



ST ALOYSIUS COLLEGE (AUTONOMOUS)

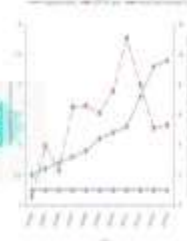
Mangaluru, Karnataka - 575003
www.staloyusius.edu.in



DEPARTMENT OF ECONOMICS

OFFERS

MATHEMATICS FOR ECONOMICS



AN ONLINE CERTIFICATE COURSE

COURSE HIGHLIGHTS:

- 30 Hours
- Quiz and Assignments
- E-Certificate on successful completion of the course

WHO CAN APPLY?

- Students
- Academicians
- General Public

HURRY UP!!
LIMITED SEATS

Course Fee
Rs 500/-

TO REGISTER LOGIN TO
www.sac-elearning.com

STARTS ON
18/10/2021

Mr Reji John 8553357577
Mr Alwyn Misquith 9538189529

Rev. Dr Praveen Martis SJ Principal	Dr Norbert Lobo Director, Admin Block	Dr Priya S. Shetty HOD
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Certificate Course On

MATHEMATICS FOR ECONOMICS

Course Duration : 30 Hours

MODULE I: INTRODUCTION TO MATHEMATICAL ECONOMICS - (6 HOURS)

Introduction to Mathematical Economics- Advantages and Disadvantages of Mathematical Economics – Variables- Constants – Parameters – Functions –Equations - Mathematical Model

MODULE II: LINEAR AND NON-LINEAR EQUATIONS AND THEIR APPLICATIONS IN ECONOMICS - (12 HOURS)

Linear Functions - Two –Point Formula – Simultaneous Equations Formula - Demand Function – Supply Function – Market Equilibrium – Taxation – Subsidy – Break-even Analysis - National Income Determination - Elasticity of Demand. Quadratic Function - Simple Market Equilibrium - Production Possibility Curves - Power Function – Pareto’s Distribution of Income- General Market Equilibrium.

MODULE III: DIFFERENTIAL AND INTEGRAL CALCULUS AND THEIR APPLICATION IN ECONOMIC ANALYSIS – (12 HOURS)

Maxima and Minima – Application of Derivatives in Economics – Cost – Average and Marginal Cost Relationship – Revenue – Average and Marginal Relationship –Equilibrium of the Firm under perfect competition, monopoly, price discrimination. Integral Calculus – Indefinite and Definite Integration – Application to Economics – Cost Analysis -Revenue Analysis – National Income Analysis – Consumers Surplus – Producers Surplus.

Course Outcomes

- Use mathematical techniques to analyse economic problems.
- Model economic questions in mathematical framework.
- Evaluate range of problems using mathematical techniques.
- Acquire mathematical skills used in economic analysis.

MODULE I: INTRODUCTION TO MATHEMATICA(6 HOURS)

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1.	Introduction to Mathematical Economics
2.	Advantages of Mathematical Economics
3.	Disadvantages of Mathematical Economics
4.	Variables – Meaning and Types
5.	Constants – Meaning and Types
6.	Parameters- Meaning and Types
7.	Functions – Meaning and Types
8.	Graphical Representation