MSL301 Organization & People Management
3 Credits (3-0-0)
Lectures on multidisciplinary perspective on organizations, Organization structure & Design, Organizational stakeholder Ethics, Organizational Culture, Organizational Environment, Strategy and Structure, Technology and organizational structures, Lifecycle of an organization will be supported with case studies & exercises.

MSL302 Managerial Accounting & Financial Management
3 Credits (3-0-0)
On completion of this course the student will be able to: Understand accounting for managerial decisions. Assess financial health of a corporate firm. Design profit planning. Understand cost concepts and financial decision making.

MSL303 Marketing Management
3 Credits (3-0-0)
Marketing concept, Environment of Marketing, Marketing Strategy, Marketing Ethics, Marketing Planning, Concept of Product life cycle, Pricing, Advertising and Promotion Strategies, Concept of Unique selling proposition, Product and Brand Management, Marketing Research Methodologies, Case study discussions.

MSL304 Managing Operations
3 Credits (3-0-0)
The objective of the course is to provide the students about the application of Industrial management in various functional areas of business especially industrial operations such as linear programming, assignment and transportation problem, layout/location design, quality, materials management, Preventive maintenance, project management, supply chain management, scheduling/sequencing, ergonomics, operations strategy. The entire course is a case based where the participants will be given a case. Participants will be asked to tackle the case problem without using linear programming techniques.

MSL305 New Venture Creation
3 Credits (2-0-2)

MSL306 Ideation & Prototyping
3 Credits (3-0-0)
Module I: Framework for changing environment, Criteria and perimeter definition for relevance, Idea potential Recognition, Incorporating environmental factors into idea development, Venture life cycle of ideation, planning, implementation, Understanding social cultural, politico-legal & economic dimensions of the environment, opportunities and challenges, Macroeconomic indicators relevant to an idea, Demand estimation for emerging market, Policy regime changes and opportunities, Global Economic Environment impact on Indian markets, Changing Social Paradigms & Evolving Technology.

Module II: Understanding consumer behaviour as a prerequisite for marketing plan and strategy, Consumer discovery: Consumer location, Market analytics, Psychographic and demographic profile, Income levels, geography and culture); Product knowledge and involvement; Reasons for the purchase; Decision making process of the consumer, Pain points of potential consumer. Pricing, Product features, Service quality, Delivery, Consumer need analysis, Consumer's environment (Physical and social), Cultural influences, Family influence, Family decision making, Demographic changes in family. Consumer socialisation.


MSL307 Venture Financing & Teaming
3 Credits (3-0-0)
Pre-requisite(s): MSL305, MSL306
Module I: Early Stage venture financial sourcing and utilization, Art of Bootstrapping: Emphasize the significance, switch to external funding.
Module II: Process, options and strategy of acquiring resources
Module III: Attracting Investment at early stage: Dwell on idea communication, trust building and sourcing of early investors into the venture along with comparative evaluation of early investment opportunities.
Module IV: Early Stage Valuation Models, tools of financial valuation. The role of valuation in investment decisions faced by entrepreneurs and investors.
Module V: Art and science of utilizing and managing resources.
Module VI: Team Synergy and Engagement Terms: Challenges, long-term payoffs of high-performance synergized teaming, an early stage venture. Real-world case studies on entrepreneurial finance.

MSD308 Product Viability & Market Traction
1.5 Credits (0-0-3)
Pre-requisite(s): MSL305, MSL306, MSL307

MSD309 Business Plan & Funding
1.5 Credits (0-0-3)
Pre-requisite(s): MSL305, MSL306, MSL307, MSD308
MSL310 Financial Institutions and Markets  
3 Credits (3-0-0)  
Introduction to the financial markets including debt, equity, derivative, and foreign exchange markets, various types of securities issued and traded in these markets, why these securities are issued, what are the risks associated with these securities, and how these risks are managed. This course also covers roles played by different financial institutions in an economy and regulatory framework surrounding financial markets.

MSL401 Entrepreneurial Design Thinking  
3 Credits (3-0-0)  

MSL402 Social Innovation & Entrepreneurship  
3 Credits (3-0-0)  


MSL403 Entrepreneurial Market Strategies  
3 Credits (3-0-0)  
Process & Discipline of Market Sensing, Value Proposition for Relevant Stakeholders, Go to Market (GTM), Developing Profitable Core Product Design.


Distribution Channel Decisions, Sales Planning & Execution & Installing Processes, Systems for Sales Productivity, Sales Force Recruitment and Training, Sales Script Design for Direct Marketing, Cold Calling, Closing Sales Deal, Managing Sales Process.


MSL404 Entrepreneurial Business Development  
3 Credits (3-0-0)  


Role of Technology in Building and Managing Core Relationships. Tech-enabled Systems for Building and Managing Core Relationships (CRM), Productivity Tools to Manage Core Relations. ERP Tools for Startups and Mid-Size Companies, Social Media Usage to Move Strategic Agenda, Consistency in Personal Integrity, Principles, Morals and Obligations, Art of De-learning, Relearning and Applying New Skills, Harvesting Assets in Perpetuity, Framing Existing Relationships and Linkages.

MSL405 Financial Accounting & Compliance for Startups  
3 Credits (3-0-0)  

MSL406 Company Law, Governance, IPR & Legal Issues for Startups  
3 Credits (3-0-0)  

MSL407 Corporate Innovation & Entrepreneurship  
3 Credits (3-0-0)  
Intrapreneurship Concept, Intrapreneurship & Entrepreneurship Distinction, Corporate Experiences in Intrapreneurship, Intrapreneurial initiatives in Matured Organizations, Sensing Emerging Corporate
Opportunities, Corporate Learning from Intrapreneurial Initiatives
Failures, Intrapreneurial Strategies, Cross-Functional Teams
for Intrapreneurship, Corporate Innovation, Innovation and
Intrapreneurship, Growth stagnation in Successful Firms, Sources of
Organisational Rigidity, Organisational Fatigue in Market Response,
Rekindling 'Innovation', New Business Creation, Measuring/
Tracking Intrapreneurship, Channeling organisational resources for
Intrapreneurship, Intrapreneurial Environment to Sustain Initiatives,
Processes for Overcoming Organizational Inertia.
Implementing Intrapreneurial Changes, Challenges Implementing
Initiatives, Resolving Implementation Challenges, Intrapreneurial
Leadership, Intrapreneurial Talent Recruitment, Lateral Entrepreneurial
Potential, Entrepreneurial Team Building Strategies, Cross-
Functional Team Effectiveness, Methodologies for Group Dynamics,
Decision Making, Power, and Conflict in Intrapreneurial Teams.
Innovative Networks Idea Sourcing, Key Individuals and Organisations
in External Environment, Internal Venturing, In-house Incubation,
Corporate Incubation in Entrepreneurial Ecosystem, Framework for
Culture of Intrapreneurship.

MSL408 Startup Performance Management
3 Credits (3-0-0)
Management Processes for Startups, Defining & Setting Strategic
Intent for Startups, Dynamic Timelines and Benchmarks, Measuring
Financial and Non-financial Startup Performance, Qualitative
and Quantitative Performance Metrics, Continuous Performance
Feedback System.

Entrepreneurial Leadership, Leadership Issues in Entrepreneurial
Setups, Functions as Entrepreneurial Leader, Transformational
Enactment, Mental Models and Behaviour as Leader, Uncertainty
Sense-making, Perceptual Barriers and Stereotypes, Integrative
Actions, Motivation Building, Learning Ability of Founders, Acquire,
Develop and Retain Entrepreneurial Talent, Environment for
Entrepreneurial Transformation, Supporting key Stakeholders, Flexible
Resource Deployment, Dynamic Capabilities for Startups, Leadership
with Growth, Succession Management.

Strategic Management of Startups, Intent to Create Value,
Process of Strategy Evolution, Balancing Emerging Stakeholder
Expectations, Positioning for Potential Competition, New Venture
Dynamic Capabilities, Strategic Implementation of Venture Business
Model, Building New Capabilities from Success and Failure Cycle,
Auditing Assets, Process, Capabilities and Competences, Dynamically
Managing Capabilities, Continuous Improvement, stray
Sustainable Leadership Qualities for Entrepreneurs.

MSL409 Entrepreneurship and Life Balance
3 Credits (3-0-0)
Execution of Smart Life Plan, Internal Origins of Novel Ideas, Value
Creation and Life View, Cost-benefit of an Entrepreneurial Aspiration,
Aspiration Level on Time Scale, Family Ecosystem, Entrepreneurial
Aspiration Acceptance by Family and Society, Appropriate and Effective
Communication in Relationships, Art of Sharing Entrepreneurial Ideas
with Family and Friends, Family Participation in Startup Decisions.

Balance as Contributor to Venture Success & Sustainability, Time
Management, Setting Work Boundaries, Role of Determination,
Aspiration and Time as a Resource, Scheduling & Prioritising Life,
Wisdom Managing Personal Responsibilities, Planning and Flexibility
Entrepreneurial time, Planning Open Time, Personal/Spiritual
Development.

Staying Inspired. Continuous Learning, Initiating New Work Culture,
Blending Formal and Informal Work Environments, Motivation
and Fairness in Startup Environment, Aligning and Motivating
Valued Employees for Personal Fulfillment. Anticipating & Planning
for Entrepreneurial Risk, Preparing Startup Team for Exigencies,
Managing Personal Impact from Startup Failures, Communicating
Start-up Failures, Extracting Learnings from Startup Failures, Life of
Serial Entrepreneurs, Life of Successful Entrepreneurs, Life Quality
Issues for Entrepreneurs.

