

**Scheme of Examination
&
Syllabus
of
MBA Specialization – Operations and Analytics**

[With effect from Academic Session 2018-2019]



**UNIVERSITY SCHOOL OF MANAGEMENT STUDIES
GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY
Sector-16 C, Dwarka, New Delhi 110078.**

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

MASTER OF BUSINESS ADMINISTRATION (MBA)

Criteria for Internal Assessment

The internal assessment of the students (**out of 25 marks**) shall be as per the criteria given below:

1. Class Test* - **15 marks**

(Will be a written test to be conducted on the date communicated by the University as per Academic Calendar for the Class Test, except for the Fourth Semester where the dates will be decided by the concerned institutes/school).

2. Individual Participation/Presentation/Viva-Voce/Group Discussion **10 marks**

**Record to be maintained by faculty and made available to the Examination Branch of the University, if required.*

Note: The Scheme and Syllabus is as per the Ordinance 11 of the University.

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

MASTER OF BUSINESS ADMINISTRATION (MBA)

FIRST SEMESTER

Code No.	Paper	L	T/P	Credits	Type of Course
MS 101	Management Process & Organizational Behaviour	4	-	4	Core
MS 103	Decision Sciences	4	-	4	Core
MS 105	Managerial Economics	4	-	4	Core
MS 107	Accounting for Management	4	-	4	Core
MS 109	Information Technology Management	3	-	3	Ability Enhancement Course
MS 111	Business Communication	4	-	4	Ability Enhancement Course
MS 113	Legal Aspects of Business	4	-	4	Core
MS 151	Information Technology Management Lab	-	2	1	Ability Enhancement Course
MS 115	Managerial Skills Development (NUES)*	2	-	2	Ability Enhancement Course
	Total	29	2	30	
Open Courses offered under CBCS Scheme by USMS					
MS 101	Management Process & Organizational Behaviour	4	-	4	
MS 111	Business Communication	4	-	4	
MS 115	Managerial Skills Development (NUES)*	2	-	2	

* *NUES: NON UNIVERSITY EXAMINATION SYSTEM*

***Choice Based Credit System*

Note: Students of other University Schools of Studies can take a maximum of two open courses in one semester.

Industrial Visit:

There will be at least one Industrial Visit for the students in the 1st Year either in the First Semester or Second Semester. The students will be required to submit a report and present the same to their Industrial Visit In-Charge.

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

MASTER OF BUSINESS ADMINISTRATION (MBA)

SECOND SEMESTER

Code No.	Paper	L	T/P	Credits	Type of Course
MS 102	Management of Technology, Innovation and Change	4	-	4	Core & Inter Disciplinary
MS 104	Financial Management	4	-	4	Core
MS 106	Marketing Management	4	-	4	Core
MS 108	Business Research Methods	4	-	4	Core & Inter Disciplinary
MS 110	Operations Management	4	-	4	Core
MS 112	Human Resource Management	4	-	4	Core
MS 114	E-Business	4	-	4	Core & Inter Disciplinary
MS 116	Business Analytics (NUES) *	2		2	Ability Enhancement Course
	Total	30	-	30	
Open Courses offered under CBCS Scheme by USMS					
MS 104	Financial Management	4	-	4	
MS 106	Marketing Management	4	-	4	
MS 112	Human Resources Management	4	-	4	

* NUES: NON UNIVERSITY EXAMINATION SYSTEM

**Choice Based Credit System

Note:

- (1) Students of other University Schools of Studies can take a maximum of two open courses in one semester.
- (2) The Student is required to undergo Summer Training of Six to Eight Weeks immediately after the final Exam of 2nd Semester and obtain a Certificate of Training from the organization as per the format prescribed.

