

**HUMANITIES AND SOCIAL SCIENCES INCLUDING  
MANAGEMENT ELECTIVE COURSES**

<b>HSMEC 701</b>	<b>Industrial Economics &amp; Foreign Trade [5]</b>	<b>2L:0T:0P</b>	<b>2 credits</b>
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**Course Outcome:**

At the end of this course, students will demonstrate the ability to

- The subject will provide the knowledge of economics, finance and accountancy for the better decision making of the economic alternatives and investment alternatives in the field of engineering and anywhere else.
- The students will be able to understand the principles of economics and International Trade.

**Module 1: Demand Analysis and Forecasting:** Cardinal Ordinal Approaches. Demand and Supply, Elasticities, Forecasting techniques, Consumer behavior.

**Module 2: Production, Cost, and Market structure:** Variable proportions, Returns to Scale, Isoquants Analysis, Production Function, Cost Curves, Cost Function, Market Analysis and game theory.

**Module 3: Types, Location, Efficiency and Finance:** Mergers & Amalgamations, Location of Industries and Theories, Productivity and Capacity Utilization, Shares, Debentures, Bonds, Deposits, Loan etc., FDI, Foreign Institutional Investment, Euro Issues, GDR, ADR, External Commercial Borrowings.

**Module 4: Introduction to Foreign Trade:** Features of International Trade, Inter-regional and international Trade, Problems of International Trade. Theories:

**Module 5: Terms of Trade-** Concept, Measurement, Types, Factors affecting Terms of Trade, Exchange rate.

**Module 6: Free Trade, Protection and Tariffs, Balance of Payments:** Free Trade, Protection-Quotas, Dumping, etc., Balance of Trade and Balance of Payments.

**Module 7: Regional Economic Groupings and International Institutions:** BRICS, EU, SAARC, OPEC, ASEAN. International Institutions: GATT, WTO, UNCTAD, IBRD, IMF.

**Text / References:**

1. Chauhan,S.P.S., 'Micro Economics, An Advanced Treaties', PHI, 2009.
2. Jhingan,M.L, 'International Economics', Vrinda Publications, 2009.
3. Francis Charunilam, 'International Economics', Mc-Graw Hill, 5th Edition. 2008.
4. Paul, R. Krugman, 'International Economics', Pearson, 2013.
5. Kenneth D. George, 'Industrial Organization', Routledge, 2009.

<b>HSMEC 702</b>	<b>Engineering Economics &amp; Accountancy</b> [5]	<b>2L:0T:0P</b>	<b>2 credits</b>
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**Course Outcome:**

At the end of this course, students will demonstrate the ability to

- The subject will provide the knowledge of economics, finance and accountancy for the better decision making of the economic alternatives and investment alternatives in the field of engineering and anywhere else.

**Module I: Engineering Economics**

Introduction to Engineering Economics – Fundamental concepts-Time value of money – Cash flow and Time Diagrams – Choosing between alternative investment proposals.

**(6 hours)**

**Module II: Capital Budgeting**

Methods of Economic analysis (Pay back, ARR, NPV, IRR and B/C ratio). Depreciation and methods of calculating depreciation (Straight line, Sum of the years digit method, Declining Balance Method, Annuity Method, Sinking Fund method.)

**(7 hours)**

**Module III: Indian economy and Economic Development**

National Income Accounting – Methods of Estimation – Various Concepts of National Income – Significance of National Income Estimation and its limitations. Inflation: Definition- Measures to Control (Monetary and Fiscal policy). New Economic Policy 1991 Breakeven Analysis – Meaning and its application, Limitation.

**(8 hours)**

**Module IV: Financial Accounting:**

Accounting Principles, procedure-Double entry system – Journal, ledger, Trial balance – Cash Book – Preparation of Trading and Profit and Loss account – Balance Sheet. Cost Accounting - Introduction- Classification of costs – Methods of Costing-Techniques of Costing. E-commerce: Importance and Need.

**(8 hours)**

**Module V: Managerial Economics**

Scope of Managerial Economics: Theory of Demand and Theory of Supply. Law of demand and Law of Supply. Techniques of Managerial Economics; Theory of firm, Theory of Market Structure. Applications of Managerial Economics.

**(7 hours)**

**Text / References:**

- Henry Malcom Steiner, 'Engineering Economics Principles', McGraw Hill Publications.
- Dewett K.K., 'Modern Economic Theory', Sultan Chand & Co.
- Agrawal AN, 'Indian Economy', Wiley Estern Ltd, New Delhi
- Jain and Narang, 'Accounting Part-1', Kalyani Publisher
- Kumar P., 'Fundamentals of Engineering Economics', Wiley India Pvt. Ltd. New Delhi.