MSL700 Fundamentals of Management of Technology
3 Credits (3-0-0)
Module I: Understanding technology: definition, Key concepts, role,
importance, need. History of technological developments. Today’s
Technology-Management integration, Life cycle approach to
technology management. Technology innovation process. Managing
and fostering the Innovation.

Module II: Technology forecasting and assessment. Technology
flow and diffusion. Evaluating technology, technology planning and
strategy; Strategic potential of new technology. Factors promoting
technology acquisition, Flexibility in Technology Management.
Technology transfer and absorption, Modes of global technology
transfer. Technological Entrepreneurial.

Module III: Technology implementation. Integrating people and
technology, human factors in technology operations. Organisation
structure and technology. Investing for technological maintenance
and growth. Concern of phasing out and upgradation. Market
factors in technology operations, Science and Technology Policy.
Technology support systems. Information networking for technological
updatedness.

MSL701 Strategic Technology Management
3 Credits (3-0-0)
Module I: Emerging technology-strategy relationship in the large
corporation from the perspective of individual firm, and entire industry.
Global technology comparison, technological change, sources of
technology, Technology Information. Criticality of technology for
growth, core competencies, R&D productivity, Resource Leverage.
World Class Organisation.

Module II: Corporate technology strategy, Generic competitive
technology strategies. Corporate R&D, Strategic technology
management process, relationship between technology strategy
and corporate strategy. Strategic shifts and resource commitments,
technology vision and goals, technology leadership. SWOT analysis
for technology, Matching Business Portfolio and Technology Portfolio,
Technology- Market matrix. Innovation and entry strategy, Flexibility
in Technology strategy.

Module III: Business/technology alliances and networks. Technology
forecasting and assessment. Technology strategy at business level.
Strategic Technology Planning. Investment in Technology, Technology
Strategy and functional strategy. Implementation and Control of
technology strategy, Managing Corporate culture, structure, and
interdepartmental linkages.

MSL702 Management of Innovation and R&D
3 Credits (3-0-0)
Module I: Technological innovation systems and processes.
Understanding the process of technological innovation and the
factors affecting successful innovation. Management problems from
the product/service concept-stage to end-product/service marketing.
Creativity and Innovation- Creativity process, Individual and group
creativity, Critical functions in the innovation process, Evolving
innovative culture, teams for innovation.

Module II: Product and technology life cycle. Management of R&D
planning, organising, staffing, scheduling, Controlling, budgeting,
Selection of R&D projects. Methodologies for evaluating the
effectiveness of R&D, Research Productivity. Protection of Intellectual
Property Rights. Evolving flexible organisation.

Module III: Issues relating to managing scientists and technologists
as individual, in teams, and in large organisations. Human
Resource Management in R&D and Innovation, training, motivation,
communication, group dynamics. Information management for
innovation and R&D- strategies, sources, channels, and flows.
Standardisation and Quality management.

MSL703 Management of Technology Transfer and
Absorption
3 Credits (3-0-0)
Module I: Transfer of technology from R&D to field and at
international level. Commercialization of new technology and new
venture management, prototyping, test marketing, pilot plant, project viability. Technology push and market pull. Quality management, customer education and awareness. Assessment, justification and financing of new technology, source of funds, venture capital financing. New venture products and services.

**Module II:** Global transfer of technology, Technology transfer models: Active, passive. Multi channel approach: from hardware technical services acquisitions to strategic partnering and networking arrangements. Sourcing technology, technology negotiation, licensing agreement. Fee for technology transfer, royalty, equity participation. Modes: technological collaboration, joint venture, alliance, acquisition. International S&T cooperation: institutional framework, multilateral/bilateral cooperation, pre-emptive R&D cooperation.


**MSL704 Science & Technology Policy Systems**

3 Credits (3-0-0)

**Module I:** Role of S&T in economic development, Modern analysis of growth and structural change, international economic relations, liberalisation, globalisation/ regionalisation, industrial/technological partnership. The role of S&T in Indian Economy, Policy, Government evolution and its impacts on technology development. Living with the new technology, social issues. International trends, Technology policy in USA, Japan, European Commission, and other select countries.


**MSL705 HRM Systems**

1.5 Credits (1.5-0-0)

This course focuses on various functions of human resource management. It begins with the context and evolution of HR, followed by functions of HR via cases and various exercises. Manpower planning, job design, recruitment & selection, training & development, performance appraisal & management, compensation & reward management and career management, legal issues in HRM are the topics covered.

**MSL706 Business Laws**

3 Credits (3-0-0)


**Module III:** Negotiable Instrumented act. Definition and characteristic of Negotiable instrument. Liabilities of Parties to Negotiable Instruments. Brief exposure to Company law including incorporation of a company - objects, registration, article of association, raising capital from public, company management and reconstruction, amalgamation and winding up.

**MSL707 Management Accounting**

3 Credits (3-0-0)

On completion of this course the student will be able to: Understand accounting principles governing preparation of financial statements. Assess financial health of a corporate firm. Design profit planning, Understand cost control systems. Understand techniques of pricing, product and capital budgeting decisions.

**MSL708 Financial Management**

3 Credits (3-0-0)

The course is comprehensive and is designed to equip the students with tools and techniques to enable them to make sound financial decisions, among others, related to capital budgeting, working capital, capital structure and dividend policy.

**MSL709 Business Research Methods**

1.5 Credits (1.5-0-0)

Pre-requisite(s): MSL301 & MSL302

Introduction to Business Research Methods; Theoretical approaches; Problem definition; Research Design; Questionnaires & Scales; Sampling - Probability, size and challenges; Survey & Observation, Experiments; Qualitative Research, Secondary Data; Data Preparation & Analysis, Report Writing.

**MSL710 Creative Problem Solving**

3 Credits (3-0-0)

**Module I:** Structure of managerial problems. Open and close ended problems, convergent and divergent thinking. The creativity process, Individual and group creativity, Idea generation methods: Brain storming, Nominal Group Technique, Idea Engineering, Check list, Attribute listing, Morphological analysis, Synectics, Mental Imaging, Critical Questioning. Total System Intervention, Flexible Systems Methodology.

**Module II:** Idea Structuring: Graphic tools, Programme Planning Linkages, Interpretive Structural Modelling, Relationship Analysis, Flexible Systems Management, SAP-LAP Analysis, Flexibility Influence Diagrams, Collaboration Diagrams. Scenario Building: Harva method, Structural Analysis, Options Field/Profile Methodology.


**MSL711 Strategic Management**

3 Credits (3-0-0)

Understanding new perspectives on strategic management, Content and process of strategic management. Strategic formulation and implementation of strategies, Developing cross-functional trade-off decision making skills, and Help appreciate new themes in strategic management. This course will require reading books, articles, case studies and literature from the field of Strategic Management. The sessions would be interactive where attempt will be made to understand the theories and concepts through discussion of the readings and their application in cases. Student will be required to prepare and effectively participate in class and make impromptu or scheduled presentations of issues and learnings. Besides the readings, groups of students will have to work on a comprehensive research project to investigate and validate some of the key learnings.

**MSL712 Ethics & Values Based Leadership**

1.5 Credits (1.5-0-0)

Pre-requisite(s): MSL301 & MSL302

MSL713 Information Systems Management
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302
This course may expose the participants to the following topics: Information Systems and its impact in Organization and People, Information Technologies: concepts, types and usage, Information Systems, Organizations and Strategy, Economics of Information Systems, Foundations of E-Business, Foundations of Data management, Foundations of Business Analytics, Networks and Collaboration as Business Solutions, Information Security & Risk Management, Building and Managing Systems, Enterprise Systems, etc. Hands on training would also be provided, using specific tools.

MSL714 Organizational Dynamics and Environment
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302
Module I : Organizational systems vix. a vis., the environment. The dialectics of agency and structure- extent of environmental and organizational control. External control of organization. Organizations and the new institutionalism. Systems for managing chaos and conflict.
Module II : Constituent systems for organizational functioning-planning, learning, organising, communication and control systems. Organizational systems and mechanisms related to technology. Systems for managing strategy, and structure related to new technology.
Module III : Systems for managing continuous and radical change for organizational renewal and transformation. Adaptiveness and flexibility in organisational systems. Systems for managing collective action within the organization. Feminism and organizational systems for managing gender diversity.

MSL715 Quality and Environment Management Systems
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302

MSL716 Fundamentals of Management Systems
3 Credits (3-0-0)

MSL717 Business Systems Analysis & Design
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302
This course will have the following topics: System Analysis Fundamentals: Introducing SADSD for Systems Professionals, Analyzing the Business Case and Managing Systems Projects, Overview to Data Structure in Systems Modeling, Data Flow Diagrams and Modelling DFDD, Requirements Modelling and Systems Specification, User Driven Business Analysis, Role of the consultant, Object Oriented Modelling: Object Relationships, Hierarchies. Use Case Approaches to identify and model classes, Process Driven Approaches: Gane, Sarson and Yourdon techniques, Data Driven Approaches: Entity Relationship Diagrams, Designing the User Interface and Output, Verification & Validation of new systems.

MSL718 Management of Blockchain Technology
1.5 Credits (1.5-0-0)
Fundamental building blocks of blockchain. Concepts of distributed databases, blocks, encryption, and overall scope of blockchain. Understanding implications and applications of blockchain characteristics like decentralization, immutability, transparency, disintermediation, sharability, privacy, security, authentication, traceability, auditability, data integrity and efficiency, Applications in agriculture; banking; management; finance, capital markets, services; governments; high-tech enterprises; etc.

MSL719 Statistics for Management
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302

MSL720 Macroeconomic Environment of Business
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302

MSL721 Econometrics
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302
Introduction to Econometrics, Simple linear regression model, Multiple linear regression model, Discrete Choice, Panel Data, Time Series, Stationarity, VAR, Co-integration and Error correction models.