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

MASTER OF BUSINESS ADMINISTRATION (MBA)

THIRD SEMESTER

Code No.	Paper	L	T/P	Credits	Type of Course
MS 201	Summer Training Report	-	-	4	Ability Enhancement Course
MS 203	Management of International Business	4	-	4	Core
MS 205	Information Systems Management	4	-	4	Core
MS 207	Entrepreneurship Development	4	-	4	Core & Inter Disciplinary
MS 209	Business Simulation and Games (NUES) *	2	-	2	Ability Enhancement Course
	Elective – I	3	-	3	
	Elective – II	3	-	3	
	Elective – III	3	-	3	
	Elective – IV	3	-	3	
	Elective – V	3	-	3	
	Total	29	-	33	
Open Courses offered under CBCS Scheme by USMS					
MS 203	Management of International Business	4	-	4	
MS 207	Entrepreneurship Development	4	-	4	

* NUES: NON UNIVERSITY EXAMINATION SYSTEM

**Choice Based Credit System

- Note :
1. All students must specialize in one major and one minor area. Five papers must be taken from the major area and three papers from the minor area of specialization in total.
 2. Three elective papers must be taken in the third semester and two elective papers in the fourth semester from the area selected for major specialization.
 3. Students opting for Operations & Analytics specializations must select distinct courses in Major and Minor specialization.
 4. For Project Dissertation to be done in 4th Semester, the allocation of Project Guide and selection of Topic will be done in the 3rd Semester and notified.
 5. Students of other University Schools of Studies can take a maximum of two open courses in one semester
 6. The Students can undertake Education cum Industrial Tour to any station within India or Abroad (optional) with the prior permission of Dean/Director.

LIST OF ELECTIVES

- I. **MARKETING**
 - MS 211 - Consumer Behavior
 - MS 213 - Sales and Distribution Management
 - MS 215 - International Marketing
 - MS 217 - Services Marketing
 - MS 219 - Customer Relationship Management
- II. **FINANCE**
 - MS 221- International Financial Management
 - MS 223 - Financial Markets and Institutions
 - MS 225 - Security Analysis and Investment Management
 - MS 227 - Corporate Tax Planning
 - MS 229 - Financial Econometric
 - MS 269 – Project Management
- III. **HUMAN RESOURCE**
 - MS 231 - Compensation Management
 - MS 233 - Industrial Relations and Labor Laws
 - MS 235 - Training and Development
 - MS 237 - Performance Management
 - MS 239 - Talent Management

IV. INFORMATION TECHNOLOGY

- MS 241 - Systems Analysis and Design
- MS 243 - Enterprise Systems
- MS 245 - Network Applications and Management
- MS 247 - Database Management Systems - 2 credits
- MS 249 - Information Security Management
- MS 261- Database Management Systems Lab - 1 credit

Note: The Lab MS 261 is a part of course MS 247 and the students opting for MS 247 will also study MS 261.

V. INTERNATIONAL BUSINESS

- MS 251 - International Business Environment
- MS 253 - Export, Import Policies, Procedures, and Documentation
- MS 255 - WTO and Intellectual Property Rights
- MS 257 - International Economics
- MS 259 - International Business Negotiation

VI. Operations & Analytics

- MS 243- Enterprise Systems
- MS 247- Database Management Systems - 2 credits
- MS 263- Operations and Supply Chain Management
- MS 265- Advanced Business Analytics
- MS 267- Services Operations Management
- MS 269- Project Management
- MS 261- Database Management Systems Lab - 1 credit

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI
MASTER OF BUSINESS ADMINISTRATION (MBA)
FOURTH SEMESTER

Code No.	Paper	L	T/ P	Credit s	Type of Course
MS 202	Project Dissertation	-	-	6	Ability Enhancement Course
MS 204	Business Intelligence and Applications	3	-	3	Core
MS 206	Strategic Management	3	-	3	Core
MS 208	Corporate Social Responsibility, Human Values & Ethics	3	-	3	Ability Enhancement Course
	Elective – I	3	-	3	
	Elective – II	3	-	3	
	Elective – III	3	-	3	
	Total	21	-	24	
Open Courses offered under CBCS Scheme by USMS					
MS 208	Corporate Social Responsibility, Human Values & Ethics	3	-	3	

**Choice Based Credit System*

NOTE:

- (1) Students of other University Schools of Studies can take a maximum of two open courses in one semester
- (2) Syllabus for the Fourth Semester papers shall be completed by April 15 every year and for the remaining period of the Academic Calendar the students will be required to complete the project and submit the same.

