

**ACADEMIC AFFAIRS OFFICE
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

No. Acd./ 737 /IAPC-97

Dated: February 06, 2021

Head, Department of Management Studies

The IAPC (97th meeting, under Item No. 97.3.2) has approved the modified syllabi received from Department of Management Studies for MBA Term 3.

The modified syllabi are attached as **Appendix-A**.



Assistant Registrar (Curriculum)

Encl: as above

Copy to (through e mail):-

1. All faculty
2. All Heads of Departments/ Centres
3. Dean, Academic Affairs
4. Associate Dean of Academic Affairs (Curriculum)
5. Channel I/ Acad portal/ Academic webpage of iitr.ac.in

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

NAME OF DEPARTMENT/CENTRE: Department of Management Studies

1. **Subject Code:** BMN-519 **Course Title:** Production and Operations Management 2
2. **Contact Hours:** **L:** 4 **T:** 0 **P:** 0
3. **Examination Duration (Hrs.):** **Theory:** 3 **Practical:** 0
4. **Relative Weightage:** **CWS:** 50 **PRS:** 0 **MTE:** 0 **ETE:** 50 **PRE:** 0
5. **Credits:** 2 6. **Term:** Third
7. **Pre-requisite:** Nil 8. **Subject Area:** PCC
9. **Objective:** To provide a systemic view of operations management and its role in the total enterprise management.

10. Details of the Course

S.No.	Contents	Contact hours
1.	Layout designs, Product, process, cellular layouts, layout in service systems, line balancing	4
2.	Location Strategies, methods of evaluating location alternatives, service location strategy	2
3.	JIT and Lean Operations	3
4.	Quality Management, cost of quality, Total quality management, Quality tools, Contribution of quality Gurus	5
5.	Statistical Quality Management, Six Sigma, Acceptance Sampling	5
6.	Maintenance Management, Reliability, TPM, Overall Equipment Effectiveness	4
7.	Sustainable operations Management, sustainable manufacturing	3
8.	New Challenges in Operations Management, Use of IT in operations Management	2
Total		28

11. Suggested Books:

S.No.	Name of Authors/Book/Publisher	Year of Publication / Reprint
1.	Chase, RB., Jacobs, RF., Aquileno, N.J. and Agarwal, N.K., "Operations Management for Competitive Advantage", 11 th Edition McGraw-Hill	2009
2.	Gaither, N. and Frazier, G., "Operations Management", 9th Edition, Cengage Learning	2004
3.	Buffa, E. S. and Sarin, R., "Modern Production and Operations Management", 8th Edition, John Wiley and Sons	2009
4.	William J Stevenson, Operations Management, 12 th Edition, McGraw Hill	2017

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

NAME OF DEPARTMENT/CENTRE: Department of Management Studies

1. **Subject Code:** BMN-520 **Course Title:** Human Resource Management
2. **Contact Hours:** **L:** 4 **T:** 0 **P:** 0
3. **Examination Duration (Hrs.):** **Theory:** 3 **Practical:** 0
4. **Relative Weightage:** **CWS:** 50 **PRS:** 0 **MTE:** 0 **ETE:** 50 **PRE:** 0
5. **Credits:** 2 6. **Term:** Third
7. **Pre-requisite:** Nil 8. **Subject Area:** PCC
9. **Objective:** To create an understanding of the various facets of managing people and of policies and practices relating to the management of human resources.