MSL722 Managing Enterprise AI / ML Systems
1.5 Credits (1.5-0-0)
Overview to models for Enterprise AI/ML applications and objectives; Different types of intelligent algorithms; managing supervised, semi supervised and unsupervised algorithms; Building enterprise data models for AI/ML applications; Emergence of new intelligent models and their outcome.
Managing Neural Networks based applications, Managing Bio Inspired and swarm based applications; Managing tradeoffs between computational and data challenges; Managing large scale applications like AI Chat-bots, recommender systems, social CRM systems management and policy interventions, Managing adverse outcome in AI/ML applications; mitigation of risk for adverse outcome; Interventions for policy making and governance; Addressing transparency, fairness, explainability and accountability in enterprise applications.

MLST23 Telecommunications Systems Management
3 Credits (3-0-0)

Module I: Telecom Technology Systems Evolution: Recent Developments in Telecom Industry, Regulation & Liberalization policy. Techno-managerial aspects of telecommunication, role of the telecommunication managers in a dynamic environment. The business of telecommunication; telecommunication as a facilitating infrastructure for economic development of the country, technical survey of the ways and means that voice, data and video traffic are moved long distances, data network, the telephone system.

Module II: Issues of the monopolization and deregulation of telecom, national telecom policy, various institutions/organizations like telecom regulatory authority etc; conveyance. Telecom service costing, economic evaluation of telecom projects, telecom project financing.

Module III: Telecom marketing, building brand equity for competitive advantage, Customer care, total service quality management, preparing for the new millennium managing change and people development.

MLST24 Business Communication
1.5 Credits (1.5-0-0)

Pre-requisite(s): MSL301 & MSL302

On completion of this course, students would be able to: Evaluate the key purposes of communication in business. Explain the communication process model and the barriers to effective communication. Understand & evaluate the changing landscape of business communication. Apply techniques for effective communication.

MLST25 Business Negotiations
1.5 Credits (1.5-0-0)

Pre-requisite(s): MSL301 & MSL302

Students who complete this course would be able to: (a) Understand the nature, process and structure of negotiations. (b) Understand different types of negotiations and the dynamics of cooperative and competitive interaction in negotiations. (c) Appreciate and leverage their bargaining position in a situation. (e) Learn and apply influence and persuasion techniques. (f) Learn ways to build lasting working relationships. (g) Understand and appreciate ethical negotiations.

MLST26 Telecom Systems Analysis, Planning and Design
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

Module I: An introduction to the basic system analysis tools, the procedures for conducting system analysis advanced software principles, techniques and processes for designing and implementing complex telecommunication systems.

Module II: Planning and implementation of telecommunications systems from strategic planning through requirements, the initial analysis, the general feasibility study, structured analysis, detailed analysis, logical design, and implementation.

Module III: Current system documentation through use of classical and structural tools and techniques for describing flows, data flows, data structures, file designs, input and output designs, and program specifications. The student would gain practical experience through a project as part of a term paper.

MLST27 Interpersonal Behavior & Team Dynamics
1.5 Credits (1.5-0-0)

Pre-requisite(s): MSL301 & MSL302

On completion of this course, students would be able to: Understand the nature, structure and formation of teams. Appreciate the competitive and collaborative dynamics between teams and sub-teams. Understand and apply techniques for building and sustaining high performing teams. Reflect on their roles within teams and its impact on other members.

MLST28 International Telecommunication Management
3 Credits (3-0-0)

Module I: Historical development and evolution of telecom, managerial issues and structure of industry; evolution and role of international institutions; global trends in liberalization and de-regulations, Patterns of Transaction in international telecom management; managing the market growth; developing, operating and monitoring regulation issues.

Module II: Role of telecommunications in socio-economic development; ICT & Social change, new technologies and services for international telecommunications; data services and business applications, Telecom prospectus of WTO & other international bodies.

Module III: Current issues and organisational growth; telecom implications for the industry, value added services and market drives; regional prospectives on development of telecom; Human Resource Planning and Industrial relations in ITSM; skill formation for ITSM and learning renewal, future directions of growth.

MLST29 Individual Behavior in Organization
1.5 Credits (1.5-0-0)

Pre-requisite(s): MSL301 & MSL302

This course will focus on understanding the nature, composition and relevance of organizational behaviour. Students will be introduced to the fundamental concepts and theories underpinning organizational behaviour. For every concept/theory introduced, its application for organizations would be discussed.

MLST30 Managing With Power
1.5 Credits (1.5-0-0)

Pre-requisite(s): MSL301 & MSL302

This course covers power dynamics, the basic art of influencing, types of power, display of power at various levels and power vs empowerment and ethics. Various cases and readings are included for deeper understanding and application of the learnings.

MLST31 Developing Self Awareness
1.5 Credits (1.5-0-0)

Pre-requisite(s): MSL301 & MSL302

Important areas of self awareness: Personal values, moral maturity, cognitive styles, attitude towards change, Locus of control, social needs of achievement, inclusion, control and affiliation.

MLST33 Organization Theory
1.5 Credits (1.5-0-0)

Pre-requisite(s): MSL301 & MSL302

Different issues related to the organization would be discussed and then applied in real life situations, the emphasis will be on application of theory to real life situations. The course would be imparted through a combination of lectures, cases and simulation exercises.

MLST34 Management of Small & Medium Scale Industrial Enterprises
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

Module I: MSME Act 2006; Nature of entrepreneurial management, the new entrepreneur, his problems and prospects in the Indian environment. Practical aspects of setting up and running of industrial enterprises including formulation of projects and feasibility study for new projects.


MSL735 Qualitative Methods in Management Research
3 Credits (3-0-0)
Qualitative research methods in management research - Philosophical assumptions; Biography; Phenomenological study; Grounded Theory Method; Ethnography; Case Study; Content Analysis; NVivo/Atlas Ti; Narrative Analysis; Template analysis; Writing.

MSL740 Quantitative Methods in Management
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302


Module II : Non-Linear Programming, introduction to Quadratic Programming, Geometric Programming and Direct Search techniques. Multiple Criteria Decision making- Goal programming, TOPSIS and AHP.

Module III : Sequential decisions using Dynamic Programming. PERT and CPM. Queuing theory- M/M/1 and M/M/n model. Monte Carlo System Simulation concepts and applications. Brief introduction to Non-traditional optimization. Case Study applications and use of OR software packages.

MSL745 Operations Management
3 Credits (3-0-0)
Module I : Managing operations; planning and design of production and operations systems. Service characteristics. Facilities planning- location, layout and movement of materials. Line balancing. Analytical tools and techniques for facilities planning and design.


MSL760 Marketing Management
3 Credits (3-0-0)


Module III : Implementation and Control. The marketing organization- alternative organization structures; the concept of product management. Administration of the marketing programme: sales forecasting; marketing and sales budgeting; sales management; management of sales force. Evaluation of marketing performance; sales analysis; control of marketing effort; marketing audit.

MSL780 Managerial Economics
1.5 Credits (1.5-0-0)
Pre-requisite(s): MSL301 & MSL302
Introduction to managerial economics. Basic concepts, Consumer behavior; Demand analysis: Determinants, estimation and managerial uses of elasticity of demand. Demand forecasting. Supply function and Market equilibrium analysis. Production and Cost analysis and Equilibrium of the firm, production Analysis, Productivity Analysis, Production efficiency analysis. Pricing and output under different market situations: Perfect Competition, Monopolistic Competition, Monopoly, Oligopoly and Cartels.

MSL781 Macroeconomic Dynamics
3 Credits (3-0-0)

MSL782 Business Cycles and Global Economy
1.5 Credits (1.5-0-0)
Economy moves in cycles. Depending on the state of economy (in whether expansion or downturn), the firms should adjust their business strategies and investment strategies. This course will look into the state of art of business cycles under the increasingly integrated global economic system, and discuss the usefulness and application of the cyclical analyses for the appropriate and flexible decision making. Global business cycles; short and long cycles; fluctuation; synchronization; identification, driver and nature of cyclical movements; endogenous and exogenous views; political economy; role of manufacturing; transmission mechanism; trend analysis; structural shift in the global system; China; India; forecasting and indicators; COVID-19.

MSL783 Global Economic Development
1.5 Credits (1.5-0-0)
The course will discuss the shift in the global economic power, necessary and enabling conditions for the strong economic growth and national development under the globalized world, and its implication for the business. Economic development; capitalism; world economy; theory and empirical evidences; structural shift; industrial revolution; modernization; rise and decline of the West and Japan; China as emerging power; economic structure; elasticity; colonialism; Bretton Woods institutions; globalization; currency war; trade war; secular stagnation; long cycles; economic and financial crises; uneven sectorial development; business opportunity.

MSL784 Sovereign Debt and Default
3 Credits (3-0-0)
Pre-requisite(s): MSL720
Origin of money, banks, and the central banking; Sovereign debt; The role of borrowing; External and foreign currency borrowing; Sovereign default: A historical perspective; Theoretical models of default (e.g., reputation); Laws and economics of sovereign default and restructuring; Sovereign debt and default- The International Experience.

MSL799 Theories in IS Research
1.5 Credits (1.5-0-0)
This is a research based course which will expose the Ph.D. scholars...
to the advanced methods and theoretical models in information systems management. Participants would be expected to understand a lot of emergent theories and research methods in the information systems domain. Pedagogy would be seminar and discussion based on an exhaustive set of readings compiled on high impact research papers.