LIST OF ELECTIVES

I. MARKETING

- MS 212 - Retail Management
- MS 214 - Advertising and Brand Management
- MS 216 - Internet Marketing
- MS 218 - Business Marketing

II. FINANCE

- MS 220 - Strategic Financial Management
- MS 222 - Mergers, Acquisitions and Corporate Restructuring
- MS 224 - Financial Derivatives
- MS 226 - Behavioral Finance

III. HUMAN RESOURCE

- MS 228 - Strategic Human Resource Management
- MS 230 - Organizational Development
- MS 232 - Team Building
- MS 234 - Behaviour Testing & Counseling

IV. INFORMATION TECHNOLOGY

- MS 236 - Digitalization and E- governance
- MS 238 - Software Project Management
- MS 240 - Web Technologies - 2 credits
- MS 242 - Knowledge Management
- MS 252 - Web Technologies Lab. - 1 credit

Note: The Lab MS 252 is a part of course MS 240 and the students opting for MS 240 will also study MS 252.

V. INTERNATIONAL BUSINESS

MS 244 - Global Competitiveness and Strategic Alliance

MS 246 - Supply Chain Management for International Business

MS 248 - Managing Diversity

MS 250 - Global Strategic Management

VI. Operations & Analytics

MS 216- Internet Marketing

MS 236- Digitalization and E- governance

MS 240- Web Technologies

MS 252 - Web Technologies Lab.

MS 254- Supply Chain Analytics

GURU GOBINDSINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

MASTER OF BUSINESS ADMINISTRATION (MBA)

Enterprise Systems

Course Code: MS 243

L-3 Credits: 3

Objectives: This course aims at providing overall knowledge regarding the concepts and structure of Enterprise business systems and imparts necessary knowledge for ERP, CRM, SCM implementation in a business enterprise.

Course Contents

Unit I

Enterprise Systems: An Overview, Business and Enterprise Systems, Types of Enterprise Systems; Enterprise System Architecture, Enterprise System Development, Enterprise System Implementation Strategies and Challenges, Enterprise System Integration.

(10 Hours)

Unit II

ERP: Features of ERP, ERP Components, MIS Integration, ERP drivers, ERP and E-Commerce, ERP Culture, ERP and CRM, ERP and SCM, ERP Selection Issues, Pre and Post Implementation Issues, ERP Vendors, Trends in ERP, Future Directions in ERP.

(10 Hours)

Unit III

SCM: An Introduction, Concepts, Issues in Supply Chain Management, Customer Focus and Distribution Management, Logistics Framework – Concept, Objective and Scope, SCM Technologies – EDI, Internet Enabled SCM, E-Marketplaces, Online Auctions, Collaborative Planning, Forecasting and Replenishment (CPFR);

(12 Hours)

Unit IV

CRM: An Introduction, Concepts of Relationship Management, e-CRM as a Strategic Marketing Tool, Elements of e-CRM, CRM Process, Models of e-CRM, CRM Planning and Implementation, CRM Applications, Trends in CRM.

(10 Hours)

Text Books

1. Luvai Motiwala (2008). Enterprise Systems for Management, Pearson Education.
2. David Olson and Subodh Kesharwani, (2007), Enterprise Information Systems: Contemporary Trends and Issues," World Scientific.Pub.

Reference Books

1. Alexis Leon (2014), ERP Demystified, 3/e Paperback, McGraw Hill Education.
2. Peelan, Ed. (2009) Customer Relationship Management, 1/e, Pearson Education..
3. Sunil Chopra and Peter Meindl, D V Kalra, (2016) Supply Chain Management: Strategy, Planning and Operations, 6/e, Pearson Education.
4. Judith M Myerson, Enterprise Systems Integration: Best Practices Series, 2nd Edition, Auerbach Publications

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

MASTER OF BUSINESS ADMINISTRATION (MBA)

Database Management Systems

Course Code: MS-247

L-3 Credits: 2

Objective: This course will help students to understand how databases can be used to store an organization's information.

