

**Stanley College of Engineering &
Technology for women**
Scheme of Instruction & Examination
(Curriculum for the Academic Year 2021-2022)

M.Tech. I to IV
Semester of
Two Year Post Graduate Degree Programme
in
Computer Science and Engineering

**SCHEME OF INSTRUCTION & EXAMINATION
M.Tech.(Computer Science and Engineering) I–Semester**

S.No.	Course Type/Code	CourseName	Scheme of Instruction				Scheme of Examination			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration in Hrs	
Theory Courses										
1	Core	ProgramCore–I	3	1	-	3	40	60	3	4
2	Core	ProgramCore–II	3	1	-	3	40	60	3	4
3	Elective	Professional Elective –I	3	-	-	3	40	60	3	3
4	Elective	ProfessionalElective–II	3	-	-	3	40	60	3	3
5	CC	Research Methodology& IPR	2	-	-	2	40	60	3	2
6	Audit	Audit Course –I	2	-	-	2	40	60	3	0
Practical/LaboratoryCourses										
7	Lab	Laboratory– I	-	-	2	2	50	-	3	1
8	Lab	Laboratory–II			2	2	50		3	1
9	STS1CS	Seminar	-	-	2	2	50	-	3	2
Total			16	02	06	22	390	360		20

PC: Program Core **PE:** Professional Elective **OE:** Open Elective **AD:** Audit Course
CC: Compulsory Course **HS:** Humanities and social science

L: Lecture **T:** Tutorial **P:** Practical **D:** Drawing
CIE: Continuous Internal Evaluation **SEE:** Semester End Examination (Univ. Exam)

Note:

1. Each contact hour is a Clock Hour.
2. The practical class can be of two and half hour (clock hours) duration as per the requirement of a particular laboratory.

****CC Research Methodology & IPR is compulsory course for all M.E/M.Tech Programs.**

**SCHEME OF INSTRUCTION & EXAMINATION
M.Tech(Computer Science and Engineering) II–Semester**

S.No.	Course Type/Code	CourseName	Scheme ofInstructi on				Scheme ofExaminati on			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration inHrs	
Theory Courses										
1	Core	ProgramCore –III	3	1	-	4	40	60	3	4
2	Core	ProgramCore –IV	3	1	-	4	40	60	3	4
3	Elective	ProfessionalElective –III	3	-	-	3	40	60	3	3
4	OE	OpenElective	3	-	-	3	40	60	3	3
5	Audit	AuditCourse–II	2	-	-	2	40	60	3	0
Practical/LaboratoryCourses										
6	Lab	Laboratory–III	-	-	2	2	50	-	3	1
7	Lab	Laboratory–IV	-	-	2	2	50	-	3	1
8	SMPTP1CS	MiniProjectwithSeminar	-	-	4	4	50	-	3	2
Total			14	02	08	24	350	300		18

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CC: Compulsory Course **HS:** Humanities and social science

L: Lecture **T:** Tutorial **P:** Practical **D:** Drawing
CIE: Continuous Internal Evaluation **SEE:** Semester End Examination (Univ. Exam)

Note:

1. Each contact hour is a Clock Hour.
2. The practical class can be of two and half hour (clock hours) duration as per the requirement of a particular laboratory.

**SCHEME OF INSTRUCTION & EXAMINATION
M.Tech.(Computer Science and Engineering) III – Semester**

S.No.	Course Type/Code	CourseName	Scheme ofInstructi on				Scheme ofExaminati on			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration inHrs	
Theory Courses										
1	Elective	ProfessionalElective–IV	3	-	-	3	40	60	3	3
2	Elective	ProfessionalElective–V	3	-	-	3	40	60	3	3
3	SPW1CS	MajorProject Phase–I	-	-	20	20	100	-	3	10
Total			06	-	20	26	180	120		16

M.Tech.(Computer Science and Engineering) IV – Semester

S.No.	Course Type/Code	CourseName	Scheme ofInstructi on				Scheme ofExaminati on			Credits
			L	T	P/D	Contact Hrs/Wk	CIE	SEE	Duration inHrs	
Theory Courses										
1	SPW2CS	Major Project Phase – II(Dissertation)	-	-	32	32	-	200	3	16
Total			-	-	32	32	-	200		16

