



# **St. Xavier's College – Autonomous Mumbai**

## **Syllabus for 10<sup>th</sup> Semester Core Courses in**

### **Economics**

### **(June 2022 onwards)**

Contents:

Theory Syllabus for Courses:

AECO1001 Strategic Implementation in Urban Development

AECO1002 Strategic Implementation in Rural Development

AECO1003 Economics of Infrastructure

AECO1004 Energy Economics

AECO1005 Environmental Economics

AECO1006 Economics of Housing

**MA**

**Course: AECO1001**

**Title: Strategic Implementation in Urban Development**

**Learning Objectives:**

1. To understand the planning of new cities and revitalizing existing cities
2. To understand the modelling of policy intervention for urban poor
3. To understand the importance of building resilience

**Number of Lectures: 45**

**UNIT I: Planning New Cities and Revitalizing Existing Cities [15 lectures]**

1. Understanding Topography
2. Access to natural resources and basic amenities
3. Location or Theme-based city pattern
4. Planning industries and commercial zones
5. Urban Agglomeration
6. Expansion of Cities: Core and Periphery
7. Building new infrastructure: New initiatives and up-gradation

**UNIT II: Policy Intervention for Urban Poor [15 lectures]**

1. Modelling an ideal city design
2. Access to basic amenities
3. FSI and Congestion

**UNIT III: Building Resilience [15 lectures]**

1. Natural Calamities
2. Epidemics
3. Disasters
4. Financial Breakdowns

**Basic Reference Books:**

1. Cities of Tomorrow: An Intellectual History of Urban Planning and Design in the Twentieth Century by Peter Geoffrey Hall (1996 Updated Edition)
2. Design With Nature by Ian L. McHarg (1995)
3. The City in History: Its Origins, Its Transformations, and Its Prospects by Lewis Mumford (1972)
4. Local Planning: Contemporary Principles and Practice Edited by Gary Hack, et al. (2009)
5. The Urban Villagers by Herbert J. Gans (1962, updated 1982)

**Learning Objectives:**

1. To understand the importance of strategic implementation in rural development
2. To understand the significance of building human capital
3. To understand the significance of geographic indication and economic planning

**Number of Lectures: 45**

**UNIT I: Funding and Finance [15 lectures]**

1. Budget allocation by the government
2. Disbursement of funds at state, district and village level
3. Implementation and Execution of projects and funds
4. Other financing agents: Banks, CSR, Microfinance, NGOs, etc.

**UNIT II: Building Human Capital [15 lectures]**

1. Human capabilities building
2. Education and skill based training
3. Health and Hygiene
4. Widening socio-cultural paradigms through exposure programs

**UNIT III: Geographic Identification and Economic Planning [15 lectures]**

1. GIS Tagging and agricultural capacities
2. Cropping patterns and Agricultural planning
3. Opportunities for economic activities: Horticulture, Pisciculture, Poultry farming

**Basic Reference Books:**

1. Strategies for Rural Development: Planning and Performance by S Kanchana Ratnam, Hardcover Publication, 2000
2. Rural Development: Principles, Policies and Management, Katar Singh, Sage Publication
3. Rural Development in India, K R Gupta, Hardcover
4. Strategies for Sustainable Development S P Sinha, Surat Singh
5. Communication for rural development Sourcebook, FAO

**MA**

**Course: AECO1003**

**Title: Economics of Infrastructure**

**Learning Objectives:**

1. To understand the fundamentals of economics of infrastructure
2. To learn the significance of governance and regulation of infrastructure

3. To understand the importance of finance and funding

**Number of Lectures: 45**

**UNIT I: Understanding Infrastructure [15 lectures]**

1. Definition & Types (Economic and Social infrastructure)
2. Significance of transport viz. Road, Water and Airways modes &
3. Telecommunication and digital infrastructure

**UNIT II: Governance and Regulation of Infrastructure [15 lectures]**

1. Understanding the functioning of various Governing bodies & authorities
2. MMRD, MSRDC, METRO, Ministry of Surface Transport, Inland Waterways Authority of India (IWAI), Airport Authority of India, Mumbai Metro Railway Corporation Limited etc.
3. Permission & approval procedure and legalities

**UNIT III: Finance and Funding [15 lectures]**

1. Project finance,
2. Risk analysis & Capital budgeting
3. Financial sustainability of project

**Basic Reference Books:**

1. Economics of Infrastructure: Growth and Development, L. N. Dash, Regal Publications, 2007
2. Industry and Infrastructure Development in India Since 1947 Anup Chatterjee, K. Narindar Jetli, New Century Publications, 2009 Road Infrastructure: Issues and Implications, Vivek Date, ICFAI University Press, 2012
3. Port Infrastructure and Economic Development, Pradeepta Kumar Samanta, Ashok Kumar Mohanty, Kalpaz Publ., 2005
4. Infrastructure Development in India: Post-liberalisation Initiatives and Challenges, K. Narindar Jetli, Vishal Sethi, New Century Publications, 2007

**MA**

**Course: AECO1004**

**Title: Energy Economics**

**Learning Objectives:**

1. To understand the fundamentals of energy economics
2. To learn the basics of energy analytics
3. To understand the practical challenges and solutions

**Number of Lectures: 45**

**UNIT I: Introduction to Energy Economics [15 lectures]**

1. Meaning and Importance of Energy Economics
2. Types of Energy resources and energy commodities
3. Energy Statistics, Energy Flows
4. Accounting to Energy Balances