Course Contents

Unit I

Purpose, Advantages and Disadvantages of DBMS: Data Models, Schemas and Instances, DBMS Architecture and Data Independence, Types of DBMS – Hierarchical, Network, Relational, Object-Oriented and Object Relational. **(06 Hours)**

Unit II

ER-Model: Basic concepts, Design Issues, Mapping Constraints, Keys, E-R Diagram, :Design of an ER Database Schema, Reduction of E-R Schema to Tables. **SQL:** Background, Basic Structure, Set Operations, Aggregate Functions, Null Values, Nested Sub Queries, Derived Relations, Views, Modification of Database, Joined Relations, Data Definition Language, Domain Constraints, Referential Integrity. **(08 Hours)**

Unit III

Oracle: Basic Architecture, Data Definition, Data Manipulation (LIKE Operator, String Commands, Numeric Function, Date Function, Translate and Decode Function), Introduction to PL/SQL (Conditional, Logic, Loops, Go to Statements, Exceptional Handling, Triggers, Procedures, Functions, Cursor, LOB's). **(08 Hours)**

Unit IV

Structure of Relational Databases, Relational Algebra, Functional Dependencies, Normal forms NF1, NF2, NF3 and BCNF, Multivalued Dependencies and Fourth Normal Form, Join Dependencies and Fifth Normal Form. Transaction, Concurrency: ACID Properties, Transaction State, Locks, Deadlock Condition, Two- Phase Locking Protocol. **(06 Hours)**

Text Books

1. Silberschatz, A, Korth H and Sudarshan S (2013), Database System Concepts, 6/e, McGraw- Hill Education.
2. Elmsari R. and Navathe S. (2013), Fundamentals of Database Systems, 6/e, Pearson Education.

Reference Books

1. Koch, G. & Loney, K. (2008), Oracle 11g, The complete reference. Mc GrawHill Education.
2. Bipin C. Desai (2000), Introduction to Database Management System, Galgotia Publication.
3. Singh, Shio Kumar, Database Systems: Concepts, Design and Applications, 2/e, Pearson Education.
4. Rob. Peter (2010), Data base system concepts, 1/e, Cengage Learning India Pvt. Ltd.

GURU GOBINDSINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

MASTER OF BUSINESS ADMINISTRATION (MBA)

Operations and Supply Chain Management

Course Code: MS-263

L – 3, Credits – 3

Course Outcomes: With the growth of e-business, Supply Chain Management has become essential part of business. After completion of the course the students will able to learn the concepts of materials management, inventory management and their integration of Supply Chain Management.

Course Contents

Unit 1:

Materials Management: Objectives and importance, Materials planning and control. Material Classification, Need and usage of classification, Single-dimensional classification, Multidimensional classifications; Materials Codification, Usage of codification, Codification types; Purchase Management: Objectives, functions, policies, Outsourcing: make or buy decisions, vendor development and rating.

(10 Hours)

Unit 2:

Storage and warehousing concepts, Receipt, Warehouse type, Layout, issue of materials and updation of records; Manpower and equipment. Inventory Management: Various costs in inventory management and need : Deterministic models and discounts, Probabilistic inventory management. Role of inventory management in SCM

(10 Hours)

Unit 3:

Introduction to supply chain: Definition, Structure, complexity, key issues, Centralized vs. decentralized systems, Strategic Decisions. **Value of information and supply chain integration:** Bullwhip effect, Push-based, pull based systems.

(10 Hours)

Unit 4: Transportation decision: Drivers of the decision, Network design decisions, Cross-docking, transshipment. **Distribution and logistics in supply chains:** Direct shipment /intermediate storage policies, Vehicle routing models, Third-party logistics; **Information technology in supply chain:** Enabling supply chain through IT, ERP vendor platforms, Service oriented architecture (SOA), RFID, Global perspectives. Supply Chain Performance Management.

