

B.Sc. Honours (Fin. Math & Ind. Stat.) Degree: Programme Structure						
Semester	Course Code	Course Name	Credit Value	Status	Th/Pr	Total no of credits
1	MIS1112	Basic statistics in industry	2	C	Th	16
	MIS1122	Introduction to Probability and Distributions	2	C	Th	
	MFM1112	Computing for Finance 1	2	C	Pr	
	MSF1113	Calculus I	3	C	Th	
	MFM1122	Operational Research I	2	C	Th	
	MFM1132	Financial Management	2	C	Th	
	MSF1123	Programming Techniques	3	C	Th	
2	MIS1213	Mathematical Statistics	3	C	Th	17
	MIS1222	Statistical Computing (R and Python software)	2	C	Pr	
	MFM1213	Financial Mathematics I	3	C	Th	
	MFM1222	Introduction to Economics	2	C	Th	
	MSF1212	Numerical Analysis I	2	C	Th	
	MSF1222	Operational Research II	2	C	Th	
	MSF1233	File organization and DBMS	3	C	Th	
3	MIS2113	Inferential Statistics	3	C	Th	16
	MIS2122	Sampling Techniques and survey designs	2	C	Th	
	MSF2112	Calculus II	2	C	Th	
	MFM2112	Mathematical Economics	2	C	Th	
	MSF2122	Research Methodology	2	C	Th	
	MSF2132	Linear Algebra	2	C	Th	
	MFM2123	Financial Mathematics II	3	C	Th	
4	MIS2213	Regression Analysis	3	C	Th	17
	MIS2223	Survival Analysis	3	C	Th	
	MFM2213	Financial Mathematics III (Market Models and Risk Management in Discrete Time)	3	C	Th	
	MSF2212	Calculus III	2	C	Th	
	MFM2222	Computing for Finance II	2	C	Pr	
	MSF2223	Numerical Analysis II	3	C	Th	
	MIS2231	Case Study I	1	C	Pr	
5	MFM3113	Financial Time Series	3	C	Th	
	MIS3113	Design and Analysis of Experiment	3	C	Th	

	MFM3123	Life Insurance	3	C	Th	<b>19</b>
	MFM3133	Financial Mathematics IV (Market Models and Risk Management in Continuous Time)	3	C	Th	
	MFM3142	Operational Research III	2	C	Th	
	MIS3122	Non-Parametric Statistics	2	C	Th	
	MSF3112	Decision Theory	2	C	Th	
	MFM3151	Case Study II	1	C	Pr	
<b>6</b>	MIS3212	Bayesian Inference	2	C	Th	<b>15</b>
	MIS3222	Multivariate Data Analysis	2	C	Th	
	MFM3213	Non-Life Insurance	3	C	Th	
	MFM3222	Computing for Finance III	2	C	Pr	
	MFM3232*	Business Proposals and Report Writing	2	C(Elective)	Th	
	MSF3212	Fundamentals of Management	2	C	Th	
	MSF3222*	Scientific Writing and Communication	2	C(Elective)	Th	
	MIS3232	Stochastic Processes	2	C	Th	
<b>7</b>	MIS4212**	Statistical Quality Control	2	O	Th	<b>15</b>
	MSF4126	Research Project	6	C	Th	
	MIS4222	Reliability Theory	2	O	Th	
	MIS4232**	Categorical Data Analysis	2	O	Th	
	MFM4212**	Credibility	2	O	Th	
	MFM4222	Computing for Finance IV	2	C	Pr	
	MFM4232	Stochastic Processes in Finance	2	O	Th	
	MFM4242**	Measure-theoretic Probability with Applications in Finance	2	O	Th	
	MSF4212	Human Resource Management	2	O	Th	
	MIS4241	Statistical Consulting	1	C	Pr+Th	
	MFM4252	Introduction to Information Theory & Information Geometry with Applications to Finance	2	O	Th	
<b>8</b>	MSF4116	Industrial Training	6	C (Non GPA)		<b>06</b>

MFM3232\* and MSF3222\* are elective, but one of these options must be taken.

\*\* Offer as optional in 2024.

## Credit Summery

Semester	Credits
1	16
2	17
3	16
4	17
5	19
6	15
7	C-9 O-6
8	6 (ND)
Total Credits	109
Total optional	06
Total ND Credits	06
Total	<b>121</b>