## Prerequisite and Co-requisite modules Honors Degree of Bachelor of Science in Information Technology & Management

Module		Pre/Co-requisite	Pre-requisite Module/s	
CM 1130	Elements of Statistics	Pre-requisite	CM 1120	Essentials of Mathematics
CM 2120	Calculus	Pre-requisite	CM 1120	Essentials of Mathematics
CM 2130	Statistical Distributions and Estimation	Pre-requisite	CM 1130	Elements of Statistics
CM 3110	Computational Mathematics	Pre-requisite	CM 2120	Calculus
CM 3120	Computational Statistics	Pre-requisite	CM 2120	Calculus
		Pre-requisite	CM 2130	Statistical Distributions and Estimation
CM 3310	Artificial Intelligence	Pre-requisite	CM 2120	Calculus
CM 3320	Logic Programming & Artificial Cognitive Systems	Co-requisite	CM 3310	Artificial Intelligence
CM 4110	Advanced Topics in Mathematics	Pre-requisite	CM 3110	Computational Mathematics
CM 4121	Advanced Topics in Statistics	Pre-requisite	CM 3120	Computational Statistics
CM 4130	Mathematical Modelling	Pre-requisite	CM 2120	Calculus
CM 4140	Operational Research	Pre-requisite	CM 2130	Statistical Distributions and Estimation
CM 4210	Theory of Computability & Complexity	Pre-requisite	CM 3210	Automata Theory
CM 4220	Theory of Compilers	Pre-requisite	CM 3210	Automata Theory
CM 4230	Formal Methods and Software Verification	Pre-requisite	CM 3210	Automata Theory
CM 4310	Artificial Neural Networks & Evolutionary Computing	Pre-requisite	CM 3310	Artificial Intelligence
CM 4320	Complex Systems & Agent Technology	Pre-requisite	CM 3310	Artificial Intelligence
CM 4330	Semantic Web and Ontological Modelling	Pre-requisite	CM 3310	Artificial Intelligence
CM 4340	Natural Language Processing	Pre-requisite	CM 3310	Artificial Intelligence
CM 4350	Fuzzy Logic	Pre-requisite	CM 3310	Artificial Intelligence
CM 4360	Robotics	Pre-requisite	CM 3310	Artificial Intelligence
CM 4370	Machine Learning and Pattern Recognition	Pre-requisite	CM 2120	Calculus
CM 4380	Deep Learning Architectures	Pre-requisite	CM 4310	Artificial Neural Networks & Evolutionary Computing
CM 4390	Advanced Topics in Bioinformatics	Pre-requisite	CM 3330	Fundamentals of Bioinformatics

Module		Pre/Co-requisite	Pre-requisite Module/s	
IN 2100	Object Oriented Programming	Pre-requisite	IN 1100	Programming Fundamentals
IN 2400	Database Management Systems	Pre-requisite	IN 1400	Fundamentals of Databases and Database Design
IN 2600	Computer Graphics and Animation	Pre-requisite	IN 2100	Object Oriented Programming
		Pre-requisite	CM 2120	Calculus
IN 3100	Enterprise Applications Development	Pre-requisite	IN 1100	Programming Fundamentals
		Pre-requisite	IN 2100	Object Oriented Programming
IN 3400	Advanced Database Management Systems	Pre-requisite	IN 1400	Fundamentals of Databases and Database Design
		Pre-requisite	IN 2400	Database Management Systems
IN 3500	Computer Communications	Pre-requisite	IN 2500	Essentials of Computer Communication
IN 3600	Digital Video Production	Pre-requisite	IN 1600	Essentials of Multimedia and Web Technologies
IN 4100	Theory of Programming Languages	Pre-requisite	CM 3210	Automata Theory
IN 4400	Data Mining & Data Warehousing	Pre-requisite	IN 2400	Database Management Systems
IN 4410	Big Data Analytics	Pre-requisite	IN 2400	Database Management Systems
		Co-requisite	IN 4400	Data Mining & Data Warehousing
IN 4530	Multimedia Communications	Pre-requisite	IN 2500	Essentials of Computer Communication
IN 4600	Multimedia Systems	Pre-requisite	IN 1600	Essentials of Multimedia and Web Technologies

Module		Pre/Co-requisite	Pre-requisite Module/s	
IS 4010	Appreciation of Literary Works (Non GPA)	Pre-requisite	IS 2010 (Grade B or above)	Scientific Communication
IS 4610	Financial Engineering	Pre-requisite	IS 1210	Financial Accounting
		Pre-requisite	IS 2210	Management Accounting