(12 Hours)

Text Books:

1. Bedi, K. , (2016) *Production and Operations Management*, 3rd Edition, Oxford University Press.
2. Krajewski, L.J., Ritzman, L.P., Srivastava, S.K., Malhotra, M.K., *Operations Management ; Process and Supply Chains*, 13 edition, Pearson Education

Reference Books:

1. Chopra, S., Meindl, P., *Supply Chain Management*, 7th edition, Pearson Education.
2. Chandrasekaran, N. (2010), *Supply Chain Management: Process, System and Practice*, 1st edition, Oxford University Press.

GURU GOBINDSINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

MASTER OF BUSINESS ADMINISTRATION (MBA)

Advance Business Analytics

Course Code: MS-265

L – 3, Credits – 3

Course Outcomes: The availability of large data in the organizations are compelling them find patterns in them for better decision making. This course will help the students to analyze the data using data exploration and modeling techniques

Course Contents

Unit I:

Understanding business analytic, Importance of data in business, Framework of business analytics, Basics of R programming-Basics of R, Introduction to R libraries, Data structures and data types in R, Operators, control structures and functions in R, Lists and data frames
(12 hours)

Unit II:

Data preparation: Treatment of missing values, Identification of outliers and Erroneous data, Data Visualization Techniques ,Dimension Reduction Techniques- Principal Component Analysis
(10 hours)

Unit III:

Supervised learning: Regression – Simple, multiple and logistic regression, K Nearest Neighbors (KNN); **Unsupervised learning:** Clustering analysis, Association Rule Learning.
(12 Hours)

Unit IV:

Time series analysis and forecasting: Time series patterns, forecast accuracy, moving averages and exponential smoothing, using regression analysis for forecasting.
(10 Hours)

Text Books:

1. Camm, J.D. et al. (2015) . Essentials of Business Analytics. Cengage Learning
2. Acharya, S (2018). Data Analytics using R. McGraw Hill Education

Reference Books:

1. Rakshit, S (2017). R for Beginners. McGraw Hill Education
2. Prasad, R.N and Acharya, s. (2017). Fundamentals of Business Analytics. Wiley

GURU GOBINDSINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

MASTER OF BUSINESS ADMINISTRATION (MBA)

Services Operations Management

Course Code: MS-267

L – 3, Credits – 3

Course Outcomes: Develop an understanding of the terminology and responsibilities that relate to Service Operations Management. Learn to apply analytical tools and skill in managing issues associated with operating the service operations system.

Course Contents

Unit I:

Introduction: Nature & Role of Services in Economy; Service Operations and their Management Fundamentals; Service Strategy; Positioning of Services in the Organization Value Chain, Classification of services and analyzing service operations, Service system design and delivery process. Technology & automation in services. e services and Self-service technologies, Digital Accessibility issues, Service encounter. **(10 Hours)**

Unit II:

Quality Service by Design, Service process control, Service process control, Quality philosophy and performance excellence, Service recovery and Service guarantee, Service facility design :Process analysis of facility layouts, Facility location decision factors, Quantitative models for facility location, Quantitative models for multiple service facilities. **(10 Hours)**

Unit III:

Demand Management In Services: Forecasting Demand In Services, Smoothing Customer Demand In Services, Service Capacity Management. Managing Waiting Lines & Queuing Models :Yield management, Resource and Workforce Scheduling in Services, Introduction to Queuing System, Characteristics of Queuing system, - Queuing Models. **(12 Hours)**

Unit IV:

Service Inventory and Supply Chain Management: Service Inventory Management. Service Supply Chains, Processes in Service Supply Chain; Quantitative Models In Managing Service Operations: Data Envelopment Analysis, Application of simulation in service operations management, Vehicle routing and scheduling. **(10 Hours)**

Text Books:

1. Johnston, R., & Clark, G. (2008). Service operations management: improving service delivery. Pearson Education.
2. Fitzsimmons, J. A., Fitzsimmons, M. J., & Bordoloi, S. (2018). Service management: Operations, strategy, information technology, New York, NY: McGraw-Hill.

Reference Books:

1. Haksever, C., & Render, B. (2017). Service and Operations Management. World Scientific Publishing Company.
2. Van Hove, S., & Thomas, M. (2016). Pragmatic application of service management: the five anchor approach. It Governance Ltd.

