

Course title: Linear Algebra and Dynamic Optimisation			
Course code: MPE 114	No. of credits: 4	L-T-P: 51-9-0	Learning hours: 60
Pre-requisite course code and title: MPE 117; Real Analysis and Optimization			
Department: Department of Policy and Management Studies			
Course coordinator: Dr Malvika Tyagi		Course instructor: Dr Malvika Tyagi	
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Course type: Core		Course offered in: Semester 2	
Course description: This course develops fundamentals of certain areas of mathematics that are relevant to growth economics, game theory, resource economics, and econometrics. The course covers vector spaces, linear transformations, inner product spaces, spectral theory, difference and differential equations, dynamicoptimisation in discrete and continuous time.			
Course objective:			
<ol style="list-style-type: none"> 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. 			