10. Details of the Course

S.No.	Contents	Contact hours
1.	HRM - Introduction/Strategic Role Concepts and Perspective on Human Resource Management; Role of HRM in a competitive business environment	2
2.	Job Analysis-Introduction, process of Job Analysis ,Competency Approach to Job Analysis ,Methods of Collecting Job Analysis Data, Job Description, Job Specification, Role Analysis	3
3.	HR Planning-Features, Objective, Importance, Process of HRP, Effective HRP, Markov Analysis.	3
4.	Recruitment-Definition, Constraints and Challenges, Source of Recruitment, Methods of Recruitment, Selection Definition, Process, Interview Techniques.	3
5.	Training & Development Process Training and developing employees, Training Methods, Evaluation of training program	2
6.	Performance and Potential Appraisal - Concept of Appraisal Techniques for Appraising Performance, Potential Appraisal, Performance Appraisal Practices in India	3
7.	Compensation Management –Introduction, Compensation Planning, Wages& Salary Administration, Wage Policy, HRA-Introduction, Personal Records and Reports.	3
8.	Introduction to IR-Health and Safety, Employee Welfare, Employee Grievances and Discipline, Collective Bargaining.	2
9.	Participation and Empowerment, Trade unions and employers' associations, Industrial Relations and Industrial Disputes	2
10.	Career and Succession Planning –Concept of Career, Career Planning, Career Stages, Career Development, Career Management, Succession Planning, Succession Development.	3
11.	Current business trends and its impact on HR: Emerging HR issues And contemporary HR concepts and practices.	2
Total		28

11. Suggested Books:

S.No.	Name of Authors/Book/Publisher	Year of Publication / Reprint
1.	Gary Dessler & Biju Varkkey , Human Resource Management(15 th Edition) Pearson India Education Pvt. Ltd.	2019
2.	John M Ivancevich , Human Resource Management(11th Edition),The McGraw-Hill Companies	2017
3.	V S P Rao , Human Resource Management(3 rd Edition) Excel Books.	2010

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

NAME OF DEPARTMENT/CENTRE: Department of Management Studies

1. **Subject Code:** BMN-521 **Course Title:** Financial Management -1
2. **Contact Hours:** **L:** 3 **T:** 0 **P:** 0
3. **Examination Duration (Hrs.):** **Theory:** 2 **Practical:** 0
4. **Relative Weightage:** **CWS:** 50 **PRS:** 0 **MTE:** 0 **ETE:** 50 **PRE:** 0
5. **Credits:** 1.5 **6. Term:** Third
7. **Pre-requisite:** Nil **8. Subject Area:** PCC
9. **Objective:** To acquaint the MBA students with the fundamentals of corporate finance and financial management beginning with financial planning and ending with financial control.

10. Details of the Course

S.No.	Contents	Contact hours
1.	Financial management: an overview, Fundamentals of corporate finance, Financial Decisions in a Firm, Goals of Financial Management, The Fundamental Principle of Finance, Building Blocks of Modern Finance.	2
2.	Financial Planning and forecasting. Need of Financial Planning, Sales Forecast, Proforma Profit and Loss Account, Proforma Balance Sheet, Growth and External Financing Requirements.	3
3.	The Time Value of Money, Future Value of a Single Amount, Future Value of an Annuity, Present Value of a Single Amount, Present Value of an Annuity, Intra-year Compounding and Discounting.	4
4.	Techniques of Capital Budgeting. Importance, Capital Budgeting Process, Project Classification, Investment Criteria, Net Present Value, Benefit Cost Ratio, Internal Rate of Return, Modified Internal Rate of Return, Payback Period, Accounting Rate of Return.	4
5.	Estimation of project cash flows. Elements of the Cash Flow Stream, Principles of Cash Flow Estimation, Cash Flows for a Replacement Project, Biases in Cash Flow Estimation.	4
6.	Risk analysis in capital budgeting. Sources and Perspectives of Risk, Sensitivity Analysis, Scenario Analysis, Break-even Analysis, Hillier Model, Simulation, Analysis, Decision Tree Analysis, Corporate Risk Analysis, Managing Risk, Project Selection under Risk, Risk Analysis in Practice.	4
Total		21

11. Suggested Books:

S.No.	Name of Authors/Book/Publisher	Year of Publication / Reprint
1.	Richard Brealey and Stewart Myers and Franklin Allen, “Principle of Corporate Finance” , 13 th edition, McGraw-Hill Education.	2020
2.	Chandra, P., “Financial Management: Theory & Practice” , 10 th Edition, McGraw-Hill Education.	2019