GURU GOBINDSINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

MASTER OF BUSINESS ADMINISTRATION (MBA)

Project Management

Course Code: MS-269

L-3 Credits-3

Objective: The Course aims at making the student understand the concept of Project and its management by understanding the various tools and techniques that are used in managing a project from Planning to Control.

Course Contents

Unit I:

Project Identification and Selection: Introduction, Project Identification Process, Project Initiation, Pre-Feasibility Study, Feasibility Studies, Project Break-even point and its managerial implications.

(10 Hours)

Unit II:

Project Planning and Recourse Consideration: Introduction, Project Planning, Need of Project Planning, Project Life Cycle, Roles, Responsibility and Team Work, Project Planning Process, Resources Considerations in Projects, Resource Allocation, Scheduling, Project Cost Estimate and Budgets, Project Scheduling/Network Techniques in Project Management: CPM and PERT Analysis; Float Times; Crashing of Activities; Contraction of Network for Cost Optimization, Updating; Cost Analysis of Resources Allocation.

(12 Hours)

Unit III:

Organizational Structure and Quality Issues: Introduction, Concept of Organizational Structure, Roles and Responsibilities of Project Leader, Relationship between Project Manager and Line Manager, Leadership Styles for Project Managers, Conflict Resolution, Team Management and Diversity Management, Change management, Project Quality Management, Quality Concepts, Value Engineering process.

(10 Hours)

Unit IV:

Project Risk Management, performance management and control:: Introduction, types of Risks, risk Management, Role of Risk Management in Overall Project Management, Steps in Risk Management, Risk Identification, Risk Analysis, Reducing Risks, Project Performance Measurement, Performance Measurement Matrix, Productivity, Project Performance Evaluation, Benefits and Challenges of Performance Measurement and Evaluation, Controlling the Projects-Project Execution, Project Control Process.

(10 Hours)

Note: The above course shall include 08 hours of Lab Training on a Project Management Software.

Text Books

1. Chadra P. (2014), Projects: Planning, Analysis, Selection, Financing, Implementation, and Review, 8/e, McGraw Hill Education, Delhi.
2. Jeffry K. Pinto (2009), Project Management, 1/e, Pearson Education.

Reference Book

1. Panneerselvam. R. and Senthilkumar. P., (2009) Project Management. Prentice Hall of India Pvt. Ltd.
2. Choudhury, S, (2001), Project Management, 1/e, Mc GrawHill Education.
3. Bhavesh, M. Patel (2009), Project Management: Strategic Financial Planning Evaluation and Control, Vikas Publishing House Pvt. Ltd, Delhi.
4. Harvey Maylor, Project Management, 3/e, Pearson Education.

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI
MASTER OF BUSINESS ADMINISTRATION (MBA)
Database Management Systems Lab.

Course Code: MS 261

L –0 P-02 Credits: 01

Course Contents This course will be based on MS 247 Database Management Systems Course and is part of it.

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

MASTER OF BUSINESS ADMINISTRATION (MBA)

Internet Marketing

Course Code: MS-216

L-3 Credits: 3

Objectives: This course aims at creating an understanding of the concepts and techniques of internet marketing so as to exploit the opportunities of this medium to support the organization's marketing activities.

Course Contents

Unit 1

Introduction to Internet Marketing: Meaning, scope and importance of internet marketing, Application of internet marketing, Internet versus traditional marketing communication: the internet microenvironment; Business to Consumer and Business to Business Internet Marketing; E-Marketing Research; Internet marketing strategy. **(10 hours)**

Unit 2

Online buyer behaviour and Models; The Marketing Mix in an online context; Managing the Online Customer Experience: Planning website design, Understanding site user requirement, site design and structure, developing and testing content, e-Service quality **(10 hours)**

Unit 3

Characteristics of Interactive Marketing Communications; Integrated Internet Marketing Communications (IIMC); Objectives and Measurement of Interactive marketing communication; Online Promotion Techniques: Search Engine Marketing & SEO, Online PR, Interactive Advertising, Online Partnerships, Viral Marketing, Opt-in-e-mail, Offline Communications; e-CRM **(10 hours)**

Unit 4

Social Media Marketing: Meaning, Scope and Importance; SMM Plan – Goals and Strategies Rules of Engagement & Ethical Issues, Publishing Blogs and Webinars, Sharing Videos/ Images, Social Networks, Microblogging; Mobile Computing and Location Marketing. Social Media Monitoring, Social Media Marketing Plan. **(12 hours)**

The above course shall include Lab work of a minimum of 8 Hours, covering practical aspects.