**MDL800 Management of Blockchain Technologies**  
1.5 Credits (1.5-0-0)  
Pre-requisite(s): MSL713  

(about 100 words; Topics to appear as course contents in the courses of Study booklet) (Include Practical / Practice activities): Fundamental building blocks of blockchain. Concepts of initiating a blockchain project and management challenges surrounding complexity assessment, feasibility assessment, deployment, maintenance and technology upgradation. Understanding managerial implications of blockchain characteristics on adoption and diffusion in firms. Does the elements tie with Roger's diffusion of innovation for emerging technologies? How do these characteristics require specific interventions in terms of organizational structures and relationships among participating organizations? Understanding governance and information management of blockchain characteristics, how can organization structure and networks play a role, understanding antecedents of diffusion of blockchain applications among firms and networks in industries, understanding enablers and barriers to use and usefulness of blockchain. Management case studies in corporate: banking; digital services; high-tech enterprises; supply chain. Management case studies in government and society, stakeholder specific impacts assessment.

**MDD801 MBA Project**  
3 Credits (0-0-6)  
The topic for the major project would be a generic one, pertaining to a management problem/issue related to any functional area viz. finance, operations, strategy, HR, marketing, IT, econometrics etc. Latest management & research tools and techniques would be applied in the analysis. The project would also be evaluated by an external expert. Each MBA project would be unique and the contents would be decided on the advice of the project supervisor.

**MDL801 Managing Digital Transformation**  
1.5 Credits (1.5-0-0)  
Pre-requisite(s): MSL713  
Making sense of 'digital' and 'digital transformation', digital competencies and contested boundaries in the information age, data as catalyst for digital transformation, achieving customer centricity through data integration, products vs. platforms and multi-sided markets, dynamics of renewal through digital transformation, organizational alignment for digital transformation, balancing g mainstream and new stream businesses coming from digital channel, technology leadership at large firms, open innovation & crowdsourcing, virtual reality, internet of things (IoT), AI, blockchain, big data.

Data Uses: legal and ethical considerations, such as data breaches, GDPR, and California data protection rules, Recent trends review and what the future holds.

**MDL802 Entrepreneurial Finance**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL 707 and 708 for MBA students, MSL302 for B.Tech. Students  
The course would broadly cover the entrepreneurial environment, organizing and operating the venture, planning for the future, creating and recognizing venture value, structuring financing for the growing venture and finally the exit and turnaround strategies. Among these broad six areas, there would be specific content and deliverables.

**MDL803 Fixed Income Securities**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL708 for MBA, MSL302 for B. Tech students  
The course covers types of debt securities, who are the market participants in the debt market, regulatory framework, and how debt market in linked to the macroeconomic environment. It covers basic features of the debt market instruments, their valuation, yield measures, duration and convexity measures, and term structure of interest rates. The course covers simple bonds, bonds with embedded options and asset-backed securities, arbitrage-free valuation, reduced and structural models of credit risk, interest rate derivatives, and construction of bond portfolios and how performance of bond portfolios in evaluated.

**MDL804 Behavioural Science**  
1.5 Credits (1.5-0-0)  
Pre-requisite(s): MSL302 or MSL708  
This course aims to acquaint students with the area of Behavioral Finance. We begin by understanding the classical rational finance and then discuss the deviations from it. We then discuss some of the common biases in humans and how they affects finance and the related aspects. We connect all of these to study the concept of prospect theory. We also introduce some market anomalies and their possible explanations using behavioral finance. To conclude, we develop framework on how we can mitigate these biases as investor and in firms.

**MDL805 Financial Technology**  
1.5 Credits (1.5-0-0)  
Pre-requisite(s): MSL302 or MSL708  
This course aims to help students learn about Financial Technology or Fin Tech. We discuss its evolution, interaction with finance, and the major technologies driving it. We study money and payment, digital money and cryptocurrencies, and introduce the underlying Block chain and cryptography technologies. Applications in Investment and trading under the Fintech environment are discussed along with introduction to data protection and privacy, cybersecurity and technological risk. Multiple case studies provide a practical overview into the FinTech development in developed and emerging markets. We also discuss the evolving nature of regulation that come with Fintech, including Regtech and wrap up with ideas on how technology could continue to transform the careers and finance in the future.

**MDL806 Technology Forecasting & Assessment**  
3 Credits (3-0-0)  

**Module I**: Forecasting as an input to technology planning, Futures Research, Elements of forecasting process. Types of forecasting methods. Quantitative methods of forecasting: time series models, growth curves, Precursor, Envelope curves, Experience curves, technical assessment.

**Module II**: Qualitative methods: Morphological analysis, Relevance trees, Delphi, Technological gap analysis, Analog method, Organising for Technology Forecasting.


**MSP801 Interdisciplinary Research in Management**  
1 Credit (0-0-2)  
Fundamentals of zinter/ multi-disciplinary research, identify and understand complex problems, defining complex problems, designing inter-disciplinary research, conducting research in teams, preparing a working draft of the paper.

**MSV801 Selected Topics in OB & HR Management**  
1 Credit (1-0-0)  
The course will cover selected topics in emerging areas of research and practice in the area of OB & HR Management. The topics covered will vary with each offering of the course, and will be defined by the faculty member teaching the course.
MDD802 MBA Project  
3 Credits (0-0-6)  
The topic for the major project would be a generic one, pertaining to a management problem/issue related to any functional area viz. finance, operations, strategy, HR, marketing, IT, econometrics etc. Latest management & research tools and techniques would be applied in the analysis. The project would also be evaluated by an external expert. Each MBA project would be unique and the contents would be decided on the advice of the project supervisor. The project would need to focus on Telecom sector.

MSL802 Management of Intellectual Property Rights  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
Module I : Nature of Intellectual Property; Patents, Industrial Design, Trademark and Copyright; Process of patenting and development; technologival research, innovation, patenting, development; International cooperation on Intellectual Property; International treaties on IPRs; Patenting under PCT. Procedure for granting of patents.  
Module II : Scope of Patent Rights; Licensing and transfer of technology; Patent information and databases; Geographical Indications.  
Module III : Administration of Patent System. New developments in IPR; IPR of biological systems, plant varieties, computer softwares etc. Traditional knowledge; Case Studies; IPR and IITs.

MSV802 Selected Topics in Finance  
1 Credit (1-0-0)  
The course will cover selected topics in emerging areas of research and practice in the area of Finance. The topics covered will vary with each offering of the course, and will be defined by the faculty member teaching the course.

MDD803 MBA Project  
3 Credits (0-0-6)  
The topic for the major project would be a generic one, pertaining to a management problem/issue related to any functional area viz. finance, operations, strategy, HR, marketing, IT, econometrics etc. Latest management & research tools and techniques would be applied in the analysis. The project would also be evaluated by an external expert. Each MBA project would be unique and the contents would be decided on the advice of the project supervisor. The project would need to focus on technology sector.

MSL803 Technical Entrepreneurship  
3 Credits (3-0-0)  
Module III : Managing the new technological venture: Developing systems in new venture, Managing doing early operations, Growth and expansion, ending the venture. Legal issues, Franchising and acquisition. Entrepreneurship, globalisation and Entrepreneurship.

MSV803 Selected Topics in Information Technology Management  
1 Credit (1-0-0)  
The course will cover selected topics in emerging areas of research and practice in the area of Information Technology Management. The topics covered will vary with each offering of the course, and will be defined by the faculty member teaching the course.

MSL804 Procurement Management  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
This course will introduce students to purchasing and materials management by learning the planning production process, master scheduling, material requirements, and forecasting material demands and inventory levels. This course is designed to build on the student’s knowledge of how effective material management improves supply chain performance.

MSV804 Selected Topics in Operations Management  
1 Credit (1-0-0)  
The course will cover selected topics in emerging areas of research and practice in the area of Operations Management. The topics covered will vary with each offering of the course, and will be defined by the faculty member teaching the course.

MSL805 Services Operations Management  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
This case course explores the dimensions of successful service firms. It prepares students for enlightened management and suggests creative entrepreneurial opportunities. The main idea behind the course is: To study “breakthrough” services in order to understand the operations of successful service firms that can be benchmarks for future management practice. To develop an understanding of the “state of the art” of service management thinking. To understand the dimensions of service growth both domestically and internationally.

MSV805 Selected Topics in Economics  
1 Credit (1-0-0)  
The course will cover selected topics in emerging areas of research and practice in the area of Economics. The topics covered will vary with each offering of the course, and will be defined by the faculty member teaching the course.

MDL806 Derivatives  
Credits: 3 (3-0-0)  
Pre-requisite(s): MSL606 MBA, MSL302 for B.Tech Students  
This course covers how derivative markets function, how various derivative securities are priced, their usage and the associated risks with each. Specifically, this course focuses on forwards and futures, and options on stocks, stock indices, currencies, and futures options. It covers binomial model and Black Scholes-Merton model for option pricing, moves on to trading strategies using options, and finally Greek letters and volatility smiles. It briefly covers energy and commodity derivatives in the applications.

MSL806 Mergers & Acquisitions  
3 Credits (3-0-0)  

MSV806 Selected Topics in Marketing Management  
1 Credit (1-0-0)  
The course will cover selected topics in emerging areas of research and practice in the area of Marketing Management. The topics covered will vary with each offering of the course, and will be defined by the faculty member teaching the course.

MSL807 Selected Topics in Strategic Management  
1 Credit (1-0-0)  
Open slot course (To be decided when the course is floated). The course will cover selected topics in emerging areas of research and practice in the area of Strategic Management. The topics covered will vary with each offering of the course, and will be defined by the faculty member teaching the course.
MSL808 Systems Thinking  
3 Credits (3-0-0)  
Module I: Systems thinking in management: Hard and soft systems thinking; open systems thinking; Analytical and systems approaches; System concepts, principles and metaphors; General systems theory and cybernetics.  
Module II: Theory building with causal loop diagrams; Feedback loop structures; Linking feedback, stock and flow structures; Tutorial on Stella; Case Studies on system dynamics modelling.  
Module III: Soft systems methodology; Flexible systems thinking; Management of continuity and change; Interpretive systems model.  