3.	Eugene, F. Brigham & Michael C. Ehrhardt, “Financial Management: Theory & Practice” 15 th Edition, Cengage Learning.	2017
4.	Stephen A. Ross, Randolph W. Westerfield, Jeffrey Jaffe, Bradford D. Jordan, & Ram Kumar Kakani, “Corporate Finance” , 11 th edition, McGraw-Hill Education.	2017
5.	Van Horne, J.C., “Financial Management and Policy”, 12 th Edition, Pearson publishing.	2015
6.	Pandey, I.M., “Financial Management”, 11 th Edition, Vikas Publishing House	2015

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

NAME OF DEPARTMENT/CENTRE: Department of Management Studies

1. **Subject Code:** BMN-522 **Course Title:** Strategic Management-1
2. **Contact Hours:** **L:** 4 **T:** 0 **P:** 0
3. **Examination Duration (Hrs.):** **Theory:** 3 **Practical:** 0
4. **Relative Weightage:** **CWS:** 50 **PRS:** 0 **MTE:** 0 **ETE:** 50 **PRE:** 0
5. **Credits:** 2 6. **Term:** Third
7. **Pre-requisite:** Nil 8. **Subject Area:** PCC
9. **Objective:** To impart knowledge for developing long range strategic plans for any organization.

10. Details of the Course

S.No.	Contents	Contact hours
1.	Conceptual foundation of strategy and evolution of strategic management, strategy-making process	3
2.	Vision and mission analysis, goals, objectives, policies and business model	3
3.	Environmental scanning covering both the internal firm environment (RO Model and Industry Model), and external environment	3
4.	Internal and External perspective of Value Chains with reference to Industry Analysis	2
5.	Acknowledgement of Organizational Life Cycle Stages and Strategic Choices with references to Vision	2
6.	Strategy Formulation Business Level strategy, low cost strategies, differentiation strategies, Competitive strategies, Strategies and Tactical Perspective	2
7.	Cooperative strategies, collusion, strategic alliances, joint ventures, mergers and acquisitions and the process of due diligence	4
8.	Intermediary strategic analysis and choice augmentation	2
9.	Strategy and Globalization and Localization	2
10.	Strategic implementation- staffing the organization, developing and building critical resources and capabilities, matching organizational structure to the strategy	3
11.	Strategic monitoring- evaluation process, criteria and methods, strategy-evaluation activities	2
Total		28

11. Suggested Books:

S.No.	Name of Authors/Book/Publisher	Year of Publication / Reprint
1.	Thompson, A.J., Peteraf, M., Gamble, J. and Strickland, A., "Crafting & Executing Strategy: The Quest for Competitive Advantage: Concepts and Cases", 21 st Ed., McGraw-Hill Higher Education	2017
2.	Kim, W.C. and Mauborgne, R.A., "The Blue Ocean Strategy: How to Create Uncontested Market Space and Make the Competition Irrelevant", Harvard Business Press	2015

3.	Reeves M., Haanaes K. and Sinha J., “Your Strategy Needs a Strategy: How to Choose and Execute the Right Approach”, Harvard Business Review Press	2015
4.	Mootee, I., “Design Thinking for Strategic Innovation: What They Can't Teach You at Business or Design School”, Wiley	2013
5.	David, F.R. and David, F.R., “Strategic Management: A Competitive Advantage Approach: Concepts and Cases”, 16 th Ed., Pearson	2009
6.	Markides, C., “All the Right Moves: A Guide to Crafting Breakthrough Strategy”, Harvard Business Press	2000
7.	Hamel, G., “Leading the Revolution”, Harvard Business School Press	2000

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

NAME OF DEPARTMENT/CENTRE: Department of Management Studies

1. **Subject Code:** BMN-523 **Course Title:** Advanced Statistics
2. **Contact Hours:** **L:** 3 **T:** 1 **P:** 0
3. **Examination Duration (Hrs.):** **Theory:** 3 **Practical:** 0
4. **Relative Weightage:** **CWS:** 50 **PRS:** 0 **MTE:** 0 **ETE:** 50 **PRE:** 0
5. **Credits:** 2 6. **Term:** Third
7. **Pre-requisite:** Nil 8. **Subject Area:** PCC
9. **Objective:** To provide knowledge of statistics for business decision making.

