| Date                  | Time                                   | Title   | Туре       | Module | Faculty             |  |
|-----------------------|--|---|------------|--------|---------------------|--|
|                       |  | Building Blocks of Quantitative Finance             |            |        |                     |  |
| 25/01/2022            | 18:00 - 20:30 GMT                      | The Random Behavior of Assets                       | Lecture    | 1      | Dr Paul Wilmott     |  |
| 27/01/2022            | 18:00 - 20:30 GMT                      | Binomial Models                                     | Lecture    | 1      | Dr Paul Wilmott     |  |
| 01/02/2022            | 18:00 - 20:30 GMT                      | PDEs & Transition Density Functions                 | Lecture    | 1      | Dr Riaz Ahmad       |  |
| 03/02/2022            | 18:00 - 20:30 GMT                      | Applied Stochastic Calculus I                       | Lecture    | 1      | Dr Riaz Ahmad       |  |
| 07/02/2022            | 18:00 - 20:30 GMT                      | Applied Stochastic Calculus II                      | Lecture    | 1      | Dr Riaz Ahmad       |  |
| 09/02/2022            | 18:00 - 20:30 GMT<br>12:00 - 13:30 GMT | Martingales   | Lecture    | 1      | Dr Riaz Ahmad       |  |
| 10/02/2022            | 18:00 - 19:30 GMT                      | Further Probability Theory                          | Tutorial   | 1      | Dr Riaz Ahmad       |  |
| 14/02/2022            | 12:00 - 13:30 GMT<br>18:00 - 19:30 GMT | Introduction to Financial Time Series               | Python Lab | 1      | Kannan Singaravelu  |  |
|                       |  | Quantitative Risk & Return                          |            |        |                     |  |
| 15/02/2022            | 18:00 - 20:30 GMT                      | Portfolio Management                                | Lecture    | 2      | Dr Sebastien Lleo   |  |
| 17/02/2022            | 18:00 - 20:30 GMT<br>12:00 - 13:30 GMT | Fundamentals of Optimization                        | Lecture    | 2      | Dr Sebastien Lleo   |  |
| 21/02/2022            | 18:00 - 19:30 GMT                      | PDEs – Theory & Applications                        | Tutorial   | 2      | Dr Riaz Ahmad       |  |
| 22/02/2022            | 18:00 - 20:30 GMT                      | Value at Risk & Expected Shortfall                  | Lecture    | 2      | Stuart Jackaman     |  |
| 24/02/2022            | 18:00 - 20:30 GMT<br>12:00 - 13:30 GMT | Asset Returns: Key Empirical Stylized Facts         | Lecture    | 2      | Prof Stephen Taylor |  |
| 25/02/2022            | 18:00 - 19:30 GMT                      | Binomial Trees in Option Pricing                    | Python Lab | 2      | Kannan Singaravelu  |  |
| 01/03/2022            | 18:00 - 20:30 GMT                      | Volatility Models: The ARCH Framework               | Lecture    | 2      | Prof Stephen Taylor |  |
| 03/03/2022            | 18:00 - 20:30 GMT<br>12:00 - 13:30 GMT | Risk Regulation & Basel III                         | Lecture    | 2      | Dr Jon Gregory      |  |
| 04/03/2022            | 18:00 - 19:30 GMT                      | Portfolio Optimization                              | Python Lab | 2      | Kannan Singaravelu  |  |
| 08/03/2022            | 18:00 - 20:30 GMT<br>12:00 - 13:30 GMT | Collateral & Margins                                | Lecture    | 2      | Dr Jon Gregory      |  |
| 10/03/2022            | 18:00 - 19:30 GMT<br>12:00 - 13:30 GMT | Value at Risk & GARCH                               | Python Lab | 2      | Kannan Singaravelu  |  |
| 11/03/2022            |  | Statistical Essentials for VaR & ES                 | Tutorial   | 2      | Dr Richard Diamond  |  |
| Equities & Currencies |  |   |            |        |                     |  |
| 14/03/2022            | 18:00 - 20:30 GMT                      | Black Scholes Model                                 | Lecture    | 3      | Dr Riaz Ahmad       |  |