MSL809 Cyber Security: Managing Risks  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
This course introduces students to the interdisciplinary field of cybersecurity by discussing the following: cybersecurity theory, and the relationship of cybersecurity to nations, businesses, society, and people, cybersecurity technologies, processes, and procedures, analyzing threats, vulnerabilities and risks present in these environments, and develop appropriate strategies to mitigate potential cybersecurity problems, advanced policy related topics would also be covered through which these risks may be mitigated. Other relevant advanced topics may be explored.  

MSL810 Advanced Data Mining for Business Decisions  
1.5 Credits (1.5-0-0)  
Pre-requisite(s): MSL301 & MSL302  
This course will expose the participants to the following topics within this domain: Understanding advanced models of data mining, advanced unsupervised mining methods and approaches, Decision Support Systems, Group Decision Support Systems, Consensus based systems, Multi-criteria decision systems, Knowledge management systems, knowledge management methods, Intelligent systems, Hybrid data mining methods, Advanced and emergent topics and applications.  

MSL811 Management Control Systems  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  

MSL812 Flexible Systems Management  
3 Credits (3-0-0)  


MSL813 Systems Methodology for Management  
3 Credits (3-0-0)  
Module II: Validation, Simulation and testing of System Dynamics models, Policy analysis, Micro world and Management games, Managerial applications of Systems methodology.  
Module III: Management of physical systems. Physical system theory; fundamental premises and postulates, modelling of basic processes, application to manufacturing, managerial, and socio-economic systems. Critical comparison and integration of Physical System Theory and System Dynamics. Flexibility in physical system theory.  

MSL814 Data Visualization  
1.5 Credits (1.5-0-0)  
Pre-requisite(s): MSL301 & MSL302  
This course would have the following: It would train the participants to use visual imagery to present complex information and the trends associated with extensive data. Visualization provides a solution to address information overload, through a well-designed visual encoding to aid comprehension, memory, and decision making. Furthermore, visual representations may help engage more diverse audiences in the process of analytic thinking. Topics like data and image models, heat maps, infographics, multidimensional data visualization and representation, graphical perceptions, mapping & cartography and text visualization may be covered. Other relevant topics within the subject domain may also be explored.  

MSL815 Decision Support and Expert Systems  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
Module III: Integrating expert systems and DSSs. Strategies for implementing and maintaining management support systems. Case studies, and laboratory and filed projects.  

MSV815 Case Study Writing and Teaching  
1 Credit (1-0-0)  
Various concepts of case study teaching and writing will be covered.  

MSL816 Total Quality Management  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
Module I: Introduction to TQM: Customer Orientation, Continuous Improvement, Quality, Productivity and Flexibility, Approaches and philosophies of TQM, Quality Awards, Strategic Quality Management, TQM and corporate culture, Total Quality Control; Basic Analytical tools-Check Sheets; Histograms; Pareto charts, Cause and Effect diagrams; Flow charts.  
Module II: Statistical Process Control; Advanced Analytical tools-Statistical Design of Experiments; Taguchi Approach; Cost of Quality; Reliability and failure analysis. FMEA, Quality Function Deployment, Benchmarking, Concurrent Engineering.
Module III: Quality Teams, Employee practices in TQM organisations: Leadership, delegation; empowerment and motivation; role of communication in Total Quality, Quality Circles; Total Employee Involvement; Problem Solving in TQM- Brain storming; Nominal Group Technique Team process; Kaizen and Innovation; Measurement and audit for TQM; Quality Information Systems, ISO 9000 series of Quality Standards; TQM Implementation; Reengineering and TQM.

MSV816 Contemporary Issue in Management 1 Credit (1-0-0)
The contents of the course around a selected advance topic in Management

MSL817 Systems Waste & Sustainability 3 Credits (3-0-0)


MSV817 Art of Scholarship in Management Research 1 Credit (1-0-0)
Understanding the role of a scholar in society. Knowing various aspects of ‘Body of Knowledge’, Understanding the purpose and structure of Academic Bodies in the management discipline, Various forms of scholarly outlets (symposium, workshop, seminar, conclave, conference, summit, meet, reviews, communications, journals, open etc.), Prevalent Style and methods of scholastic writing, Assessing value of scholarly publications (prevailing Indices & Impact factors), Pre and Post internet scenarios, Interaction with an established scholar.

MSL818 Industrial Waste Management 3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302


Module III: Waste management in Indian industries- present practices, potentials and perspectives. Management of waste in different industrial systems- steel, aluminum, power, automobile, transport and other service industries. Economic analysis and system models of industrial waste management systems. Analytical and Creative techniques to waste control.

MSV818 Contemporary Issues in OB & HR Management 1 Credit (1-0-0)
The contents of the course around selected contemporary topic(s) in HR and OB.

**Module II : International Business Strategy of Indian Industry**
Competitive position of key Indian Industries. Entry strategies for Indian firms: Joint Ventures, strategic/technical alliances/ collaboration. Strategies employed by Indian firms to develop and sustain international business.


**MSV822 Contemporary Issues in Economic Policy**
1 Credit (1-0-0)
The course will concentrate on contemporary important economic policy issues. The specific topics will be of current economic policy interest. The topics covered are to include some of the following topics but not limited to: 1. Fiscal Policy Issues, Taxation and Inter State Relations 2. Monetary Policy and Exchange Rate Frameworks 3. Issues Related to Poverty and Inequality 4. Financial Integration and Currency Unions 5. International Trade Policies, Globalization and Implications on Welfare 6. Technological Change and Innovations 7. Climate Change and policy Alternatives.

**MSL823 Strategic Change & Flexibility**
3 Credits (3-0-0)

**Module II :** Revising Strategies Postures. Corporate restructuring. Alliances, joint ventures, acquisitions and merges. Reorganising the firm, the impact of mergers and acquisitions on organizational performance. Management of continuity and change, Blue Ocean strategy.


**MSL824 Policy Dynamics & Learning Organization**
3 Credits (3-0-0)
**Module I :** Learning Organization. Emergence of learning organization. Strategies for organization learning, using Feedback, shared vision, team work, personal mastery, mental models, systems thinking, role of leader, organizational dynamics. Soft Systems Methodology application to policy formulation. Flexibility in policy strategy. Strategy formulation in a learning organisation, clarifying vision and opportunities for change in a learning organization.


**Module III :** Frontiers. Role playing games and case studies to develop principles for successful management of complex strategies in a dynamic world. Strategic Management game for policy planning, Interactive Planning. Strategic issues such as business cycles, market growth and stagnation. And diffusion of new technologies. Knowledge management in learning organizations.

**MSV824 Contemporary Issues in Strategic Management**
1 Credit (1-0-0)
The course addresses a number of current issues in strategic management, including but not limited to such topics as competitive analysis, mergers and acquisitions, managerial ethics, global strategy, and corporate culture. Emphasis is placed on the development of critical thinking skills.

**MSL825 Strategies in Functional Management**
3 Credits (3-0-0)
**Module I :** Linkage of corporate and Business strategy with various Functional strategies, Flexibility in Functional Strategies. Marketing Strategy, financial Strategy.
**Module II :** Manufacturing Strategy, IT Strategy, Human Resources Strategy.
**Module III :** Technology Strategy, Quality and Productivity Strategy, Environmental Strategy.

**MSL826 Business Ethics**
3 Credits (3-0-0)

**Module II :** Ethical Responsibilities. Ethical responsibilities of economic agents: role obligations, obligation to shareholder, rights and, obligations to customers, obligations to pay taxes. Environmental protection. Corporate accountability, Ethical conflicts, concern for the locality. Attitude to labour. Ethics and Government policies and laws.


**MSV826 Frontiers in OB & HR Management**
1 credit (1-0-0)
The contents of the course would be built around the particular nuance and/or emerging frontier.

**MSL827 International Competitiveness**
3 Credits (3-0-0)
**Module I :** Introduction to Competitiveness. Background, Need, Basics, Myths; Global Perspectives, Context, Definitions, Benchmarking & Key Issues; Related concepts: Excellence, Value Creation; Competitiveness at Different Levels.


**Module III :** Practitioners Perspectives. Business Models for Competitiveness, Functional (e.g. HR, Operational, Financial, Technological) Linkages, Partnerships/Cooperation for Competitiveness, Emerging Issues/ Practices.

**MSV827 Frontiers in Finance**
1 Credit (1-0-0)
The contents of the course would be built around the particular nuance and/or emerging frontier.

**MSL828 Global Strategic Management**
3 Credits (3-0-0)


MSV832 Frontiers in Information Systems Management
1 Credit (1-0-0)
Series of focused topics in any emerging area of Information Systems. The topics may evolve based on the expertise of the expert invited for delivering the course, with due discussion with the area. The topics would cover emerging issues in information systems, from both a theory and practice point of view. Further it may expose the participants to challenges and critical success factors in the domain being explored.

MSL829 Current and Emerging Issues in Strategic Management
3 Credits (3-0-0)
(Relevant current and Emerging Issues)

MSL830 Organizational Structure and Processes
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302
Module III: Interface of structure and processes- structural functionalism; Allport and Event- Structure theory. Organizational Governance- organizations as a subject of political enquiry, Models of organizational governance. Making and breaking patterns.

