

SHIV NADAR UNIVERSITY

Department of Computer Science and Engineering, School of Engineering Master of Technology (CSE)

Overall Credit Structure

Category	Core component	Elective Courses	Total
Credits	32	18	50

Core Component (PC) – 32 credits

CSD711	Advanced Data Structures and Algorithms	3-0-1	4
CSD712	Topics in Mathematical Sciences	3-1-0	4
CSD713	Research Methodology	4-0-0	4
CSD890	Software Lab / Minor Project	0-0-4	4
CSD892	Major Project Part 1	0-0-6	6
CSD893	Major Project Part 2 / Industry Project	0-0-10	10

Elective Courses (PE)

CSD720	Advanced Data Management Systems	3-0-1	4
CSD721	Computational Neuroscience	3-0-1	4
CSD722	Computer Graphics	3-0-1	4
CSD723	Foundation of Information Security	3-1-0	4
CSD724	Information Retrieval	3-0-1	4
CSD725	Image Processing & Applications	3-0-1	4
CSD726	Logic and Functional Programming	3-0-1	4
CSD727	Machine Learning	3-0-1	4
CSD728	Natural Language Processing	3-0-1	4
CSD740	Applied Cryptography	3-1-0	4
CSD741	Big Data Analytics	3-0-1	4
CSD742	Computer Vision	3-0-1	4
CSD743	Data Mining & Data warehousing	3-0-1	4
CSD744	Deep Learning	3-0-1	4
CSD745	Internet of Things	3-0-1	4
CSD746	Performance Modelling Of Computer Communication Networks	3-1-0	4
CSD747	Virtualization and Cloud Computing	3-0-1	4
CSD748	Wireless Sensor Networks	3-0-1	4
CSD749	Wireless and Mobile Systems	3-0-1	4
CSD750	Independent Study	3-0-0	3
CSD751	Internship / Mini Project	3-0-0	3

Program Structure Semester Wise

Sem	PC1	PC2	PE	PE	Project	Total
1 st	CSD711	CSD713	PE1			12
2 nd	CSD712	CSD890	PE2	PE3		15
3 rd			PE4	PE5	CSD892	13
4 th					CSD893	10

CSD801	Special Topics in Artificial Intelligence	3-0-0	3
CSD802	Special Topics in Cyber Security	3-0-0	3
CSD803	Special Topics in Data Science	3-0-0	3
CSD804	Special Topics in Embedded Systems	3-0-0	3
CSD805	Special Topics in Sensor Networks	3-0-0	3
CSD810	Special Module in Artificial Intelligence	1-0-0	1
CSD811	Special Module in Cyber Security	1-0-0	1
CSD812	Special Module in Data Science	1-0-0	1
CSD813	Special Module in Embedded Systems	1-0-0	1
CSD814	Special Module in Sensor Networks	1-0-0	1

Bridge Courses

CSD610	Artificial Intelligence	3-0-1	4
CSD611	Computer Networks	3-0-1	4
CSD612	Database Management Systems	3-0-1	4
CSD613	Design and Analysis of Algorithms	3-0-1	4
CSD614	Operating Systems	3-0-1	4
CSD615	Computer Organization and Architecture	3-1-1	5
CSD616	Probability and Statistics	3-1-0	4

Specialization:

1. Artificial Intelligence and Machine Learning
2. Data Science and Big Data Analytics
3. Cyber Security and Privacy
4. Embedded Systems

- Minimum 25 Credits (out of 50 credits).
 - Electives from chosen specialization: 9 Credits
 - M.Tech Thesis Components: 16 Credits
- Overall CGPA ≥ 7 and Specialization CGPA ≥ 8 .

Specialization Buckets

Artificial Intelligence and ML	Data Science and Big Data Analytics	Cyber Security and Privacy	Embedded Systems
CSD722, CSD725, CSD726, CSD727, CSD728, CSD742, CSD744, CSD747, CSD750, CSD751, CSD801, CSD810	CSD720, CSD721, CSD724, CSD741, CSD743, CSD747, CSD750, CSD751, CSD803, CSD812	CSD723, CSD740, CSD745, CSD746, CSD747, CSD750, CSD751, CSD802, CSD811	CSD745, CSD746, CSD747, CSD748, CSD749, CSD750, CSD751, CSD804, CSD805, CSD813, CSD814