<b>HSMEC 703</b>	<b>Organizational Behavior &amp; Industrial Psychology [14]</b>	<b>2L:0T:0P</b>	<b>2 credits</b>
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**Course Outcome:**

At the end of this course, students will demonstrate the ability to

- Understanding of organisational behaviour and industrial psychology is a must for an engineer since it directly affects the industry in the larger sense.
- The functioning of an organisation right from the floor to the top management level has to be understood well from the OBIP perspective in order to make a positive contribution to the growth of the organisation.

**Module I: Introduction**

4 Lectures

Concept of organization & organizational behaviour.

**Module II: Personality**

11 Lectures

Meaning, concept, determinants, personality theories (psychoanalytic theory, trait theory and self-theory)

- (a) Perception: Meaning, concept, process of perception, significance of perception.
- (b) Learning: meaning, concept, nature, component of learning process.
- (c) Attitude: Meaning, concept, factors in attitude formation, method of finding employee's attitude.
- (d) Value: Meaning and types, value and attitude – similarity and difference.
- (e) Motivation: Meaning, theories of motivation (Maslow's theory & Herzberg's theory), Hawthorne experiment

**Module III: Group & Team**

4 Lectures

**Group:** Concept, importance, classification of groups, reason for group formation, group dynamics, group cohesiveness.

**Team:** Meaning, concept, types, creating an effective team work.

**Module IV: Communication**

8 Lectures

- (a) Concept, process, importance, barrier
- (b) Organizational conflict: Meaning, concept, types, stages of conflict, resolution of conflict.
- (c) Power & Politics: Nature and concept, ethics of power and politics, types of power.
- (d) Leadership: Concept, Qualities and functions of a leader, approaches to the analysis of leadership

**Module V: Concept of Organization theory**

8 Lectures

Concept of Organization structure, forms of Organizational Structure, Concept of Organizational culture.

**Module VI: Gender at the workplace**

2 Lectures

Women at the workplace rules and regulations, hygiene and safety regulations, Problems and solutions.

**Module VII: Organizational effectiveness**

6 Lectures

- (a) Concept, approaches, criteria of effectiveness.
- (b) Organizational Change: Meaning, factors in organizational change, process of planned Change.
- (c) Organizational development: Concept, Need of organizational development, difference between organizations development & management development

**Text / References:**

- Stephen P. Robbin & Seema Sanghi , ‘Organizational Behaviour’, Pearson.
- L.M. Prasad, ‘Organizational Behaviour’, S. Chand & son

<b>HSMEC 704</b>	<b>PRINCIPLE OF MANAGEMENT, ENTREPRENEURSHIP &amp; IPR[3,14]</b>	<b>2L:0T:0P</b>	<b>2 credits</b>
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**Course Outcome:**

At the end of this course, students will demonstrate the ability to

- For any developing country, innovation, entrepreneurship and intellectual property rights hold the key to the entry in the league of developed countries.
- Equipped with the scientific knowledge and the right training, the engineer is an important building block of a nation.

**Module I**

Introduction to Management, Characteristics of Management, Management as an art – profession, Systems approach to management, Task and Responsibilities of a Professional Manager, Levels of Managers and Skill required, Planning & Decision Making.

**Module II**

Management Process, Organizing Principles & Structures, Directing: Leadership, Motivation, Communication and Controlling

**Module III**

Introduction to Functional areas of Management, Operations Management, Human Resources Management, Marketing Management, Financial Management

**Module IV**

Introduction to Entrepreneurship: Starts ups, Prospects & Challenges.

**Module V**

- i. Introduction to intellectual property, copyright, related rights, trademarks, patents, unfair competition, protecting new varieties plants.
- ii. WIPO hand book/ notes
- iii. Law relating to patents, trademarks, copyright design & geographical indication,
- iv. Profiting from intellectual capital: extracting value from innovation
- v. Intellectual property right, the WTO and developing countries: the TRIPS agreement and policy options.

**Text / References:**

1. Koontz, H., and Wehrich, H.,Essentials of Management: An International Perspective, 8th ed., McGraw Hill, 2009.
  2. Hicks, Management: Concepts and Applications, Cengage Learning, 2007.
  3. Mahadevan, B., Operations Management, Theory and Practice, Pearson Education Asia, 2009.
  4. Kotler, P., Keller, K.L, Koshy, A., and Jha, M., Marketing Management, 13<sup>th</sup> ed., 2009.
- Wadhra B.L., ‘Law relating to patents, trademarks, copyright design & geographical indication’, universal law pub. 2000