MSL831 Management of Change
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302
Module II: Change and the use of power. Nature and sources of power. Leadership and change- Transactional vs. Transformational change. Change cycle including participative and coerced change.

MSL832 Managing Innovation for Organizational Effectiveness
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302
Module II: Managing social equity and organisation efficiency paradox, blocks to creativity, methods to overcome the blocks. Introducing creativity in organisation. Structure and creativity. Work culture and innovation.


MSV832 Frontiers in Strategic Management
1 Credit (1-0-0)
The contents of the course shall be around a selected advanced topic in strategic management area

MSL833 Organizational Development
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302
Module II: Coping with environmental change. Socio-cultural dimensions of work and behaviour, Environmental analysis and impact. Diagnosis of the ongoing process from symptoms to causes. Organisation development and intervention strategies.

MSL834 Managing Diversity at Workplace
1.5 Credits (1.5-0-0)
Pre-requisite(s): MSL301 & MSL302
The course introduces students to the relational framework towards diversity management by discussing the macro, meso and micro factors influencing DM. Through analysis of the different organizational approaches and initiatives towards diversity management, it highlights ways in which inclusive workplaces can be created and diversity leveraged for business performance.

MSL835 Labor Legislation and Industrial Relations
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302

MSL836 International Human Resources Management
1.5 Credits (1.5-0-0)
Pre-requisite(s): MSL301 & MSL302
The course would cover issues pertaining to selecting, managing and developing international workforce. It would sensitize students to the cross-cultural issues faced by global organizations and emerging issues within international HRM. Lectures, small group discussions and case study analysis would be the primary teaching methods adopted in this course.

MSL839 Current and Emerging Issues in Organizational Management
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302

(RElevant current and Emerging Issues)

**MSL840 Manufacturing Strategy**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302


Module II: Technology-manufacturing process interfaces with marketing, engineering, quality, purchasing, finance and accounting. Inter-relationship among manufacturing manager and their suppliers, customers, competitors, superior and production workers.


**MSL841 Supply Chain Analytics**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

This course will introduce students to supply chain analytics by learning the three aspects of supply chain planning and design. The first one is Descriptive Analytics of supply chain, which focuses on fundamental tools and methods on data analysis and statistics, visual representations of data and data modeling. The second major focus is on Predictive Analytics of supply chain, which develops approaches for building and analyzing predictive models, applying regression, forecasting techniques, simulation and risk analysis, etc. The third major focus is on Prescriptive Analytics of supply chain, which aims at arriving at optimal decisions for the different future scenarios in the supply chain.

**MSL842 Supply Chain Modeling**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

This course primarily deals with understanding and analyzing problems underlying the design, planning and operation of supply chains, with a special emphasis on the logistical and other issues related to the material and the information flow in these systems. The main objective of the course is to introduce methodological description of the various issues in supply chain related to design, planning and control problems. Mathematical models and techniques are used to support the analysis of the identified issues. It also develops understanding of some basic tools that can support the functioning of the analytical methodologies.

**MSL843 Supply Chain Logistics Management**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

Module I: Perspective of Supply Chain Logistics Management. Logistics concept, role and scope; Logistics Environment- Integrating Logistics of Supply, Logistics of Production and Logistics of Distribution. Internal and external factors for logistics strategy, Operational Resources of logistics (personnel, warehouse means of transport, warehouse transport aids, organizational aids, material stocks, and area/spare) Effective supply chain management; customer networking and manufacturing, Risk Pooling, Postponement, cross docking in supply chain, CPPR, IT-enabled supply chains value of Information, Coordination in SCM.

Module II: Logistics Activity Mix. JIT and Logistics, Synchronised manufacturing. Purchasing and Materials Management. Distributional logistical systems and facilities-single stage or multistage, warehouse(s), their number, location and allocation, Automated Warehousing, Materials Handling and Packaging. Simulation aided planning of conveyor and warehousing systems.


**MSL844 Systems Reliability, Safety and Maintenance Management**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302


Module II: Maintenance Planning and Control.

Module III: Information System for Reliability, Safety and Maintenance Management.
Organizational aspects and a computer aided management information system for reliability, safety and maintenance. Life cycle costing and cost management for maintenance. Human factors in maintenance, Maintenance Manpower Planning. Case Studies.

**MSL845 Total Project Systems Management**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

Module I: Project Systems Management: a life cycle approach, project characteristics; project life cycle phases: conception, definition, planning and organising, implementation and project clean up. Project feasibility analysis. The project manager: role and responsibilities, Team Building and Conflict Management. Tools and techniques for project management. Environmental impact analysis of a project.

Module II: Network techniques for project management-PERT, CPM and GERT. Accounting for risk, uncertainty and fuzziness. Time cost tradeoffs and crashing procedures. Multi project planning and scheduling with limited resources. Multi objective, fuzzy and stochastic based formulations in a project environment.


**MSL846 Total Productivity Management**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

Module I: Total Productivity overview: meaning, relevance and scope for productivity and effectiveness. Productivity conceptualisation. Productivity mission, objectives, policies and strategies. Productivity environment. Corporate culture, management styles, employees participation, trade unions and role of governmental agencies. Productivity measurement, monitoring and management both at micro and macro levels. Corporate and annual productivity plans.

Module II: Benchmarking: Management issues, modelling, tools and techniques; indicators for evaluation of manufacturing, business or services organizational performance and its measurement.

Module III: Productivity Improvement Techniques: modifying organizational characteristics and work characteristics. Work study, Value Engineering, Waste Management. Human resource development
strategies to increase productivity. Managing technological change. Interfaces of Productivity with Quality, Reliability and Safety. Management commitment and involvement for higher productivity. Case Studies.

**MSL847 Advanced Methods for Management Research**
3 Credits (3-0-0)

*Pre-requisite(s): MSL301 & MSL302*

Introduction to management research, types of management research, research designs, Portfolio of management research methodologies involving qualitative and quantitative tools, optimization approaches, Multi-criteria decision making tools, case studies, interpretative models, soft system methodology, simulation, etc. Design of a questionnaire-based survey instrument, development of data measurement, scale development, testing the validity and reliability of data, sampling techniques, descriptive statistical analysis, inferential analysis, sampling techniques, sampling distribution, hypothesis testing, ANOVA, factor analysis, correlation, regression: OLS, Logic, Tobit, Probit, Discriminant analysis, Co-integration, unit root testing, Granger, causality, VAR, GARCH and its variants. Structural equation modelling and other related research tools. Portfolio of optimization tools such as linear programming, goal programming, integer programming, Data Envelopment Analysis for designing a management research. Case study approach with SWOT, SAP-LAP, value chain, PEST, etc. AHP, ANP modeling of risk and uncertainty in management, real life case development with appropriate research design.

**MSL848 Applied Operations Research**
3 Credits (3-0-0)

*Pre-requisite(s): MSL301 & MSL302*

The objective of the course is to provide the students about the application of Operations Research (OR) in various functional areas of business such as operation, supply chain management, materials management, marketing, finance, and human resource. The entire course is a case based where the participants will be given a case. Participants will be asked to tackle the case problem without using OR using their own experience or any other logical method and then they will be asked to tackle the same situation applying OR. At the end of the course they will appreciate how OR can help the decision makers in an efficient decision making process.

**MSL849 Current and Emerging Issues in Manufacturing Management**
3 Credits (3-0-0)

*Pre-requisite(s): MSL301 & MSL302*

(Relevant current and Emerging Issues)

**MSL850 Management of Information Technology**
3 Credits (3-0-0)

*Pre-requisite(s): MSL301 & MSL302*

**Module I:** The Strategic Framework for IT Management. Emerging information technologies: IT for competitive advantage; IT for internal effectiveness; IT for inter-organizational linkage; Module II Strategic Development and Planning Techniques.

**Module II:** IT Planning (CSFs, Scenario analysis, Linkage analysis, Enterprise modeling); Strategy formulation techniques; Nolan's stage model and revised models for Nolan's stages; IT investment decisions; methods for evaluating IT effectiveness; IT enabled business process redesign.

**Module III:** Strategic Issues Related to IT Management. Relating IT to organizational leadership, culture, structure, policy and strategy; programmer productivity; Managing legacy systems; evaluating centralization-issues; IT-forecasting.

**MSL851 Strategic Alliance**
1.5 Credits (1.5-0-0)

This is an advanced strategy course that focuses on the role of strategic alliances and inter-firm networks in the overall strategic adaptation process of the firm. Inter-firm networks and strategic alliances have emerged as important strategic options for navigating survival and creating competitive advantage in times of high velocity turbulent environments characterized by pressures to master rapid technological developments, counteract new competitors and the never ending need to acquire and master new capabilities (technical and managerial). The course explores crucial success factors that distinguish successful from failing strategic alliances. The course utilizes case discussions supplemented with readings, lectures, and conceptual discussions.

**MSL852 Network System: Applications and Management**
3 Credits (3-0-0)

*Pre-requisite(s): MSL301 & MSL302*

**Module I:** Networking fundamentals. Communication fundamentals (transmission and transmission media; communication techniques; transmission efficiency) Wide area networks, local area networks, ISDNs; OSI architecture, IBM's SNA, Digitalis DNA, Internet networking; network applications- EDI, Email, file transfer, conferencing, Enterprise networking.

**Module II:** Networking technologies and applications. Design and development of enterprise network; Web-based application development, Design of large-scale intranets, Network and systems management issues, Remote access to computer resources, Network and system security.

**Module III:** Managing networks. Preparing for doing business on the internet; Choosing and costing networks and network services; network management requirements; network performance indicators; performance monitoring.

