

DEPARTMENT OF MANAGEMENT STUDIES

M.B.A. Programme

The Department of Management Studies offers two MBA programmes. The full-time MBA programme is focused on "Management Systems" and "Telecommunication Systems Management" and is designed to be completed in two years. The part-time MBA programme* is focused on "Technology Management" and is designed to be completed in three years. The programme provides a wide range of choices to the student resulting in attractive employment opportunities at the completion of the programme by incorporating a combination of various technical skills and value focused decision making along with the regular teaching. All this is imparted in a course work offered in a flexible mode.

OVERALL STRUCTURE

		Minimum	Maximum
Duration	Full-time	2 years	3 years
	Part-time*	3 years	5 years
Total Credits		72	
Compulsory Audit		(6 courses)	

Modules

1. Core Module: General Management
9 courses (27 credits) + 6 compulsory Audit Courses
2. Focus Module: Focus of the Programme
(additional core in Focus Area) 4 courses (12 credits)
3. Elective Module-I: Open Electives
5 courses (15 credits)
4. Elective Module-II: Specialization Stream
4 courses (12 credits)
(Strategic Management, Organisation Management, Manufacturing Management, Information Technology Management, Marketing, Finance, Public Sector Management)
5. Project Module: 6 credits (Industry-based)
6. Industrial Training/ Seminar: 8 weeks Industrial Placement after first year for Full-Time students. In case of part time students a Seminar Series of equivalent learning time weightage will be designed.

LIST OF COURSES

CORE MODULE

Core Courses

SML710	Creative Problem Solving	3 credits	(2-0-2)
SML720	Business Environment and Corporate Strategy	3 credits	(2-0-2)
SML730	Organisation Management	3 credits	(3-0-0)
SML731	Human Resources Management	3 credits	(3-0-0)
SML740	Quantitative Methods in Management	3 credits	(2-0-2)
SML745	Operations Management	3 credits	(3-0-0)
SML760	Marketing Management	3 credits	(2-0-2)
SML770	Managerial Accounting and Financial Management	3 credits	(2-0-2)
SML780	Managerial Economics	3 credits	(2-0-2)

Compulsory Audit Courses

SMP791	Computer Laboratory	1 credit	(0-0-2)
SMV793	Statistics for Management	1 credit	(1-0-0)
SMV794	Communication Skills	1.5 credits	(1-0-1)
SMV795	Systems Thinking	1 credit	(1-0-0)
SMV895	Management Research Methodology	1 credit	(1-0-0)
SMV896	Human Values in Management	1 credit	(1-0-0)

* Part-time MBA programme has been held in abeyance.

SML710 Creative Problem Solving

3 credits (2-0-2)

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 Digrams. Scenario Building: Harva method, Structural Analysis, Options Field/Profile Methodology.

Module III: Viable Systems Modelling. Fuzzy sets in multicriteria decision making, Analytic Hierarchy Process, Intelligent Management Systems, Creativity applications in TQM and Business Process Reengineering.

SML720 Business Environment and Corporate Strategy

3 credits (2-0-2)

Module I: An overview of planning in India. Macro economic concepts: consumption, savings, investment. Objectives of economic policy. Nature of economic policies, Chronological survey of policy pronouncements and their impact on business: FEMA Completion policy. Industrial policy resolutions etc. Comparative economic systems. Dynamics of development Global business environment. Internal and External analysis.

Module II: Business and government relations and government influences in income planning, prices and production policies. Impact of tax and inflationary parameters on corporate policy planning, Problem of determining planning horizon. Effect of uncertainties. Liberalization: Industry Policy and Trade Policy Coping strategies by Indian business, company formation and company Law.