**UNIT II: Economic Fundamentals applied to Energy Sector [15 lectures]**

1. Energy Demand Analysis, Elasticities Approach, and Determinants of the Demand for energy.
2. Economics of Energy Supply
3. Trend and patterns of energy production;
4. Energy and Economic Development
5. Economic and Environmental Effects of Energy Production

**UNIT III: Energy Analytics [15 lectures]**

1. Forecasting prices, arbitrage, speculation of Energy Sources
2. Production Cost versus Return of Investment; Empirical Determination of Breakeven (economic) Price Determination of Optimum Level of Output and attainment of Equilibrium Level of Price of Energy Sources.
3. Empirical Estimation of Economic Growth and Energy Consumption;
4. Empirical Demand Projection for Energy Sources Regression Technique

**Basic Reference Books:**

1. Bhattacharya, Subhes C. (2011). Energy economics: concepts, issues, markets and governance. Springer  
Energy Economics - Theory and Applications, Zweifel, Peter, Praktijnjo, Aaron, Erdmann, Georg, Springer
2. Energy Economics and Policy, 2nd Edition, James M. Griffin Henry B. Steele
3. Energy Economics: Markets, History and Policy 1st Edition, Kindle Edition by Roy L. Nersesian

4. The Energy System: Technology, Economics, Markets, and Policy (The MIT Press)

**MA**

**Course: AECO1005**

**Title: Environmental Economics**

**Learning Objectives:**

1. To understand the fundamental concepts of environment economics
2. To understand the importance of pollution control
3. To learn Environment Valuation & sustainable development

**Number of Lectures: 45**

**UNIT I: Fundamental concepts in Environment Economics [15 lectures]**

1. Environment-economy Relationship
2. Laws of Thermodynamics and Material Balance Model
3. Environmental Kuznets Curve (EKC): Concepts and Genesis. Explanations of inverted-U shaped EKC-empirical evidence- N-shaped EKC
4. Environmental Pollution as a Negative Externality (Pigou),
5. Issue of Property Rights (Coase),
6. Optimal Pollution

**UNIT II: Pollution Control: Command and Control and Alternative Market Based Instruments [15 lectures]**

1. Command and Control measures; Pigouvian taxes and subsidies
2. Marketable pollution permits and mixed instruments (the charges and fees)
3. Tradable pollution permits and international carbon tax
4. Coase's bargaining solution and collective action
5. Hybrid Instruments- two-part tariff, double dividend hypothesis, illicit dumping

**UNIT III: Environmental Valuation and Sustainable Development and Environment**

**Accounting [15 lectures]**

1. Basic issues of environmental valuation,
2. Revealed Preference Approach- household production function, travel cost, Hedonic price
3. Stated Preference Approach-contingent valuation method
4. Concept of sustainable development-sustainable development rules and indicators
5. Measures of sustainable development
6. Sustainable accounting-economics of green accounting
7. Sustainable resource management, Green Economy

**Basic Reference Books:**

1. Pearce,D.W. and Turner,R.K. (1991) : Economics of Natural Resources and the Environment, Hemel Hempstead, Harvester-Wheatsheaf.
2. Baumol, W.J. and Oates W.E. (1988): Theory of Environmental Policy, 2nd Edition, Cambridge University Press.
3. Bhattacharyya, R.N. (2001): Environmental Economics: Indian Perspective, Oxford University Press.
4. Hanley,N., Shrogen J.F. and White B. (1997) : Environmental Economics in Theory and Practice,Macmillan.



5. Perman R., Ma Y., McGilvary, J and Common, M (1999): Natural Resources and Environmental Economics, 2nd Edition, Prentice Hall.
6. Freeman III, A.M. (1999): The Measurement of Environmental and Resource Values: Theory and Methods, Resources for the Future, Washington D.C.
7. Kolstad, C.D. (2000): Environmental Economics, Oxford University Press. Bromley, D.W. (1995): Handbook of Environmental Economics

**MA**

**Course: AECO1006**

**Title: Economics of Housing**

**Learning Objectives:**

1. To understand the key concepts and factors influencing housing
2. To understand trajectory of housing from welfare to financialized asset
3. To understand the housing policies in India and issues

**Number of Lectures: 45**

**UNIT I: Key Concepts and Factors influencing Housing [15 lectures]**

1. Housing vs House
2. Home
3. Real estate
4. Property
5. Land
6. Construction and technology
7. Finance
8. Laws
9. Planning
10. Demand side factors
11. Indicators for understanding housing situation

**UNIT II: Trajectory of Housing from Welfare to financialized asset [15 lectures]**

1. Non -commodified housing practices
2. Artisanal Housing and self –provisioning in rural societies
3. Housing conditions in industrialization
4. Public Housing in Vienna
5. Public Housing in US and other states
6. Public Housing in Singapore
7. Mia Casa Mia Vida in Brazil
8. Housing and financialization

**UNIT III: Housing Policies in India and Issues and debates in Housing [15 lectures]**

1. Phase of social housing
2. Phase of public housing
3. Phase of market linked provision
4. Case of ULCRA
5. Rental housing
6. SRA in Mumbai
7. Land titles in Odisha
8. Housing as a public good
9. Role of government wrt housing
10. Housing as a human right
11. Housing and quality of life
12. Alternate models of housing

**Basic Reference Books:**

1. Deka Abhay et al (2016): Rural housing in India

2. Soumik Lall et al (2009): Urban Land Markets: Improving Urban Land Management
3. World Bank (1993): Making Land Markets work
4. IDFC Institute (2018): Making Housing Affordable: A supply side reform for India
5. Arimah, Ben (2000): Housing Sector performance across countries.