10. Details of the Course

S.No.	Contents	Contact hours
1.	Introduction, Chi-Square as a Test of Independence, Chi-Square as a Test of Goodness of Fit, Analysis of Variance (ANOVA), Inferences about a Population Variance, Inferences about Two Population Variance	4
2.	Introduction, Estimation Using Regression Line, Correlation Analysis, Making Inference about Population Parameters, Using Regression and Correlation Analyses: Limitations, Errors and Caveats	4
3.	Multiple Regression and Correlation Analysis, Finding the Multiple-Regression Equation, The Computer and Multiple Regression, Making Inferences about Population Parameters, Modeling Techniques	4
4.	Introduction to Nonparametric Statistics, The Sign Test for Paired Data Rank Sum Test: The Mann-Whitney u Test and The Kruskal-Wallis Test, The One-Sample Runs Test, Rank Correlation, The Kolmogorov-Smirnov Test	4
5.	Introduction, Variations in Time Series, Trend Analysis, Cyclical Variation, Seasonal Variation, Irregular Variation, A Problem Involving all Four Components of Time Series, Time series analysis in forecasting	4
6.	Defining an Index Number, Unweighted Aggregates Index, Weighted Aggregates Index, Average of Relative Methods, Quality and Values Indices, Issues in Constructing and Using Index Numbers	4
7.	The Decision Environment, Expected Profit under Uncertainty, Using Continuous Distributions: Marginal Analysis, Utility as a Decision Criteria, Helping Decision Makers Supply the Right Probabilities, Decision Tree Analysis	4
Total		28

11. Suggested Books:

S.No.	Name of Authors/Book/Publisher	Year of Publication / Reprint
1.	Richard I. Levin, David S. Rubin, M.H. Siddiqui and Sanjay Rastogi, "Statistics for Management", Pearson, 8 th Ed.	2017
2.	Ken Black, "Business Statistics: For Contemporary Decision Making", Wiley, 9 th Ed.	2016

3.	Dennis J. Sweeny, Thomas A. Williams, Jeffery D. Camm, James Cochran, “ Statistics for Business & Economics”, South Western Publication, 13 th Ed.	2017
4.	David M. Levine, David. F. Stephen, K.A. Szabat, “Statistics for Managers Using Microsoft Excel” Pearson, 7 th Ed	2017

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

NAME OF DEPARTMENT/CENTRE: Department of Management Studies

1. **Subject Code:** BMN-524 **Course Title:** Consumer Behaviour Analysis
2. **Contact Hours:** **L:** 2 **T:** 0 **P:** 0
3. **Examination Duration (Hrs.):** **Theory:** 2 **Practical:** 0
4. **Relative Weightage:** **CWS:** 50 **PRS:** 0 **MTE:** 0 **ETE:** 50 **PRE:** 0
5. **Credits:** 1 6. **Term:** Third
7. **Pre-requisite:** Nil 8. **Subject Area:** PCC
9. **Objective:** To develop an understanding of the consumer decision making process and its application in marketing functions of firms.

10. Details of the Course

S.No.	Contents	Contact hours
1.	Introduction to Consumer behavior analysis, Consumer behavior determinants, Outcomes of consumer decisions	2
2.	Creating marketing strategies for customer centric organization: from market analysis to market strategy, role of consumer behavior	3
3.	Consumer Decision Process, Model decision process, Types of decision process, factors influencing the extent of problem solving	3
4.	Pre-purchase processes, Need recognition, Search and evaluation	2
5.	Purchase-to buy or not to buy, retailing and the purchase process, determinants of retailers success or failure, changing retail landscape.	2
6.	Post purchase processes- Consumption behavior, consumption experiences, post consumption evaluations.	2
Total		14