Text Books

1. Chaffey, D., Ellis-Chadwick, F., Johnston, K. and Mayer, R. (2009) Internet Marketing: Strategy, Implementation and Practice, Third Edition, Pearson Education, New Delhi.
2. Barker, M., Barker, D., Bormann, N., Neher, N. (2013), Social Media Marketing A Strategic Approach, Cengage Learning, New Delhi.

Reference Books

1. Strauss, Judy and Frost, Raymond (2016), E-Marketing, 7th Edition, Pearson Education.
2. Gay, R., Charleworth, A., Esen, R., (2014), Online Marketing – A Customer Led Approach, Oxford University Press, New Delhi
3. Solomon, M.R., Tuten, T., (2015), Social Media Marketing, Pearson Education.
4. Hanson, W. and Kalyanam, (2010), e-Commerce and Web Marketing, 1st Edition,, Cengage Learning, New Delhi.

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI
MASTER OF BUSINESS ADMINISTRATION (MBA)

Digitalization and E-governance

Course Code: MS 236

L-3 Credits: 3

Objective: The course is aimed at providing exposure and making the students aware about the role of IT in business enterprises and government enterprises through electronic governance.

Course Content:

Unit I

Overview of Digitalization, Digitalization for growth and Innovation: How digitalization leads to disruption and change of competition, IT and Business Advantage: Overview of Business Models, IT Impact on Business Models, IT Business Value, Developing the business case for IT. Understanding IT Infrastructure, Reliable and Secure IT Services. Governance and the IT function. Application of IT in digital governance. **(08 Hours)**

Unit II

Understanding IT Infrastructure, Emerging Trends in IT Infrastructure acquisition and Service delivery, Managing a networked Organization, Organizational Issues in Managing and Controlling IT function, Managing IT Outsourcing: Why, What and When to outsource. **(12 Hours)**

Unit III

E-Governance: Meaning of E-governance, Understanding the Evolution of e-Governance in the Indian and Global Context, Benefits of e-governance; Developing a strategic perspective on E-Governance, Models of e-governance, E-governance action plan: National e-Governance Plan (NeGP), E-governance Infrastructure: Data Centres, State wide area networks (SWAN), National Service Delivery Gateways (NSDG), and Common Service Centres. **(10 Hours)**

Unit IV

Life Cycle of an e-Government Project, Critical Success Factors in implementing e-Governance. Public Private Partnership for e-Governance Project, Managing a e-Governance project, Change Management and Capacity Building for e-Governance, Information Security Management, Technology architecture for e-Governance - Enterprise Applications and Open Source for e-Governance, Regulatory framework for e-Governance (IT Act) **(12 Hours)**

Text Books:

1. Lynda M. Applegate, Robert D. Austin, Deborah L. Soule (2009), Corporate Information Strategy and Management, 8/e Mc GrawHill Education.
2. Vinod Kumar T.M. (2015), E-governance for Smart Cities, Springer.

Reference Books:

1. S. Pankaj (2013). Electronic Governance, APH Publishing.
2. Obi.T. (2009) E-governance: A Global Perspective on a new Paradigm, Vol-I IOS Press.
3. Nanditha Das (2014). E-governance and Social Inclusion: Concepts and Cases, IGI Global Press.

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI
MASTER OF BUSINESS ADMINISTRATION (MBA)
Web Technologies

Course Code: MS-240

L-2, Credits-2

Objective: To familiarize the students with trends in Web Technologies.