**MSL853 Software Project Management**
3 Credits (3-0-0)

*Pre-requisite(s): MSL301 & MSL302*

This course may expose the participants to the following topics: IT Evolution and its implications for business, IT Productivity Paradox - Issues and Implications, Impact of IS in the Networked Economy, Reasons for success and failure of IT projects, Disaster planning, Approaches to IS Development (e.g. Portfolio approaches), Technology Justification and Alignment Models, Strategic impact of IT/IS, Role of the CIO and challenges in business continuity.

**MSL854 Big Data Analytics & Data Science**
1.5 Credits (1.5-0-0)

*Pre-requisite(s): MSL301 & MSL302*

This course may expose the student to the following themes within the discipline: Introduction to Data Science and Data Scientists, Introduction to Big Data, Theories in Data Science, Big data technologies, Large query data sets and associated theories, Exploring the Hadoop Ecosystem, Information management in Big Data and Emerging Issues.

**MSL855 Electronic Commerce**
3 Credits (3-0-0)

*Pre-requisite(s): MSL301 & MSL302*

This course may expose the participants to the following topics: Introduction to e-commerce, B2B E-Commerce models, B2C E-Commerce models, Mercantile processes, E-Commerce Infrastructure and Capacity Planning, Web Portals & Services, Trading, Pricing, Auctions, Bartering & Negotiations, Advanced and emergent topics in E-Commerce, Inter-organization information systems, e-procurement systems, e-fulfillment systems, e-SCM, Risk management in E-commerce. Hands on training may also be provided.

**MSL856 Business Intelligence**
3 Credits (3-0-0)

*Pre-requisite(s): MSL301 & MSL302*

The course will consist of the following: Introduction to data mining, types of data mining systems, data preprocessing and data warehouses (OLAP/OLTP), Data Cube Computation and Data
Generalization, Mining Frequent Patterns, Associations, Correlations, Classification, Prediction, Clustering, time series and sequence data analysis, Graph Mining, Social Network Analysis, and Multirelational Data Mining, Mining Object, Spatial, Multimedia, Text, and Web Data, Applications and trends.

**MSL858 Business Process Management with IT**
1.5 Credits (1.5-0-0)

Pre-requisite(s): MSL301 & MSL302

This course may expose the participants to the following topics: Concepts of process and business process, Processes and workflow management systems, Concepts and evolution of BPM technologies, Impact of IT in BPM and its road map, BPM Cycle, Process deployment, Process monitoring, Process optimization using IT tools, Flowcharting and business process mapping and emergent issues in BPM/BPR technologies. Other relevant topics within the subject domain may also be explored.

**MSL859 Current and Emerging Issues in IT Management**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

(Relevant current and Emerging Issues)

**MSL861 Market Research**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

**Module I:** Research concepts; exploratory, descriptive and conclusive research. The market decision-making process and the need of different types of research. Types of marketing problems and type of marketing research activity. Sources of data; use and appraisal of existing information.

**Module II:** Information from respondents, sampling design, scaling techniques and questionnaire design, interviewing, mail surveys. Information from experiment, experimental design for marketing. Motivational research, Advertising research, Analysis and reporting.

**Module III:** Marketing information systems, Structure and design, its role in planning and control; the place of marketing research.

**MSL862 Product Management**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

**Module I:** The product in corporate life, Corporate and product objective, product management role, responsibility, scope and functions, product strategy and policy, optimum product pattern/line range.


**Module III:** Organization for Product Management, Marketing manager-product manager-brand manager concept, approaches and organizational role, product manager-functions and tasks-tools and techniques. Brand extensions, acquisitions, Brand value, Consumer insight. Strategies brand management.

**MSL863 Advertising and Sales Promotion Management**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

**Module I:** Mass communication theory and practices, marketing and promotion mix- interrelationship and interdependence advertising. Sales Promotion, Publicity and Public Relations- Scope, Objectives, activities and creative role. Advertising, objectives tasks and process, market segmentation and target audience- Message and copy development. Mass media, selection, planning, budgeting and scheduling. Integrated programme and budget planning. Implementing the programme, coordination and control. Advertising Agencies in India, their services and terms, advertisement campaign development, Agency selection and appointment; Agency Organization and operation, Getting the best of the agency services. Analysis of effectiveness of advertisement and promotional campaign.

**Module II:** Why and when sales promotion support, Sales promotion activities; Consumer Oriented-Sales channel Oriented-Sales staff oriented, Planning, budgeting, implementing and controlling campaigns. Advertisement development brief.

**Module III:** Valuation and measurement of advertising and sales promotion effectiveness, Company organization for advertising: sales manager, Sales Promotion Manager, Market Development Manager- Role of Tasks, advertising ethics, economics and social relevance. The Public Relations Activities, Public relations and mass media. Media planning and budgeting control.

**MSL864 Corporate Communication**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

Corporate communications is a strategic tool that is leveraged to gain strategic advantage. Organizations use it to lead, motivate, persuade and inform both employees and outside stakeholders. How organizations set objectives, define messages and reach their employees, extended audiences, the media and customers, and how the company or group articulates its vision and brings its values to life, will all be discussed.

The course will familiarize students with some of the issues that specifically affect organizations and challenge the corporate communications function. Some of these issues include a change in CEO, mergers and acquisitions, imposition of government regulation and public pressure groups. Focus will be placed on crafting corporate messages for internal and external stakeholders. Specific subject.

**MSL865 Sales Management**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

**Module I:** Organisational framework of the field sales force. Types and methods of field sales organisations-Career in Field Sales Management. Field Sales Manager- coordinating and controlling the Marketing mix, Tasks and responsibilities, team relations with Salesman and interaction and reporting relationship with Top Management. Operating environment for Field Sales Managers. Sales forecasting.

**Module II:** Sales Information and Planning. The qualities and role of a Field Sales Manager- Hierarchy of objectives and goals, concept of sales strategies and tactics; types of Planning. Marketing Intelligence and Sales Management. Relationship and contribution of Marketing Research to the sales development as decision making process. Designing and planning of sales territories, procedure for designing sales territories. Determining sales manpower requirements to establish sales territories- Recruiting salesman- selection process and system. Distribution and channel selection & Management.


**MSL866 International Marketing**
3 Credits (3-0-0)

Pre-requisite(s): MSL301 & MSL302

**Module I:** International marketing-its scope and tasks- world economy prospects and Challenges; India’s external trade. Analysis of export performance. Why all organisations cannot go global Shipping terms and international trade terms. Information needs of exports. Costing and pricing in international trade. Advantages and disadvantages of globalisation.

**Module II:** Strategic export planning. Handling an export transaction.
Export marketing checklist; Selection of Markets; Choosing Markets; Export pricing; Management of export logistics. Documentation for export; processing of an export trade. Sales forecasting in international trade, identifying geographical territories for expansion. Cultural factors affecting business in global market.

Module I: Export credit system predisposition and post-shipment, finance, medium and long term credit financing; ECGL; Transportation and shipment of cargo; Marine insurance of cargo; procedure for claiming rebate of excise duty. Import replenishment licensing procedures. Generalized scheme of preferences. Sourcing and Transfer pricing mechanism. WTO related issues and IPR related issues impacting global trade.

MSL867 Industrial Marketing Management
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302
Module I: Industrial marketing and Environment. Application of industrial buyer behaviour theories. Marketing plan to implement the marketing concept.
Module II: The new product development process. Personal selling (negotiations, systems selling, targets setting, fact finding, training); sales communications.

MSL868 Digital Research Methods
1.5 Credits (1.5-0-0)
Pre-requisite(s): MSL301 & MSL302
The course will have the following coverage: Internet as a research medium; Research design; Sampling methods; Online surveys; Nonreactive data collection; virtual ethnography; Online focus groups; secondary qualitative data analysis; blogs & videos as source of data; data analysis approaches; tools.

MSL869 Current and Emerging Issues in Marketing
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302 (Relevant current and Emerging Issues)

MSL870 Corporate Governance
1.5 Credits (1.5-0-0)
Pre-requisite(s): MSL301 & MSL302
The course would broadly be divided into three modules. Module 1 would provide a global perspective to the students on the concept of corporate governance. Module 2 would focus on India and present the framework of corporate governance for Indian organizations. Module 3 would focus on corporate social responsibility (CSR) and its manifestations. Apart from the regular lectures and assignments, there would be a course pack provided to the students containing international and national reports, articles, studies and cases to help them build an international perspective through the self-study component.

MSL871 Banking and Financial Services
1.5 Credits (1.5-0-0)
Pre-requisite(s): MSL301 & MSL302
The course will comprise of two broad sections; banking and financial services. Banking portion will cover banking sector reforms, bank management, financial statements of banks, sources and uses of bank funds, credit monitoring and management by banks, bank capital and Basel norms. Financial services will encompass both fund based and fee based services that are an integral part of modern financial systems; it will include lease financing, hire purchase financing, consumer credit, factoring, housing finance, investment banking, credit rating, stock broking, depository and custodial services. The course work will encompass problem solving on relevant topics and inputs from real life cases to give a practical insight to the theoretical concepts.

MSL872 Working Capital Management
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302

MSL873 Security Analysis & Portfolio Management
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302

MSL874 Indian Financial System
1.5 Credits (1.5-0-0)
Pre-requisite(s): MSL301 & MSL302
This course is an introduction to the Indian financial system and tends to appraise students with its components, functions and integration of its sub components with each other. It covers different types of financial institutions, financial markets and financial instruments and services through which the financial system operates. Also, the students would develop an understanding of the role played by the different financial intermediaries in developing a robust financial environment for any country. The course will also give insight into the role played by financial market regulators and the challenges being faced by them in the modern internationally integrated economies.