11. Suggested Books:

S.No.	Name of Authors/Book/Publisher	Year of Publication / Reprint
1.	Blackwell, R. D, Miniard. P. W., Engel, J.F., and Rahman, Z., Consumer Behavior, 10/e, Cengage	2017
2.	Schiffman. L., et al. Consumer Behaviour 12/e, Pearson.	2018
3.	Solomon, M, R., Consumer Behavior: Buying, Having, 10/e, PHI Publications	2016
4.	Graham, J. F., Critical Thinking in Consumer Behavior: Cases and Experiential Exercises, 2/e, Pearson	2009
5.	Assael. H., Consumer Behavior: A Strategic Approach, 1/e, Cengage Learning	2003

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

NAME OF DEPARTMENT/CENTRE: Department of Management Studies

1. **Subject Code:** BMN-525 **Course Title:** Digital Transformation and Business
2. **Contact Hours:** **L:** 3 **T:** 0 **P:** 0
3. **Examination Duration (Hrs.):** **Theory:** 2 **Practical:** 0
4. **Relative Weightage:** **CWS:** 50 **PRS:** 0 **MTE:** 0 **ETE:** 50 **PRE:** 0
5. **Credits:** 1.5 **6. Term:** Third
7. **Pre-requisite:** Nil **8. Subject Area:** PCC
9. **Objective:** The objective of this course is to understand the economics of information and explore how it determines digital transformation of businesses.

10. Details of the Course

S.No.	Contents	Contact hours
1.	Digital transformation: economics of information, network economy, economics of networks, digital markets	2
2.	Information goods: differential pricing, signaling and screening, bundling and aggregation, Search and competition	4
3.	Two-sided networks and platform competition, Pricing at zero, The long tail	4
4.	Targeted online advertising- Measurement, analytics, and experimentation	4
5.	Open source and IPR, IT-Based Experimentation, replication & innovation	4
6.	Digital advantage, Future of the Information Economy	3
Total		21

11. Suggested Books:

S.No.	Name of Authors/Book/Publisher	Year of Publication / Reprint
1.	Shapiro, C., and Varian, H., Information Rules: A Strategic Guide to the Network Economy. Cambridge: Harvard Business School	1998
2.	Brynjolfsson, E. and B. Kahin. Understanding the Digital Economy: Data, Tools, and Research	2000
3.	Rogers D., The Digital Transformation Playbook – Rethink Your Business for the Digital Age (Columbia Business School Publishing)	2016
4.	Brynjolfsson, Erik, and Adam Saunders. Wired for Innovation: How Information Technology is Reshaping the Economy. Cambridge, MA: MIT Press	2009
5.	Varian, Hal, Joe Farrell, and Carl Shapiro. The Economics of Information Technology: An Introduction. Cambridge, UK: Cambridge University Press	2005

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

NAME OF DEPARTMENT/CENTRE: Department of Management Studies

1. Subject Code: BMN-526 **Course Title:** Project Management

2. Contact Hours: L: 3 T: 0 P: 0

3. Examination Duration (Hrs.): Theory: 2 Practical: 0

4. Relative Weightage: CWS: 50 PRS: 0 MTE: 0 ETE: 50 PRE: 0

5. Credits: 1.5 **6. Term:** Third

7. Pre-requisite: Nil **8. Subject Area:** PCC

9. Objective: To provide an integrative approach to management of projects, detailing the concepts of various phases of the Project Life Cycle and also the different Knowledge Areas of Project Management including agile methodology