Module III: The nature of corporate strategy, Strategic Management in different contexts, Patterns of strategy

FOCUS MODULE- TECHNOLOGY MANAGEMENT**Core Courses**

SML700	Fundamentals of Management of Technology	3 credits	(3-0-0)
SML701	Strategic Technology Management	3 credits	(2-0-2)
SML702	Management of Innovation and R&D	3 credits	(2-0-2)
SML703	Management of Technology Transfer and Absorption	3 credits	(2-0-2)

Technology Management -Electives

(To be opted under Elective Module I)

SML704	Science and Technology Policy Systems	3 credits	(3-0-0)
SML801	Technology Forecasting and Assessment	3 credits	(2-0-2)
SML802	Management of Intellectual Property Rights	3 credits	(3-0-0)
SML804	Technical Entrepreneurship	3 credits	(3-0-0)

FOCUS MODULE - MANAGEMENT SYSTEMS**Core Courses**

SML713	Information Systems Management	3 credits	(2-0-2)
SML715	Quality and Environment Management Systems	3 credits	(2-0-2)
SML716	Fundamentals of Management Systems	3 credits	(3-0-0)
SML717	Business Systems Analysis and Design	3 credits	(2-0-2)

Management Systems- Electives

(To be opted under Elective Module I)

SML714	Organisational Dynamics and Environment	3 credits	(3-0-0)
SML811	Management Control Systems	3 credits	(3-0-0)
SML812	Flexible Systems Management	3 credits	(2-0-2)
SML813	Systems Methodology for Management	3 credits	(2-0-2)
SML815	Decision Support and Expert Systems	3 credits	(2-0-2)
SML819	Business Process Reengineering	3 credits	(2-0-2)

FOCUS MODULE - TELECOM SYSTEMS MANAGEMENT

SML723	Telecommunication Systems Management	3 credits	(3-0-0)
SML726	Telecom Systems Analysis, Planning and Design	3 credits	(3-0-0)
SML728	International Telecommunication Management	3 credits	(3-0-0)
EEL767	Telecommunication Systems	3 credits	(3-0-0)

SPECIALIZATION-STRATEGIC MANAGEMENT

SML820	Global Business Environment	3 credits	(3-0-0)
SML821	Strategic Management	3 credits	(2-0-2)
SML822	International Business	3 credits	(2-0-2)
SML823	Strategic Change and Flexibility	3 credits	(2-0-2)
SML824	Policy Dynamics and Learning Organization	3 credits	(2-0-2)
SML825	Strategies in Functional Management	3 credits	(3-0-0)
SML826	Business Ethics	3 credits	(3-0-0)
SML827	International Competitiveness	3 credits	(3-0-0)
SML828	Global Strategic Management	3 credits	(2-0-2)
SML829	Current and Emerging Issues in Strategic Management	3 credits	(3-0-0)*

SPECIALIZATION-ORGANISATION MANAGEMENT

SML830	Organisational Structure and Processes	3 credits	(3-0-0)
SML831	Management of Change	3 credits	(2-0-2)
SML832	Managing Innovation for Organisational Effectiveness	3 credits	(3-0-0)
SML833	Organisation Development	3 credits	(3-0-0)
SML835	Labour Legislation and Industrial Relations	3 credits	(2-0-2)
SML839	Current and Emerging Issues in Organisation Management	3 credits	(3-0-0)*
HUL710	Personality Structure and Dynamics	3 credits	(2-1-0)

development, explaining views on strategy development. Industry and Competitive Analysis, Generic Competitive Strategies, Offensive strategies, Defensive strategies, Vertical integration strategies, Flexibility in strategy. An overview of strategy formulation process, vision, mission, objectives.

SML730 Organisation Management**3 credits (3-0-0)**

Module I: Scope and the focus of enquiry. Multidisciplinary framework for organizational analysis. Organisation Management: Theory, practice and major schools of thought, application potentials and possibility.

Module II: Systems perspective on organizations. Contingency approach to organizational theory and practice. The socio-technical systems approach. Theory of organizational structures. Nature and consequences of structure.

Module III: Organisational change. Design and development of organisations. Impact of environmental and cultural variables on organization structure and style. Strategic thinking. Automation and organizational structure. Organizational interdependence and organizational evaluation.

