The following courses are relevant to environment and sustainability and professional ethics:

Sr. No.	Course Code	Course Title
1.	105	Information Technology for Managers
2.	411	Natural Resources and Environmental Finance

### **105: INFORMATION TECHNOLOGY FOR MANAGERS**

### Objective

The course aims at introducing the key concepts relating to information technology and developing understanding of these concepts so that business manager is able to identify opportunities for application of information technology in the managerial process. The course also focuses on effective deployment of IT resources and emerging managerial issues including the alternative strategies that could be used in order to optimize the use of IT infrastructure.

## **Course Outline**

### Information Technology in Managerial Decision Making

Changing role of IT in business organisations, Information Needs of Business Manager: Requirements Definition, Information systems: Concept, context and components, Information Management, quality of information, Information Systems and IT Infrastructure, Cloud Computing and Services

### **Types of Information Systems**

Information Systems and Need-Resource Matching, Decision Support, Executive Support and expert Systems, Functional Systems, Manufacturing and Production system, Sales and Marketing Systems, Accounting, Finance, and Compliance Systems, Human Resources Systems, Evaluating software sourcing options and strategic issues in outsourcing software services, quality issues in software

### **Information and Business Intelligence**

Databases and Information Management, Alternative Approaches to Managing Data, Sources of Financial Data, Data Types and Strategies for Organising Data, Managing Data using DBMS, Database components and models, Managerial issues in design and development of databases.

### **Internet and E-Business**

Internet as a component of IT Infrastructure, Business & E-Commerce Models and Strategies, E-Business Challenges and Strategies, Business to Consumer (B2C) E-Commerce, Business to Business (B2B) E-Commerce & E-Procurement, E-Government and Public Sector IT, E-Commerce Support Services & Digital Marketing Communications, E-business & financial services

### Enterprise Systems

Concept and Features enterprise systems of ERPs, components of ERP systems, critical success factors and managerial issues in implementations of ERP Systems

# **Information System Security and Ethics**

IT Security and Business Continuity, Cybercrimes, Criminals, and Motivations, IT Vulnerabilities and Threats, Information Assurance and Risk Management, Network Security, Internal Control and Compliance, Business Continuity and Auditing, Alternative strategies for management of security risks, IT security standards and legal aspects of IT security, Ethical Issues in IT, Ethics Policy for IT infrastructure and responsible conduct, Industry practices.

# Suggested Readings

- Efraim Turban, Linda Volonino, Information Technology For Management: Transforming Organizations In The Digital Economy, Wiley, 7th Edition 2010
- Applegate LM, Austin DA and McFarlan FW, Corporate Information: Strategy and Management, McGraw-Hill, Latest Edition
- Ken Laudon, Jane Laudon, Management Information Systems, McGraw-Hill 12th Edition 2011
- Turban E, Volonino L, and Wood G Information Technology for Management: Advancing Sustainable, Profitable Business Growth, 10th Edition 2015

(The list of cases and specific references including recent articles will be announced in class.)

# 411: NATURAL RESOURCES AND ENVIRONMENTAL FINANCE

## Objective

The object is to familiarize students with the natural resource environment and understand the role of environment and biodiversity conservation for sustainable economic development. The course shall also focus on economic regulation valuation approaches and sustainable financing objectives.

## **Course Outline**

## **Natural Resource Economics**

Types of Natural Resources and their characteristics; Resource optimization and sustainable development.

## **Biodiversity and Natural Resources**

Biodiversity and ecosystem linkages; Biodiversity conservation- trends, policy and regulatory framework.

## Natural Resource Valuation

Determinants of Economic Valuation, Alternative valuation approaches; estimating Cost and Benefits; Existence Value and Altruistic Model

# **Financing Conservation of Natural Resources**

Alternative financing tools and instruments. Role of financial markets; Carbon Trading

# International Initiatives, Convention and Treaties

## **Suggested Readings**

- Hanley, N., J.F. Shogren and B. White, Environmental Economics in Theory and Practice, Oxford: Oxford University Press, Latest Edition
- P. Neher, Natural Resource Economics Conservation and Exploitation, Cambridge, Cambridge University Press, Latest Edition
- Bateman, Ian J. et al.: Economic Valuation with Stated Preference Techniques: A Manual, Edward Elgar, Latest Edition
- Pearce, D., Atkinson, G. and Mourato S.: Cost-benefit analysis and the environment: Recent developments, OECD, Latest Edition
- Freeman, A. M.: The Measurement of Environmental and Resource Values, 2nd Edition, Resources for the Future, Latest Edition
- Parker, C., and Cranford, M., The Little Biodiversity Finance Book. A guide to proactive investment in natural capital, Global Canopy Program, Oxford., Latest Edition
- Convention on Biological Diversity (CBD) of United Nations Conference on Environment and Development (UNCED) of 1992
- World Bank Report on Diagnostic Assessment of Select Environmental Challenges for India, 2013

(The list of cases and specific references including recent articles will be announced in the class.)