MSL875 International Financial Management
3 Credits (3-0-0)
Pre-requisite(s): MSL301 & MSL302

**MSL876 Economics of Digital Business**  
1.5 Credits (1.5-0-0)  
Pre-requisites: MSL301 & MSL302  
This course may expose the participants to the following topics: Impact of diffusion of ICTs in Business and People, Trade-offs & Network effects, Economics of Data communication including pricing, Firms, Networks, Centralization, Decentralization in 2 sided markets, Factors affecting organizational structure and size, Dynamics of Open Source and Open Innovation, Information, Search, Switching and Price dispersion, Information goods pricing and bundling. Other similar themes may also be explored.

**MSL877 Electronic Government**  
1.5 Credits (1.5-0-0)  
Pre-requisites: MSL301 & MSL302  
This course may expose the participants to the following topics: Introduction to E-Governance, E-Governance models and frameworks, E-Governance infrastructure and stages in evolution, Information Management in Electronic Governance. Issues in Emerging and Developing Economies, Selective Case Studies in E-Governance, Emerging initiatives in electronic governance, Role of policy. Other relevant topics within the subject domain may also be explored.

**MSL878 Electronic Payments**  
1.5 Credits (1.5-0-0)  
Pre-requisites: MSL301 & MSL302  
This course may expose the participants to the following topics: Different business models in electronic payments, Digital certificates and certificate chains, Automated clearing and settlement systems, Banking systems and foreign exchanges, Other players in the ecosystem, E-Payment and Card security, Micro-payments, P2P Payments, Electronic Cash. Challenges and role of policy. Other relevant topics within the subject domain may also be explored.

**MSL879 Current and Emerging Issues in Finance**  
3 Credits (3-0-0)  
Pre-requisites: MSL301 & MSL302  
(Relevant current and Emerging Issues)

**MSL880 Selected Topics in Management Methodology**  
3 Credits (3-0-0)  
Pre-requisites: MSL301 & MSL302

**MSL881 Management of Public Sector Enterprises in India**  
3 Credits (3-0-0)  
Pre-requisites: MSL301 & MSL302

**MSL882 Enterprise Cloud Computing**  
1.5 Credits (1.5-0-0)  
Pre-requisites: MSL301 & MSL302  
This course will expose the participants to the following topics: Concepts of cloud computing and its impact, Technology Road Map to Cloud Computing, Virtualization, Practical usage of virtualization, Cloud Computing Frameworks and Deployment models, Cloud resource utilization and optimization, Cloud and Web Services, Service Model Architectures, SLA and QoS, Service Oriented Architecture and Cloud Computing.

**MSL883 ICTs, Development and Business**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
The course will cover the following topics: Introduction, Development agendas and place of ICTs, ICTs as appropriate technologies, ICTs in education, health, industry & enterprises; ICT policy & regulations, Politics of open technology standards; ICT consulting for government; ICTs, Bottom of Pyramid & Business.

**MSL884 Information System Strategy**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
The course may expose the participants to the following topics: IT Evolution and its implications for business, IT Productivity Paradox - Issues and Implications, Impact of IS in the Networked Economy. Reasons for success and failure of IT projects, Disaster planning. Approaches to IS Development (e.g. Portfolio approaches), Technology Justification and Alignment Models, Strategic impact of IT/IS, Role of the CIO and challenges in business continuity.

**MSL885 Digital Marketing-Analytics & Optimization**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
The course may cover the following topics: Introduction and Perspectives in internet marketing, Online consumer behaviour and technology adoption theories, Managing the Word of Web, Mapping online communities & networks, Online pricing mechanisms, Social Network Analytics & Optimization, Web Analytics and Optimization, Traffic analytics, Online campaign and channel management, Managing the Web 2.0, Search Engine & Social Media Optimization, SMAC, Social CRM, Metrics for E-Commerce Analytics, KPIS, Revenue Analytics.

**MSL886 IT Consulting & Practice**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
The course may expose the participants to the following topics: Trends in the IT consulting industry, IT consulting issues and pain points, Critical IT issues and their organizational contexts, Marketing and selling IT consulting projects, Project Entry Strategies, Contracting, Proposal Writing and making the sales pitch, Frameworks for technology evaluation. Frameworks for consulting intervention, change management and project closure, Implementation Planning for IT Projects, Managing Consulting Firms and Knowledge Management. Other relevant topics may also be explored.

**MSL887 Mobile Commerce**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
The course may expose the participants to the following topics: Introduction to Ubiquitous computing, Mobile communication and emerging technologies, Ubiquitous business models and challenges, Security issues and information risk management in mobile commerce. Mobile services and location based services, Interface with Social Media and Cloud, Mobile banking and payment systems, Socio-economic development with m-Commerce, Mobile based services for e-governance. Introduction to mobile apps in the context of ICT ecosystem; explaining success of apps; app entrepreneurship; app economy, challenges of entrepreneurship and economy. Business models of app stores; mobile gaming; app customer segmentation; case studies.

**MSL888 Data Warehousing for Business Decisions**  
1.5 Credits (1.5-0-0)  
Pre-requisite(s): MSL301 & MSL302  
The course may expose the participants to the following topics within this domain: Introduction to Database Management Systems, Hierarchical modelling, Multi-dimensional modeling of data, Design techniques and ETL, SQL. Data warehousing requirements for ETL; Data
Warehousing Risks, OLAP and OLTP Management Issues, designing and supporting applications, Expanding a data warehouse. Other relevant topics within the subject domain may also be explored.

**MSL889 Current and Emerging Issues in Public Sector management**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
(Relevant current and Emerging Issues)

**MSL890 Financial Engineering**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL708 for MBA, MSL302 for B. Tech students  
The course introduces forwards, futures, swaps, and options - how these markets function, how these securities are priced, and purposes for which they are used by hedgers and sp0eculators. It covers basic concepts in stochastic calculus, numerical procedures (including binomial trees, Monte Carlo simulation, and finite difference methods), value at risk measures, credit risk derivatives (valuation and usage), martingales pricing theory, interest rate derivatives (such as bond options, caps and floors), equilibrium and no-arbitrage models of the short-term interest rate, and advanced models (Heath, Jarrow, and Morton model, and LIBOR market model), and real options.

**MSL891 Data Analytics using SP S S**  
1.5 Credits (1.5-0-0)  
Pre-requisite(s): MSL301 & MSL302

**MSL892 Predictive Analytics**  
1.5 Credits (1.5-0-0)  
Pre-requisite(s): MSL301 & MSL302  
This course may expose the participants to the following topics: Introduction to the different predictive analytics models, using Predictive Analytics in decision making, types of Predictive Modeling, Agent Modeling, Case Based Reasoning and Predictive Expert Systems. Text mining, Social Network Analytics, Heuristics, Swarm algorithms, Hybrid Methods and algorithms. Other relevant topics within the subject domain may also be explored.

**MSL895 Advance Data Analysis for Management**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
**Module I:** Descriptive vs. Inferential Analysis, Parametric vs. Nonparametric Analysis, Univariate, Bivariate and multivariate analysis, Hypothesis Testing and Estimation  
**Module II:** ANCOVA, MANOVA, Logit Regression, Tobbit Regression, Panel Regression.  
**Module III:** Factor Analysis, Cluster Analysis, Discriminant Analysis, Data Envelopment Analysis, Structural Equation Modelling.

**MSL896 International Economic Policy**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
World trade; The standard trade model; economies of scale and international trade; international factor movements; instruments of trade policy; exchange rates and foreign exchange markets; money, interest rates and exchange rates; price, output and exchange rates, different exchange rate regimes and policy, optimum currency area; Global capital markets; Financial crisis and contagion, Transition economies: crisis and reform.

**MSL897 Consultancy Process and Skills**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
**Module I:** Introduction to Consultancy-its evolution, growth & status, Types of Consulting Services, firms and role of consultants, client-consultant relationship. Marketing of Consultancy Services.  
**Module II:** The Consulting Process-Entry, Diagnosis, Action Planning, Implementation and Termination/Closing;  
**Module III:** Methods of selection of consultants, Costs and fee calculation, Preparation of Consultancy proposals and Agreements, Technical Report Writing and Presentation.

**MSL898 Consultancy Professional Practice**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
**Module I:** Negotiation Skills, Professional Ethics and Code of Conduct. Managing a Consultancy firm-fundamentals of consulting firm management, consulting firms and IT in consulting firms, management of consulting assignments.  
**Module II:** Consulting in various areas of Management-Consulting in general and strategic management, consulting in financial management, consulting in marketing and distribution management, consulting in production and operation management, consulting in HRM, consulting in IT.  
**Module III:** R&D-Consultancy relationship, Careers and Compensation in Consulting, Training and development of Consultants, Future Challenges and Opportunities in Consultancy.

**MSL899 Current and Emerging Issues in Consultancy Management**  
3 Credits (3-0-0)  
Pre-requisite(s): MSL301 & MSL302  
Relevant current and Emerging Issues - Open Slot – Content will be decided by faculty.

**MST893 Corporate Sector Attachment**  
2 Credits (0-0-4)  
The students would undertake corporate training in the industry. This course would evaluate the projects and experiences of the interns of the full time MBA programme. A report would need to be submitted in the prescribed format with due feedback from the company where the work was undertaken. Scope, achievement of objectives and quality of deliverable would be evaluated.

**MSC894 Seminar**  
3 Credits (0-0-6)  
Research of the industry in which they are currently working/related.

**MST894 Social Sector Attachment**  
1 Credit (0-0-2)  
The student shall spend a minimum of 28 hours with a non-profit organization. The organization should be registered with government. The student proposes nature of work to be carried out and get in approved by the organization. Each student is given a faculty mentor for effective execution of the proposed work. After the engagement period, both the organization and the faculty certifies the work.