SML731N Human Resources Management**3 credits (3-0-0)**

Module I: Management of human resources- historical evolution of the field. Influences on the approach of management of human resources. Line and staff components of human resource management. Role of Human Resource management in a competitive business environment. Interpersonal dynamics.

Module II: Building a task-person fit. Determining Human Resource requirements. Recruitment and selection process. Training and Development. Team Building, Leadership. Appraising employee performance.

Module III: Wage and Salary Administration. Collective bargaining and industrial relations, Quality of worklife. Cost-Benefit analysis of HR functions. Safety, Health and employee assistance programmes. Global reference points of Human Resources Management.

SPECIALIZATION-MANUFACTURING MANAGEMENT

SML840	Manufacturing Strategy	3 credits	(3-0-0)
SML843	Supply Chain Logistics Management	3 credits	(3-0-0)
SML844	Systems Reliability, Safety and Maintenance Management	3 credits	(3-0-0)
SML845	Total Project Systems Management	3 credits	(2-0-2)
SML846	Total Productivity Management	3 credits	(3-0-0)
SML849	Current and Emerging Issues in Manufacturing Management	3 credits	(3-0-0)*
MEL661	Materials Management	3 credits	(2-0-2)
MEL783	Automation in Manufacturing	4 credits	(3-0-2)
MEL852	Computer Integrated Manufacturing Systems	3 credits	(2-0-2)

SPECIALIZATION-INFORMATION TECHNOLOGY MANAGEMENT

SML815	Decision Support and Expert Systems	3 credits	(2-0-2)
SML850	Management of Information Technology	3 credits	(3-0-0)
SML851	Database Design and Data Management	3 credits	(2-0-2)
SML852	Network Systems: Application & Management	3 credits	(3-0-0)
SML855	Electronic Commerce	3 credits	(2-0-2)
SML856	Business Intelligence	3 credits	(3-0-0)
SML857	Database Management Information System	3 credits	(3-0-0)
SML859	Current and Emerging Issues in Information Technology Management	3 credits	(3-0-0)*

SPECIALIZATION-MARKETING

SML861	Market Research	3 credits	(2-0-2)
SML862	Product Management	3 credits	(3-0-0)
SML863	Advertising and Sales Promotion Management	3 credits	(3-0-0)
SML865	Sales Management	3 credits	(2-0-2)
SML866	International Marketing	3 credits	(3-0-0)
SML867	Industrial Marketing Management	3 credits	(3-0-0)
SML869	Current and Emerging Issues in Marketing	3 credits	(3-0-0)*

SPECIALIZATION-FINANCE

SML811	Management Control Systems	3 credits	(3-0-0)
SML870	Advanced Financial Management	3 credits	(2-0-2)
SML871	Accounting for Decision Making	3 credits	(2-0-2)
SML872	Working Capital Management	3 credits	(3-0-0)
SML873	Security Analysis and Portfolio Management	3 credits	(3-0-0)
SML874	Indian Financial System	3 credits	(3-0-0)
SML875	International Financial Management	3 credits	(3-0-0)
SML879	Current and Emerging Issues in Finance	3 credits	(3-0-0)*

SPECIALIZATION-PUBLIC SECTOR MANAGEMENT

SML881	Management of Public Sector Enterprises in India	3 credits	(3-0-0)
SML889	Current and Emerging Issues in Public Sector Management	3 credits	(3-0-0)

SPECIALIZATION-CONSULANCY MANAGEMENT

SML822	International Business	3 credits	(2-0-2)
SML833	Organisation Development	3 credits	(3-0-0)
SML845	Total Project Systems Management	3 credits	(2-0-2)
SML897	Consultancy Process and Skill	3 credits	(3-0-0)
SML898	Consultancy and Professional Practices	3 credits	(3-0-0)
SML899	Current and Emerging Issues in Consultancy Management	3 credits	(3-0-0)*

SML740 Quantitative Methods in Management
3 credits (2-0-2)

Module I: Role of quantitative methods and operations research for managerial decision making and support. Role of mathematical models in problem formulation and solving. Structure of decisions, statistical decision theory; decision making under uncertainty, risk, certainty. Decision Trees; Fuzzy Decision Making. Game theoretic applications. Mathematical Programming models- formulation and applications. Linear Programming- graphical method, Simplex technique; transportation, assignment and transshipment problems. Mixed Integer Programming.