10. Details of the Course

S.No.	Contents	Contact hours
1.	Introduction - Project and Project characteristics, project life cycles, Determinants of project success, Developing project management maturity, Project Elements	2
2.	Project Selection and Portfolio Management : Project Selection, Approaches to Project Screening and Selection, Financial Models, Project Portfolio Management, Analytic Hierarchy Process	2
3.	Project Management Processes for a Project : Project Management Processes, Project management Process Groups, Process Interactions, Project Management Process Mapping, The Project Management Knowledge Areas	2
4.	Project Integration Management: Develop Project Charter, Develop Preliminary Project Scope Statement, Develop Project Management Plan, Direct and Manage Project Execution, Monitor and Control Project Work, Integrated Change Control, Close Project Project Scope Management : Scope Planning, Scope Definition, Create Work Breakdown Structure(WBS), Scope Verification, Scope Control	3
5.	Project Schedule Management: Activity Definition, Activity Sequencing, Activity Resource Estimating, Activity Duration Estimating, Schedule Development, Schedule Control, CPM &PERT, Earned Value Analysis Project Cost Management : Cost Estimating, Cost Budgeting, Cost Control	4
6.	Project Quality Management: Quality Planning, Perform Quality Assurance, Perform Quality Control, Six Sigma Project Resource Management: Resource Planning, Develop Project Team, Manage Project Team, Control Resources Project Communications Management: Communications Planning, Information Distribution, Performance Reporting, Manage Stakeholders	3
7.	Project Risk Management : Risk Management Planning, Risk Identification, Qualitative Risk Analysis, Quantitative Risk Analysis, Risk Response Planning, Risk Monitoring and Control	2
8.	Project Procurement Management: Plan Purchases and Acquisitions, Plan Contracting, Request Seller Responses, Select Sellers, Contract Administration, Contract Closure	3

	Project Stakeholder Management: Identifying Stakeholders, Managing and Monitoring Stakeholder Engagement Agile, Iterative, Adaptive and Hybrid Project Environments	
Total		21

11. Suggested Books:

S.No.	Name of Authors/Book/Publisher	Year of Publication / Reprint
1.	Jeffrey K. Pinto, “Project Management” Pearson publication, 4 th edition	2016
2.	“A guide to the Project Management Body of Knowledge (PMBOK guide)” Project Management Institute; 6th edition	2017

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

NAME OF DEPARTMENT/CENTRE: Department of Management Studies

1. Subject Code: BMN-527 **Course Title:** International Business

2. Contact Hours: **L:** 3 **T:** 0 **P:** 0

3. Examination Duration (Hrs.): **Theory:** 2 **Practical:** 0

4. Relative Weightage: **CWS:** 50 **PRS:** 0 **MTE:** 0 **ETE:** 50 **PRE:** 0

5. Credits: 1.5 **6. Term:** Third

7. Pre-requisite: Nil **8. Subject Area:** PCC

9. Objective: To familiarize students with international trade and investment, global monetary system, strategies and structure of IB.

10. Details of the Course

S.No.	Contents	Contact hours
1.	International Business- Importance, nature and scope; Modes of entry into international business; Management of international business operations – complexities and issues; IT and international business, India's involvement in International Business. Internationalization stages and orientation (EPRG framework), LPG framework	4
2.	Comparative environmental Frameworks-Cultural, political, legal, and economic environment facing business Theories and institutions of trade and investment- international trade theory, government influence of trade, regional economic integration and cooperative agreements, factor mobility and FDI	4
3.	World financial environment: Foreign exchange market, determination of exchange rates Dynamics of international business-government relationships: Government policy and plan for FDI, IB negotiation and diplomacy	3
4.	Foreign Trade Promotion Measures and Organizations in India: Special economic zones (SEZs) and 100% export-oriented units (EOUs); Measures for promoting foreign investments into and from India; Indian joint ventures and acquisitions abroad.	4
5.	International Economic Institutions and Agreements: WTO, IMF, World bank, UNCTAD, Agriculture Agreement; GATS; TRIPS; TRIM	3
6.	Regional Economic Integration: Free trade area, customs union and common market; Theory of customs union; Trade creation and diversion effects; Regionalism vs. multilateralism; Structure and functioning of EC and NAFTA; Regional Economic Cooperation. European Union (EU), ASEAN, SAARC, NAFTA	3
Total		21

11. Suggested Books:

S.No.	Name of Authors/Book/Publisher	Year of Publication / Reprint
1.	Hill, C.W.L. etal., “International Business”, 10 th Edition, McGraw-Hill	2018
2.	Daniels/Salwan, International Business environments and operations, 15 th edition, Pearson publications	2016
3.	Sundaran/Black, International Business Environment, 10 th edition, Pearson	2015