| 16/03/2022            | 18:00 - 20:30 GMT<br>12:00 - 13:30 GMT | Martingales Theory – Applications to Option Pricing | Lecture    | 3      | Dr Sebastien Lleo   |  |
| 17/03/2022            | 18:00 - 19:30 GMT                      | Black Scholes Option Pricing                        | Python Lab | 3      | Dr Riaz Ahmad       |  |
| 21/03/2022            | 18:00 - 20:30 GMT                      | Martingales & PDEs: Which, When & Why               | Lecture    | 3      | Dr Sebastien Lleo   |  |
| 23/03/2022            | 18:00 - 20:30 GMT                      | Intro to Numerical Methods                          | Lecture    | 3      | Dr Riaz Ahmad       |  |
| 24/03/2022            | 12:00 - 13:30 GMT<br>18:00 - 19:30 GMT | Monte Carlo Simulation                              | Python Lab | 3      | Dr Riaz Ahmad       |  |
| 28/03/2022            | 12:00 - 13:30 BST<br>18:00 - 19:30 BST | Finite Difference Methods                           | Python Lab | 3      | Dr Riaz Ahmad       |  |
| 29/03/2022            | 18:00 - 20:30 BST                      | Exotic Options                                      | Lecture    | 3      | Dr Riaz Ahmad       |  |
| 31/03/2022            | 18:00 - 20:30 BST                      | Understanding Volatility                            | Lecture    | 3      | Dr Richard Diamond  |  |

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|------------|---|---|--------------------|--------|--------------------------------------|
| 04/04/2022 | 18:00 - 20:30 BST   | Further Numerical Methods   | Lecture            | 3      | Dr Riaz Ahmad                        |
| 06/04/2022 | 12:00 - 13:30 BST<br>18:00 - 19:30 BST                      | Implied Volatility  | Python Lab         | 3      | Kannan Singaravelu                   |
| 07/04/2022 | 18:00 - 20:30 BST   | Derivatives Market Practice   | Lecture            | 3      | Dr Espen Huag                        |
| 08/04/2022 | 12:00 - 13:30 BST<br>18:00 - 19:30 BST                      | Further Numerical Methods in Monte Carlo & FDM  | Tutorial           | 3      | Dr Riaz Ahmad                        |
| 11/04/2022 | 18:00 - 20:30 BST   | Advanced Greeks   | Lecture            | 3      | Dr Espen Huag                        |
| 12/04/2022 | 18:00 - 20:30 EST   | Advanced Volatility Modeling in Complete Markets                                      | Lecture            | 3      | Dr Paul Wilmott                      |
| 14/04/2022 | 12:00 - 13:30 BST<br>18:00 - 19:30 BST                      | Should you Hedge with Implied Volatility?   | Tutorial           | 3      | Dr Richard Diamond                   |
|            |   | Data Science & Machine Learning I   |                    |        |                                      |
| 19/04/2022 | 18:00 - 20:30 EST   | An Introduction to Machine Learning I   | Lecture            | 4      | Dr Paul Wilmott                      |
| 21/04/2022 | 18:00 - 20:30 EST   | An Introduction to Machine Learning II  | Lecture            | 4      | Dr Paul Wilmott                      |
| 25/04/2022 | 18:00 - 20:30 BST   | Maths Toolbox for Machine Learning  | Lecture            | 4      | Dr Riaz Ahmad                        |
| 27/04/2022 | 18:00 - 20:30 BST   | Supervised Learning I   | Lecture            | 4      | Kannan Singaravelu                   |
| 29/04/2022 | 12:00 - 13:30 BST<br>18:00 - 19:30 BST                      | Introduction to Machine Learning using Scikit-learn                                   | Python Lab         | 4      | Kannan Singaravelu                   |
| 03/05/2022 | 18:00 - 20:30 BST   | Supervised Learning II  | Lecture            | 4      | Kannan Singaravelu                   |
| 05/05/2022 | 18:00 - 20:30 BST   | Decision Trees & Ensemble Models  | Lecture            | 4      | Dr Richard Diamond                   |
| 09/05/2022 | 18:00 - 20:30 BST<br>12:00 - 13:30 BST                      | Practical Machine Learning Case Studies for Finance                                   | Lecture            | 4      | Claus Huber                          |
