NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL

Minor in

MANAGEMENT

SCHEME OF INSTRUCTION AND SYLLABI

(for all B.Tech. students)

(Effective from 2021-22)

SCHOOL OF MANAGEMENT

Scheme of Instruction

Minor Program – Management

S. No.	Course Code	Course	L	T	P	Credits	Sem.
1	SMM01	Principles of Marketing	3	0	0	3	III
2	SMM02	Human Capital Management	3	0	0	3	IV
3	SMM03	Financial Markets and Investment Analysis	3	0	0	3	V
4	SMM04	Agile Project Management	3	0	0	3	VI
5	SMM05	Operations Management	3	0	0	3	VII
6	SMM06	Innovations Management	3	0	0	3	VIII
		Total	**18**	**0**	**0**	**18**	

Course Code: SMM01	PRINCIPLES OF MARKETING	Credits: 3-0-0:3

Course Outcomes:

At the end of the course, the student will be able to:

CO1	Analyze the importance of Marketing in a business organization.
CO2	Identify environmental factors which influence business firm.
CO3	Analyze the effect of competition on the business environment.
CO4	Implement different models and strategies used by organizations.

Syllabus:

Introduction: Introduction to Marketing Management**,** Core Concepts of Marketing, Marketing Orientations, Analyzing Marketing Environment, Marketing Research, Marketing Mix, Marketing Strategy, Marketing Strategy

Product Life Cycle and Branding: The concept of product lifecycle and the various strategies used by the marketer in each stage. Product characteristics and classification, Product mix and product line decisions Branding Decisions, Building Brand Equity.

Pricing: Importance of Pricing, Factors influencing pricing decisions. Various pricing methods-cost based and demand based methods.

Consumer Behaviour and Marketing Channels: Consumer Behavior, Segmentation, Targeting and Positioning, Distribution systems, Channels of distribution

Communication: Sales teams and targets, Integrated Marketing communications, Role of Social Media, Promotion mix elements, Role of contemporary modes of marketing communications, CRM and International Marketing

Learning Resources:

Text Books:

1. Marketing Management, Philip Kotler, Pearson, 2015 & 15th Edition
2. Marketing Management: Indian Context Global Perspective, Ramaswami and Namakumari, Sage Publishing, 2018 and 6th Edition

Reference books:

1. Michael Etzer, Bruce J Walker, William Stanton, Ajay Pandit, Marketing Management, 2017.

Course Code: SMM02	HUMAN CAPITAL MANAGEMENT	Credits 3-0-0:3

Course Outcomes:

At the end of the course, the student will be able to

CO1	Define the concepts and factors contributing to human resource management
CO2	Outline the functions of human resource management in decision making
CO3	Analyse the contributions of people practices at industrial and strategic level of human resource management.
CO4	Apply the digital solutions of human resource management in decision making
CO5	Adapt the principles of human resource management in solving problems in organisations.

Syllabus:

Human Resource Management- Concept, nature, scope, and Objectives; Human resource planning - determining the demand for workforce, predicting the future supply; Job analysis and Job design;

Functions of HRM - Recruitment and selection, Training and Development- Methods and Evaluation of Training; Career Development and planning; Performance Appraisal- Methods,

Performance Management, Compensation, Measuring human Capital Management, HR Accounting, HR Audit, HR Research.

Industrial Relations- Nature, Importance, Trade Unions. Collective bargaining, workers participation movement, HRM- Diversity Management, Employee Engagement, HR analytics, Digital HRM, Green HRM

Learning Resources:

Text Books:

1. Human Resource Management, Dessler, G., & Varkkey,B, Pearson Education, 2018

Reference Books:

1. Human Resource Management, Bohlander George W, Snell Scott A, Veena Vohra, Cengage Learning, 2015
2. Human Resource Management, David A. Decenzo and Stephens P. Robins, John Wiley & Sons, 2018
3. Human Resource Management, Robbins, Stephen, & Sanghi, S., Pearson Education, 2018

Course Code: SMM03	FINANCIAL MARKETS AND INVESTMENT ANALYSIS	Credits 3-0-0:3

Course Outcomes:

At the end of the course, the student will be able to

CO1	Acquaint students with the basic concept of the Indian Financial System and its components such as Financial Institutions, Markets, Instruments, and Financial Services.
CO2	Create familiarity of operations of Money market and Capital Market mechanism.
CO3	Impart on the student's knowledge of the financial institutions, their functions and role they play in the economy of India.
CO4	Understand various financial services and their significance in the operations of markets as well as economy.
CO5	Relate students with the basic concepts and principles of investment analysis.

