

w.r.t. DMPC meeting Convened on - 21/8/2020
& BoAC meeting Convened on - 05/12/2020

Course Structure & Curriculum

For
M. Tech. Programme

In

**Computer Science & Engineering (Specialization in Artificial Intelligence &
Data Science)**



**Motilal Nehru National Institute of Technology Allahabad,
Prayagraj**

Motilal Nehru National Institute of Technology Allahabad

Department of Computer Science & Engineering

M.Tech CSE (Specialization in Artificial Intelligence & Data Science)

Proposed Curriculum

I - Semester :

Subject Code	Subject Name	L	T	P	Credits	TA	Mid Sem. Exam.	End Sem. Exam	Total Marks
CS21101	Data Science: Concepts and Methodologies	4			4	20	20	60	100
CS21201	Programming Lab-1			6	4	50	00	50	100
CS21XXX	Elective – I	4			4	20	20	60	100
CS21XXX	Elective – II	4			4	20	20	60	100
CS21XXX	Elective – III	4			4	20	20	60	100

Total Credits = 20





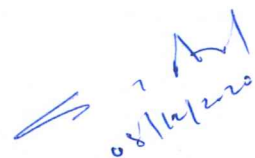
II - Semester :

Subject Code	Subject Name	L	T	P	Credits	TA	Mid Sem. Exam.	End Sem. Exam	Total Marks
CS22201	<u>Machine Learning</u>	4			4	20	20	60	100
CS22103	Programming Lab.-2			6	4	20	20	60	100

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CS22XXX	Elective – IV	4			4	20	20	60	100
CS22XXX	Elective – V	4			4	20	20	60	100
CS22XXX	Elective – VI	4			4	20	20	60	100

Total Credits = 20

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III – Semester

Subject Code	Subject Name	Credits	Total Marks
CS23601	Thesis/Project	16	100
CS23651	Colloquium/Term Project	4	100

Total Credits = 20


IV – Semester

Subject Code	Subject Name	Credits	Total Marks
CS24601	Thesis/Project	20	100

Total Credits = 20


Note : The distribution of thesis evaluation marks will be as follows :

1. Supervisor(s) evaluation component : 60%
2. Oral Board evaluation component : 40%


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DLR

List of Electives for M.Tech. CSE (Specialization in Artificial Intelligence & Data Science)

Elective I

- CS21301 Mathematical Foundation of Data science
CS21302 Numerical Optimization
CS21303 Probability and Statistical Models

Elective II

- CS21304 Artificial Intelligence
CS21305 Advanced Data Modeling
CS21306 High Performance Computing
CS21307 Data Acquisition and Productization

Elective III

- CS21308 Soft Computing Techniques
CS21309 Data Mining
CS21310 Edge and Cloud Computing

Elective IV

- CS22301 Medical Image Processing
CS22302 Advanced Algorithms
CS22303 Introduction to Bioinformatics and Genomics
CS22304 Big Data
CS22305 Data Analytics

Elective V

- CS22306 Computer Vision
CS22307 Natural Language processing
CS22308 Ethics of Data Science
CS22309 Privacy Preserving Data Mining
CS22310 Data Security and Application Security
CS22311 Visual Cryptography
CS22312 Information Retrieval

Elective VI

- CS22313 Advanced Database Systems
CS22314 Deep Learning
CS22315 Data Visualization
CS22316 Digital Ledger Technology
CS22317 Advanced Data Mining

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Shashu
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