  1  1  1  1  1  1  1	0  Veek P 2 2 0 0 0 0 2 2 2 0 Veek P	26 4 4 4 1 1 1 3 3 3 3 1 1 0 2 5
Code  8MAB302T  8CSC301T  8CSC306L  8CSC306L  8CSC9101L  8CSP101L  8CSP102L  8CSP103L  8PDM301L  8PDM302L  8LEM109T  Code	Semester - V  Course Title  Discrete Mathematics for Engineers Formal Language and Automata Computer Networks Competitive Professional Skills-II Professional Elective – 1 Professional Elective – 2 Open Elective – 1 Massive Open Online Course - I Industrial Training-I Seminar - I Analytical and Logical Thinking Skills Entrepreneurship Management Indian Traditional Knowledge Total Learning Credit  Semester - VII Course Title  Professional Elective – 5 Professional Elective – 6 Open Elective – 3 Minor Project	Hot L 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	P 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C 4 4 3 4 4 1 1 3 3 3 3 1 1 0 0 0 22 C C 3 3 3 3 3 3	Temporary   Temp	Semester - VI  Course Title  Database Management Systems Compiler Design Artificial Intelligence Comprehension Competitive Professional Skills-II Professional Elective - 3 Professional Elective - 4 Open Elective - 2 Massive Open Online Course - II Industrial Training-II Seminar - II Employability Skills and Practices Indian Art Form  Total Learning Credits  Semester - VIII Course Title	Hou L 3 3 3 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0  urs/ W  T  0  0  0  0  0  0  0  0  1  T  1  1  1  1  1  1  1  1  1  1  1	0  Veek P 2 2 0 0 0 0 2 2 2 0 Veek P	2 4 4 4 1 1 1 1 (C) 2