Syllabus:

Indian Financial System: Overview of Indian Financial System, Components of Indian Financial System – Financial Institutions, Markets, Instruments and Financial Services, Functions of a Financial System, Financial Markets- Functions and Organization.

Money Market & Capital Markets: Functions of Money Market, Benefits of Efficient Money Markets, The Indian Money Market. Functions of Capital Market, History of Indian Capital Market, Capital Market Scams, Reforms in Capital Market, The Primary Market and The Secondary Market.

Financial Institutions: Meaning and Role of Financial Institutions, Development Financial Institutions in India – Industries Development Bank of India (IDBI), Small Industries Development Bank of India (SIDBI), Industrial Finance Corporation of India (IFCI), Export-Import Bank of India (EXIM) etc.

Financial Services: Meaning and Definition of Financial Services, Importance, Various Financial Services – Investment Banking, Merchant Banking, Depositories and Custodians, Credit Rating, Mutual Funds, Securitization, Venture Capital Financing, Factoring and Forfaiting Services.

Investment: Meaning, Objectives and Characteristics of Investments, Investment vs. Speculation, Investment vs. Gambling, Types of Investors, Investment Avenues.

Investment Analysis – Concepts of Fundamental Analysis and Technical Analysis, Fundamental Analysis – Economic Analysis, Industry Analysis and Company Analysis, Technical Analysis – Meaning and Basic Principles of Technical Analysis, Dow Theory, Tools of Technical Analysis, Important Chart Formations or Price Patterns and Technical Indicators, Criticisms of Technical Analysis.

Learning Resources:

Text Books:

1. The Indian Financial System: Markets, Institutions and Services, Pathak, B, Pearson Education, Delhi, 2018.
2. Financial Markets, Institutions and Financial Services, Gomez, C, Prentice Hall India Learning Private Limited, New Delhi, 2008.
3. Security Analysis and Portfolio Management, Fischer, D. E. and Jordon, R. J, Pearson Education, New Delhi, 2002.
4. Security Analysis and Portfolio Management, Kevin, S, PHI Learning Pvt. Ltd., Delhi, 2015.

Reference Books:

1. Financial Institutions and Markets: Structure, Growth and Innovations, Bhole, L. M. and Mahakud, J, McGraw Hil, 2018.
2. Indian Financial System, Khan, M. Y, McGraw Hill, 2018.
3. Investment Analysis and Portfolio Management, Chandra, P, McGraw Hill Education, 2017.
4. 2. Security Analysis and Portfolio Management, Pandian, P, Vikas Publishing House, New Delhi, 2012.

Online Resources:

1. https://www.financialexpress.com
2. https://economictimes.indiatimes.com
3. http://www.capitaline.com/
4. http://dbie.rbi.org.in
5. http://finmin.nic.in/
6. http://dbie.rbi.org.in
7. http://mospi.nic.in/
8. http://rbi.org.in

Course Code: SMM04	AGILE PROJECT MANAGEMENT	Credits 3-0-0: 3

Course Outcomes:

At the end of the course, the student will be able to

CO1	Demonstrate the issues that drive organizations to embrace iterative methodologies.
CO2	Analyze the various estimation and planning methods of iterative methodology
CO3	Evaluate the advance constructs and the challenges faced by organizations to display these.
CO4	Determine the organizational culture and its impact on agile methodologies
CO5	Compare and contrast the lean and agile methods.

Syllabus:

Introduction – The organizations need to embrace iterative development methodologies; various development methodologies; Constructs in Agile methodology.

Estimation and planning – The various estimation and planning methods followed in iterative development.

Advanced constructs – Shared decision-making; trust; teamwork and their importance in iterative development and the challenges in achieving these.

Organizational culture and Agile – the cultural aspects that impede and drive Agile methodology.

Lean and Agile – The lean and agile combinations and the purposes that these can meet.

Learning Resources:

Textbooks:

1. Agile estimating and planning, Cohn, M., Pearson Education,2018
2. Agile foundations: principles, practices and frameworks, Levy, R., Short, M., & Measey, P. BCS,2018

Reference Books:

1. Agile software requirements: lean requirements practices for teams, programs, and the enterprise, Leffingwell, D., Addison-Wesley Professional, 2020
2. Cloud enhances agile software development, Gochhait, S., Butt, S. A., Jamal, T., & Ali, A. In Cloud Computing Applications and Techniques for E-Commerce (pp. 28-49). IGI Global,2020

Online Resources:

1. blog.feedspot.com/agile_blogs/

Course Code: SMM05	Operations Management	Credits 3-0-0: 3

Course Outcomes: At the end of the course, the student will be able to

CO1	Expose the student to the role of competitive priorities in achieving overall business objective.
CO2	Familiarize about current trends and challenges of operations at strategic level.
CO3	Develop different demand forecasting methods in business environment.
CO4	Evaluate various location and layout methods at supply chain level.
CO5	Understand role of Quality management in Manufacturing and Services.

