

## **B.Sc. & B.Sc. (Hons) with** Major in Quantitative Finance

## **Graduation Requirements for students admitted in AY2020/2021**

To be awarded a **B.Sc.(Hons) with primary major in Quantitative Finance**, in addition to the University and Faculty requirements, a candidate must satisfy the following:

Module Level	Major Requirements	Level MCs	Cumulative Major MCs
1000	<ol> <li>Pass all the following modules:         <ul> <li>CS1010/CS1010E/CS1010S/CS1010X/CS1101S*</li> <li>Programming Methodology</li> <li>ACC1701 Accounting for Decision Makers</li> <li>MA1101R/MA2001 Linear Algebra I</li> <li>MA1102R/MA2002 Calculus</li> </ul> </li> </ol>	16	16
	*CS1101S (5MCs for AY2017/18; 4 MCs from AY2018/19) may be read as an alternative to CS1010% (4MCs) to facilitate relevant programmes, e.g. Double Degree Programme with School of Computing. Registration for this module is subject to host availability.		
2000	<ul> <li>2. Pass all the following modules:</li> <li>FIN2704 Finance</li> <li>MA2104 Multivariable Calculus</li> <li>MA2108/MA2108S Mathematical Analysis I</li> <li>MA2213 Numerical Analysis I or DSA2102 Essential Data Analytics Tools: Numerical Computation</li> <li>MA2116/MA2216/ST2131 Probability</li> </ul>	20-21	36-37
3000	<ol> <li>Pass all the following modules:         <ul> <li>QF3101 Investment Instruments: Theory and Computation</li> <li>MA3269/QF2104 Mathematical Finance I</li> <li>ST3131 Regression Analysis</li> </ul> </li> <li>Pass two modules from the following:         <ul> <li>MA3220 Ordinary Differential Equations</li> <li>MA3236 Nonlinear Programming</li> <li>MA3252 Linear and Network Optimisation</li> <li>MA3264 Mathematical Modelling</li> </ul> </li> </ol>	28	64-65



Module Level	Major Requirements	Level MCs	Cumulative Major MCs
	<ul> <li>5. Pass two modules from the following:</li> <li>FIN3701 Corporate Finance</li> </ul>		
	<ul> <li>FIN3703 Financial Markets</li> <li>FIN3713 Bank Management</li> <li>FIN3714 Financial Risk Management</li> </ul>		
4000	<ul> <li>6. Pass all the following modules: <ul> <li>QF4199 Honours Project in Quantitative Finance</li> <li>QF4102 Financial Modelling</li> <li>MA4269/QF4103 Mathematical Finance II</li> </ul> </li> <li>7. Pass three modules from the following: <ul> <li>QF5210 Financial Time Series: Theory and Computation</li> <li>QF4205 Time Series Analysis for Quantitative Finance*</li> <li>FIN4711 Research Methods in Finance</li> <li>FIN4761 Seminar in Finance</li> <li>MA4255 Numerical Partial Differential Equations</li> <li>MA4260 Stochastic Operations Research</li> <li>MA4264 Game Theory</li> <li>ST4233 Linear Models</li> <li>ST4245 Statistical Methods for Finance</li> <li>MA5248 Stochastic Analysis in Mathematical Finance</li> </ul> </li> </ul>	32	96-97

• Please note that QF4205 will only be offered from AY2023/2024 Semester 2 onwards

Modular Credit Cumulative Table						
Requirements	B.Sc.	B.Sc. (Hons)				
University Requirements	20 MC	20 MC				
Faculty Requirements	12 MC*	12 MC*				
Major Requirements	64-65 MC	96-97 MC				
Unrestricted Electives	23-24 MC	31-32 MC				
Total	120 MC	160 MC				

\*Up to 4 MCs of Faculty requirements of the total of 16 MCs required for the B.Sc. (Hons.) programme are fulfilled through the reading of MA/CS modules within the major.



Students of the B.Sc. and B.Sc. (Hons.) programmes are required to fulfil the remaining 12 MCs of Faculty requirements from any three (3) of the following subject groups: Chemical Sciences, Life Sciences, Physical Sciences and Multidisciplinary & Interdisciplinary Sciences, but not from the following subject groups: Computing Sciences and Mathematical & Statistical Sciences.

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