Course contents:

Unit I

Web Servers: HTTP Request Types, Introduction to Microsoft IIS, Features, Creating Virtual Directory. **(07 Hours)**

Unit II

HTML and DHTML: Creating forms and tables in HTML, Client Side Validations Using JavaScript, Cascading Style Sheets. **(07 Hours)**

Unit III

Active Server Pages: Working with ASP Pages, ASP Objects, Session Tracking and Cookies, ActiveX Data Objects. **(07 Hours)**

Unit IV

Connecting ASP Pages with Databases: ADO connection object, Record set, Accessing a Database from Active Server Page. **(07 Hours)**

Text Books:

1. John A. Roussel (2003), Mastering ASP. BPB Publication.
1. Mitchell Scott and James Atkinson (2002), Teach Yourself Active Server Pages 3.0 in 21 Days. Techmedia – India Publications

Reference Books:

1. Deitel & Deitel, Goldberg (2009), Internet & World Wide Web, Fourth edition. Pearson Education.
2. Jackson C. Jeffery (2014), Web Technologies, 1/e, Pearson Education.
3. Uttam K. Roy, (2010), Web Technologies, Oxford.
4. Puntambekar A.A., (2009), Web Technologies, Technical Publications.

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY, NEW DELHI
MASTER OF BUSINESS ADMINISTRATION (MBA)
Web Technologies Lab

Course Code: MS-252

L-2, Credits-1

Course Contents: This course will be based on MS 240 Web Technologies and is part of it.

GURU GOBINDSINGH INDRAPRASTHA UNIVERSITY, NEW DELHI

MASTER OF BUSINESS ADMINISTRATION (MBA)

Supply Chain Analytics

Course Code: MS-254

L – 3, Credits – 3

Course Outcomes: Students learn to apply analytics for effective supply chain strategies and decisions that serve the needs of the customers whilst maximizing overall profitability of an enterprise.

Course Contents

Unit I:

Evolution of Supply Chain Management, Supply Chain Strategy, Supply Chain Drivers, Supply Chain Planning. Analytics in Supply Chain Management, importance of supply chain analytics in the flows involving material, money, information and ownership, Decision Domains in supply chain analytics, Application of Descriptive Analytics, Predictive Analytics and Prescriptive Analytics in a Supply Chain: An overview **(12 hours)**

Unit II:

Descriptive Analytics in a Supply Chain, Data aggregation and data mining, insights regarding the company's production, financials, operations, sales, finance, inventory and customers. Bullwhip Effect and Time Series Analysis, Transportation problem in a Supply Chain. Predictive Analytics and related technologies: Introduction to machine learning and cloud-based inventory management solutions, Applications in inventory management, pricing and maintenance, Forecasting using multiple characteristics in Demand Data and Inventory Management. **(10 Hours)**

Unit III:

Prescriptive analytics and scenario planning, Design of Logistics Network using Heuristics/optimization, Optimal Level of Product Availability in Supply chain, Using Excel Solver for Network Optimization, Network Design in Uncertain environment and Flexibility. **(10 hours)**

Unit IV:

Introduction to Modelling, Approaches for Optimization and Simulation, Modelling software, Basics of Modelling, Supply chain applications using R ,Trends, Challenges and Future of Supply Chain **(10 Hours)**

Text Books:

1. Drake, M. J. (2013). The Applied Business Analytics Casebook: Applications in Supply Chain Management, Operations Management, and Operations Research. Pearson Education.
2. Laursen, G. H., & Thorlund, J. (2016). Business analytics for managers: Taking business intelligence beyond reporting. John Wiley & Sons.

Reference Books:

1. Feigin, G. (2011). Supply Chain Planning and Analytics: The Right Product in the Right Place at the Right Time Business Expert Press.
2. Barlow, M. (2015). Learning to Love Data Science: Explorations of Emerging Technologies and Platforms for Predictive Analytics, Machine Learning, Digital Manufacturing and Supply Chain Optimization. " O'Reilly Media, Inc."
3. Plenert, G. (2014). Supply chain optimization through segmentation and analytics. CRC Press.