Syllabus:

Objectives of operations Management - Functions of Operations Management – Competitive Priorities & Challenges of Operations Management - Forecasting - Use of forecasting in operation planning - Techniques of forecasting - Regression analysis, Time series, Moving average, exponential smoothing - Accuracy of forecasts.

Strategic Design of Operations -Plant location concepts - Factors affecting location decisions and techniques - Plant layout concepts - Types of layouts and their characteristics – Performance measures for layout design , capacity planning

Operations decisions - Inventory Functions & Types of Inventories – Inventory costs - Economic order quantity calculations - Modification of E.O.Q under quantity discounts. Inventory Control Systems (P & Q Systems) – certain and uncertain environments of supply and demand. Techniques of Selective Inventory control - Pareto analysis – Just-in-time (JIT) Manufacturing concepts – Kanban system

Aggregate production planning strategies - Material requirement planning (MRP) – MRP inputs & outputs - scheduling and Sequencing problems, Introduction to Quality Management, ISO Standards.

Learning Resources:

Textbook:

1. Operations Management-Strategy and Analysis ,Lee J. Krajewski and Larry P. Ritzman, Pearson Education, 2005, 6th ed.

Reference Books:

1. Industrial Engineering & Management, Dr. Ravishankar, Galgotia Publishers, 2007.
2. Production and Operations Management: (Strategies and Tactics), Heizer J and Render B, Prentice Hall New Jersey, 2008, 9th ed.
3. Operations Management for Competitive Advantage, Chase R B, Aquilano N J and Jacobs F R, Tata McGraw Hill, New Delhi, 2006, 11th ed.
4. Modern Production / Operations Management ,Buffa E S, Sarin R K, John Wiley & Sons, Singapore, reprint 2009, 8th ed.
5. Operations Management,Norman Gaither and Greg Fraizer, Cengage Publishers, 9th edition

Online Resources:

1. https://nptel.ac.in/courses/112/107/112107238/
2. https://nptel.ac.in/courses/110/107/110107141/

Course Code: SMM05	INNOVATION MANAGEMENT	Credits 3-0-0: 3

Course Outcomes:

At the end of the course, the student will be able to

CO1	Demonstrate the role of innovation and its macroeconomic view.
CO2	Analyze the various dimensions of innovation.
CO3	Explain the various ways of adopting innovations
CO4	Explain the diffusion of innovation by considering various opinions and impacts
CO5	Analyze open innovations for firm-centric, network management, and role of users.

Syllabus:

Introduction to innovation – What is innovation? Schumpeter's distinction between invention and innovation. Macroeconomic view of innovation – Process (innovation; core), Offering (Product/Service performance, Service systems, customer service), Delivery (Channel, Brand, customer experience), Finance (Biz model, value network); Assumptions and barriers to innovation.

Dimensions of Innovation – Product, Process, Position, and Paradigm; Innovation typology

Diffusion of innovation - considering the forming and framing of public opinion and the societal impacts using scientific and interactive methods are necessary, and possible with technology assessment.

Open Innovation (OI) – Outside-In; Inside-out. Firm centric OI; Management of OI networks; Role of users and communities in OI.

Learning Resources:

Textbooks:

1. Managing Innovation: Technology, Consumer and Sustainability Perspective, and the Challenges, Tan, S. F, In Leveraging Consumer Behavior and Psychology in the Digital Economy (pp. 205-216). IGI Global, 2020
2. Leveraging Constraints for Innovation: New Product Development Essentials from the PDMA, Gurtner, S., Spanjol, J., & Griffin, A, John Wiley & Sons, 2018

Reference Books:

1. New frontiers in open innovation, Chesbrough, H., Vanhaverbeke, W., & West, J. (Eds.), Oup Oxford, 2014
2. Open innovation results: Going beyond the hype and getting down to business, Chesbrough, H., Oxford University Press, 2019
3. Open innovation: The new imperative for creating and profiting from technology, Chesbrough, H. W. Harvard Business Press, 2003.

Online Resources:

1. https://acuvate.com/blog/innovation-management-importance-ideas-examples