

Summer School in Mathematical Economics & Financial Econometrics

Time: 08th – 26th June, 2020

Venue: University of Nottingham Ningbo China

Opening

9:00 – 9:30am, Monday 08th

Registration & Welcoming Session

Week 1

Monday 08		Tuesday 09	Wednesday 10	Thursday 11	Friday 12
9-11	9:30-11 Probability I (CQ)	Econometrics I: Hypothesis testing (ZL)	Econometrics II: Simple Regression (ZL)	Econometrics III: Multiple Regression (ZL)	Optimization I (SMD)
11-12	Consultation Hour				
14-16	Probability II (CQ)	Calculus I (SMD)	Calculus II (SMD)	Calculus III (SMD)	Optimization II (SMD)
16-17	Consultation Hour				

Week 2

Monday 15		Tuesday 16	Wednesday 17	Thursday 18	Friday 19
9-11	Probability III (CQ)	Linear Algebra I (XQ)	Fundamentals of Time Series (ES)	Non-Stationary Time Series I: Fundamentals & Analysis (ES)	Non-Stationary Time Series II: Techniques & Applications (ES)
11-12	Consultation Hour				
14-16	Estimating Production Functions (SA)	Endogeneity and Instrumental Variables (SA)	Linear Algebra II (XQ)	Linear Algebra III (XQ)	Arbitrage Theory with Application to Option Pricing I (SM)
16-17	Consultation Hour				

Week 3

	Monday 22	Tuesday 23	Wednesday 24	Thursday 25	Friday 26
9-11	Introduction to VBA (WL)	Understanding Financial Market Data (CW)	Risk management I (WL)	Risk management II (WL)	Probability IV (CQ)
11-12	Consultation Hour				
14-16	Arbitrage Theory with Application to Option Pricing II (SM)	Modern Portfolio Theory and Applications (CW)	Exam* (14:30-16:00)	Using R for Financial Econometrics (CW)	Axiomatic Methods in Economics (CQ)
16-17	Consultation Hour				

***Examination:**

Length: 90 minutes

Format: answer three questions out of four. Calculators allowed.

Prerequisites: (1) Basic knowledge of calculus and linear algebra (e.g., Knut Sydsæter, Peter Hammond, Arne Strøm and Andrés Carvajal (2016), *Essential Mathematics for Economic Analysis*, Pearson Education); (2) Basic knowledge of introductory level of econometrics/statistics.

Teachers:

Prof. Simon Appleton (SA), School of Economics, UNNC

Prof. Weimin Liu (WL), Business School, UNNC

Dr Chen Qu (CQ), School of Economics, UNNC

Dr Chaoyan Wang (CW), School of Economics, UNNC

Dr Eric Scheffel (ES), School of Economics, UNNC

Dr Sinchan Mitra (SM), School of Economics, UNNC

Dr Stuart McDonald (SMD), School of Economics, UNNC

Dr Xuewen Qian (XQ), School of Economics, UNNC

Dr Zhenjiang Lin (ZL), School of Economics, UNNC