PC: Program Core **PE:** Professional Elective **OE:** Open Elective **AD:** Audit Course
CC: Compulsory Course **HS:** Humanities and social science
L: Lecture **T:** Tutorial **P:** Practical **D:** Drawing
CIE: Continuous Internal Evaluation **SEE:** Semester End Examination (Univ. Exam)

Note:

- Each contact hour is a Clock Hour
- The practical class can be of two and half hour (clock hours) duration as per the requirement of a particular laboratory.
- The students who are willing to register for MOOCs in the M. Tech (CSE) III – semester instead of Professional Electives – IV & V, should register for those of the courses, approved by the department. Those students are strictly not permitted to appear for either CIE or SEE of Professional Electives – IV & V if they abstain from attending the semester classwork. Further, for students willing to appear for both MOOCs and Professional Electives, they should fulfil the minimum attendance criteria.

List of subjects of Professional Core

S.No.	Course Code	Course Title
1	SPC01CS	Python Programming
2	SPC02CS	Cryptography and Network Security
3	SPC03CS	Data Structures & Algorithms
4	SPC04CS	Machine Learning & Techniques

List of subjects of Professional Electives I to V

S.No.	Course Code	Course Title
1	SPE01CS	Software Requirements Engineering
2	SPE02CS	Agile Software Engineering
3	SPE03CS	Software Design Architecture
4	SPE04CS	Software Security Engineering
5	SPE05CS	Software Project Management
6	SPE06CS	Mathematical Foundation of Computer Science Data Science
7	SPE07CS	Data Science
8	SPE08CS	Artificial Intelligence
9	SPE09CS	Predictive Analytics using R
10	SPE10CS	Soft Computing & Techniques
11	SPE11CS	Distributed Computing
12	SPE12CS	Mobile Computing
13	SPE13CS	Cloud Computing
14	SPE14CS	Parallel Computing
15	SPE15CS	Pervasive Computing
16	SPE16CS	Distributed Databases
17	SPE17CS	Exploratory data analysis
18	SPE18CS	Data Engineering
19	SPE19CS	Information Retrieval Systems
20	SPE20CS	Principles of Data Intensive Systems
21	SPE21CS	Natural Language Processing
22	SPE22CS	Digital Image Processing
23	SPE23CS	Computer Vision
24	SPE 2139 CS	Expert Systems
25	SPE 2140 CS	Deep Learning
26	SPE 2141 CS	Number Theory and Cryptography
27	SPE 2142 CS	Network Security
28	SPE 2143 CS	Cyber Security
29	SPE 2144 CS	Block Chain Technology

List of Compulsory Course

S.No.	Course Code	Course Title
1	S CC5161ME	Research Methodology & IPR

List of Open Electives

S.No.	Course Code	Course Title
1	SOE 9101 CE	Cost Management of Engineering Projects
2	SOE 9102 EC	Internet of Things
3	SOE 9103 EC	Embedded System Design
4	SOE 9104 EE	Waste to Energy
5	SOE 9105 ME	Industrial Safety

Listof subjectsofAuditCourse-I

S.No.	Course Code	CourseTitle
1	SAD9001 HS	Englishfor ResearchPaperWriting
2	SAD9002 CE	DisasterManagement
3	SAD9003 HS	SanskritforTechnicalKnowledge
4	SAD9004 HS	ValueEducation

List of subjects of Audit Course-II

S.No.	Course Code	Course Title
5	SAD9011 HS	Constitution of India and Fundamental Rights
6	SAD9012 HS	Pedagogy Studies
7	SAD9013 HS	Stress Management by Yoga
8	SAD9014 HS	Personality Development through life Enlightenment Skills

List of Laboratory Courses

S.No.	Course Code	Course Title
1	SPC2151CS	Network Security Lab
2	SPC2152CS	Machine Learning Lab
3	SPC2153CS	Advanced Algorithms Lab
4	SPC2154CS	Advanced Data Structures