| 11/05/2022 | 18:00 - 19:30 BST   | KNN & SVR for Stock Prediction  | Python Lab         | 4      | Kannan Singaravelu                   |
|            | l   | Data Science & Machine Learning II  |                    |        |                                      |
| 12/05/2022 | 18:00 - 20:30 BST   | Unsuppressed Learning L   | Lecture            | 5      | Claus Huber                          |
| 12/05/2022 | 12:00 - 20:30 BST   | Unsupervised Learning I   | Lecture            | 5      | Claus Huber                          |
| 16/05/2022 | 18:00 - 19:30 BST   | Gradient Boosting for Price Prediction  | Python Lab         | 5      | Kannan Singaravelu                   |
| 18/05/2022 | 18:00 - 20:30 BST   | Unsupervised Learning II  | Lecture            | 5      | Claus Huber                          |
| 19/05/2022 | 12:00 - 13:30 BST<br>18:00 - 19:30 BST                      | Data Source & Market Prediction   | Tutorial           | 5      | Dr Richard Diamond                   |
| 23/05/2022 | 18:00 - 20:30 BST   | Deep Learning & Neural Networks   | Lecture            | 5      | Kannan Singaravelu                   |
| 25/05/2022 | 12:00 - 13:30 BST<br>18:00 - 19:30 BST                      | K-Means Clustering & Self Optimization Maps   | Python Lab         | 5      | Kannan Singaravelu                   |
| 26/05/2022 | 18:00 - 20:30 BST<br>12:00 - 13:30 BST                      | Natural Language Processing   | Lecture            | 5      | Dr Miquel Noguer Alonso              |
| 30/05/2022 | 18:00 - 19:30 BST   | Application of Neural Networks using TensorFlow & Keras                               | Python Lab         | 5      | Kannan Singaravelu                   |
| 31/05/2022 | 18:00 - 20:30 BST   | Reinforcement Learning I  | Lecture            | 5      | Dr Steve Phelps                      |
| 01/06/2022 | 18:00 - 20:30 BST   | Reinforcement Learning II   | Lecture            | 5      | Dr Steve Phelps                      |
| 06/06/2022 | 18:00 - 20:30 BST   | Quantum Computing   | Lecture            | 5      | Dr Alonso Pena                       |
|            |   |   | 1                  |        |                                      |
| 07/06/2022 | 18:00 - 20:30 BST   | Practical Machine Learning Case Studies for Finance                                   | Lecture            | 5      | Thijs van den Berg                   |
|            | 18:00 - 20:30 BST<br>18:00 - 20:30 BST<br>12:00 - 13:30 BST | Practical Machine Learning Case Studies for Finance  Al Based Algo Trading Strategies | Lecture<br>Lecture | 5<br>5 | Thijs van den Berg  Dr Yves Hilpisch |

|                           |  | Fixed Income & Credit                    |            |   |                     |
|---------------------------|--|--|------------|---|---------------------|
|                           |  |  |            |   |                     |
| 14/06/2022                | 18:00 - 20:30 BST                      | Fixed Income Products & Analysis         | Lecture    | 6 | Stuart Jackaman     |
| 45 /06 /2022              | 40.00 20.20 BCT                        | Charlestic Interest Date Mandalina       | Lastona    |   | Du Bian Alamand     |
| 15/06/2022                | 18:00 - 20:30 BST                      | Stochastic Interest Rate Modeling        | Lecture    | 6 | Dr Riaz Ahmad       |
| 17/06/2022                | 18:00 - 20:30 BST                      | Calibration & Data Analysis              | Lecture    | 6 | Dr Riaz Ahmad       |
| 27,00,2022                | 20.00 20.00 20.                        |  | 20000.0    |   | J. 11102 7 1111100  |
| 20/06/2022                | 18:00 - 20:30 BST                      | Probabilistic Methods for Interest Rates | Lecture    | 6 | Dr Marc Henrard     |
|                           |  |  |            |   |                     |
| 22/06/2022                | 18:00 - 20:30 BST                      | Heath Jarrow & Morton Model              | Lecture    | 6 | Dr Richard Diamond  |
|                           |  |  |            | _ |                     |
