M.Tech (CS) Course Structure

Semester I	Semester II	Semester III
Mathematics for Machine Learning	Elective I	Elective V
Advanced Computer Algorithm and Analysis	Elective II	Elective VI
Software Systems	Elective III	Elective VII
Advanced Computer Network and Architecture	Elective IV	Elective VIII

Pool of Electives

Artificial Intelligence	Data Science
1. Machine Learning	1. Data Analytics
2. Soft Computing	2. Machine Learning
3. Vision & Image Processing	3. Tools & Applications of Data Science
4. Intelligent Agents & Planning	4. Cryptography & Information Security
5. Algorithmic Graph Theory	5. Computational Methods of optimization
6. Approximation Algorithms	6. Big Data Analysis
7. Expert Systems	7. Data Compression
	8. Pattern Analysis & Data Mining

General Requirements:

- M. Tech in Computer Science is a two-year (4 semesters) programme. A student needs to earn at least 64 credits, to graduate with M. Tech degree.
- M. Tech (CS) is to be done with a thesis. Students have to do a certain amount of coursework in addition the thesis work.
- The overall requirements are as follows: 48 credits of coursework + 16 credits of thesis.

- Each course here is of 4 credits. Students in the first semester must complete core courses worth at least 16 credits. The students will choose 4 elective courses each in second and third semester.
- At most 4 credits of Independent Study can be taken.
- Online courses may be permitted to be registered as Independent study with permission of PG & Ph. D in- Charge.
- The last semester will be preparation of thesis.
- Depending on the elective courses chosen by the students, M. Tech (CS) students have the option to specialize in one of the following areas,

I. Artificial Intelligence (AI)
II. Data Science (DS)