

All Course M. Tech in Artificial Intelligence & Machine Learning (36 Credits)

Semester - I		
C. No.	Course Title	Credits
EE5817	Random Variables	2
EE5827	Random Processes	1
CS6013	Adv. Data Str. & Algo	3
MA4020	Linear Algebra	3
EE5600	Introduction to Machine Learning	1
EE5601	Representation Learning	1
EE5602	Probabilistic Graphical Models	1
EE/CS/MA	Core Elective	3
Total Credits		15

Semester – II		
C. No.	Course Title	Credits
EE5603	Concentration Inequalities	1
EE5604	Introduction to Statistical Learning Theory	1
EE5605	Kernel Methods	1
EE5606	Convex optimization - 1	1.5
EE5607	Convex optimization - 2	1.5
EE/CS/MA	Core electives	6
XXxxxx	Free Electives	3
Total Credits		15

Summer Semester		
C. No.	Course Title	Credits
EE/CS/MA	Core Electives	3
XXxx	Free Electives	3
Total Credits		6

Summary	
Core Theory	12
Core Elective	18
Free Elective	6
Total	36

Tentative List of Electives

CS6420	Bayesian Data Analysis
CS6460	Introduction to Deep Learning for Vision
CS6230	Optimization Methods in Machine Learning
CS6220	Computer Vision
CS6450	Advanced Topics in Computer Vision
CS6420	Bayesian Data Analysis
CS6360	Advanced Topics in Machine Learning
CS6390	Enabling Large Scale Data Analytics: From Theoretical Foundations to Practice
CS6370	Information Retrieval
CS6210	Advanced Machine Learning
CS5330	Introduction to Statistical Natural Language Processing
EE6337	Deep Learning
EE5327	Optimization
EE7710	Probabilistic models of brain
EE6307	Speech Systems

EE7320	Immersive Multimedia
CS5270	Numerical linear algebra for data analysis
MA6040	Fuzzy logic connectives
MA6060	Redundant and sparse representations
MA5020	Functional analysis
MA6080	Measure theoretic probability
MA5050	Mathematical methods
MA5040	Topology
MA6100	Mathematics behind machine learning
MA 5120	Numerical Linear Algebra