Course title: Real Analysis and Optimisation			
Course code: MPE 117	No. of credits: 4	L-T-P: 48-12-0	Learning hours: 60
Pre-requisite course code and title:			
Department: Department of Policy and Management Studies			
Course coordinator: Dr. Shantanu De Roy		Course instructor: Guest Faculty	
Contact details:			
Course type: Core		Course offered in: 1st semester	
Course description: This is an introductory course on the fundamentals of mathematics that is heavily used in certain disciplines of economics – microeconomics, macroeconomics, etc. The course is broadly divided into two parts: one is real analysis and the other is optimisation. The course covers sequences, limits, continuity, differentiability, convex analysis, unconstrained optimisation, optimisation with equality and inequality constraints.			
Course objective: 1. To develop the core concepts of mathematics that are used in economics. 2. To develop mathematical sophistication and proof writing. 3. To build analytical and technical skills by rigorous analysis. 4. To apply these techniques and skills in economic applications.			