| 23/06/2022                | 18:00 - 20:30 BST                      | Libor Market Model                       | Lecture    | 6 | Dr Peter Jaeckel    |
| 27/06/2022                | 12:00 - 13:30 BST<br>18:00 - 19:30 BST | Yield Curve Data Analysis                | Duthon Lah | 6 | Dr Richard Diamond  |
| 27/06/2022                | 16.00 - 19.30 631                      | Field Curve Data Allalysis               | Python Lab | 0 | DI KICHATU DIAIHOHU |
| 28/06/2022                | 18:00 - 20:30 BST                      | Further Monte Carlo                      | Lecture    | 6 | Dr Peter Jaeckel    |
| 20,00,2022                | 20.00 20.00 20.                        | Taraner monte earre                      | 20000.0    | Ū | D. F. CCC. SUCCINC. |
| 30/06/2022                | 18:00 - 20:30 BST                      | Cointegration for Trading                | Lecture    | 6 | Dr Richard Diamond  |
|                           |  |  |            |   |                     |
| 02/07/2022                | 13:00 - 15:30 BST                      | Final Project Workshop I                 | Workshop   | 6 | Dr Richard Diamond  |
|                           |  |  |            | _ | _                   |
| 04/07/2022                | 18:00 - 20:30 BST                      | Credit Default Swaps                     | Lecture    | 6 | Dr Jon Gregory      |
| 06/07/2022                | 10.00 20.20 BCT                        | Cradit Dariyatiyas & Structural Madals   | Locturo    | 6 | Dr. Ion Crogony     |
| 06/07/2022                | 18:00 - 20:30 BST                      | Credit Derivatives & Structural Models   | Lecture    | 0 | Dr Jon Gregory      |
| 07/07/2022                | 18:00 - 20:30 BST                      | Intensity Models                         | Lecture    | 6 | Dr Siyi Zhou        |
| 0.70.72022                |  |  |            |   |                     |
| 09/07/2022                | 13:00 - 15:30 BST                      | Final Project Workshop II                | Workshop   | 6 | Dr Richard Diamond  |
|                           | 12:00 - 13:30 BST                      |  |            |   |                     |
| 11/07/2022                | 18:00 - 19:30 BST                      | Yield Curve Construction                 | Tutorial   | 6 | Dr Richard Diamond  |
| / /                       |  |  |            |   |                     |
| 12/07/2022                | 18:00 - 20:30 BST                      | CDO & Correlation Sensitivity            | Lecture    | 6 | Dr Siyi Zhou        |
| 14/07/2022                | 18:00 - 20:30 BST                      | X Valuation Adjustment                   | Lecture    | 6 | Dr Jon Gregory      |
| 14/07/2022                | 12:00 - 13:30 BST                      | A valuation Aujustinent                  | Lecture    | 0 | Di Joli Gregory     |
| 15/07/2022                | 18:00 - 19:30 BST                      | Intensity Models                         | Python Lab | 6 | Dr Richard Diamond  |
| , , , , , , , , , , , , , | 12:00 - 13:30 BST                      | ,  | /          | - |                     |
| 18/07/2022                | 18:00 - 19:30 BST                      | CDS Pricing                              | Python Lab | 6 | Dr Richard Diamond  |
|                           | 12:00 - 13:30 BST                      |  |            |   |                     |
| 20/07/2022                | 18:00 - 19:30 BST                      | Final Project Tutorial I                 | Tutorial   | 6 | Dr Richard Diamond  |
| 00/0=/                    | 12:00 - 13:30 BST                      |  |            | _ |                     |
| 22/07/2022                | 18:00 - 19:30 BST<br>12:00 - 13:30 BST | Final Project Tutorial II                | Tutorial   | 6 | Dr Richard Diamond  |
| 25/07/2022                | 18:00 - 19:30 BST                      | Final Project Tutorial III               | Tutorial   | 6 | Kannan Singaravelu  |
| 23/01/2022                | 10.00 15.50 051                        | Timar Froject Tatoriai III               | Tutoriai   | U | Kaiman Singaravelu  |