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.

SML745 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.

Module II: Production forecasting. Aggregate planning and operations scheduling, Production Planning and Control. Purchasing, Materials Management and Inventory control and JIT Material Requirements Planning. MRPII, ERP, Optimization techniques applications.

Module III: Work Study, Total quality & statistical process control. Maintenance management and equipment replacement policies. Network planning and control. Line of Balance, World Class Manufacturing and factories of the future. Case Studies.

OPENELECTIVES

SML734	Management of Small Scale Industrial Enterprises	3 credits	(3-0-0)
SMP783	Management Laboratory	3 credits	(0-0-6)
SML816	Total Quality Management	3 credits	(2-0-2)
SML817	Management of System Waste	3 credits	(2-0-2)
SML818	Industrial Waste Management	3 credits	(2-0-2)
SML880	Selected Topics in Management (Open Slot to float any new course)	3 credits	(2-0-2)
SML887	Business Law	3 credits	(2-0-2)
HUL762	Industrial Economics	3 credits	(3-0-0)
HUL738	International Economics	3 credits	(3-0-0)
CSL672	Computer Network	4 credits	(3-0-2)
CSL740	Software Engineering	4 credits	(3-0-2)

Electives from Focus Modules and Specialisation Streams.

(Minimum one elective is to be opted from the Focus Area of the programme or from the other Focus Area).

PROJECT

SMD792	Minor project	3 credits	(0-0-6)
SMD890*	Project	6 credits	(0-0-12)

*(only for those students registered at DMS)

INDUSTRIAL TRAINING/SEMINAR

(Non-credit requirements)

SMT893	Industrial Training
SMC891	Strategic Leadership Practice
SMC894	Seminar

Note:

- All credit courses are of three credits each. The details of non SM Courses are available under the respective Department/Centre. In addition to above some more courses may be available, details of which may be had from the Department of Management Studies.
- The students of focus module "Telecommunication Systems Management" should contact the Dept. of Management Studies before taking the courses.

SML760 Marketing Management

3 credits (2-0-2)

Module I: Introduction to Marketing function; genesis, the marketing concept. Marketing Management System: objectives, its interfaces with other functions in the organisation. Environment of Marketing- Economic Environment, Market: market segmentation. Consumer-buyer behaviour models. Socio- cultural environment. Legal Environment. Ethical issues in marketing.

Module II: Marketing Strategy- Marketing planning and Marketing programming. The concept of marketing mix, Product policy; the concept of product life cycle. New product decisions. Test marketing- Pricing Management of distribution: channels of distribution. Advertising and production. The concept of Unique Selling Proposition.

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.

SML770 Managerial Accounting and Financial Management

3 credits (2-0-2)

Module I: Accounting principles underlying preparation of Financial Statements. Preparation of Financial Statements- a synoptic view. Managerial uses of financial data. Techniques of financial analysis- Ratio Analysis. Statement of changes in Financial Position: cash, working capital, all resources basis. Cases and Problems.

Module II: Cost concepts. Cost-Volume-Profit (CVP) relationship and Profit Planning. Budgeting. Full Costing and Variable Costing methods. Cost analysis for Decision- Making. Standard Costing and Variance Analysis. Cases and Problems.

Module III: Long-term Investment Decisions: Developing relevant data, Time Value of Money, Cost of Capital, Determination of Working Capital, Techniques of Capital Budgeting decisions, Capital rationing. Cases and Problems.

SML780 Managerial Economics

3 credits (2-0-2)

Module I: Role of Economic Analysis in managerial decisions. Basic concepts; Objectives of Business Firms and profit policies. Theories of Profit; Demand analysis and Demand Management w.r.t. domestic and world markets. Determinants, estimation and managerial uses of elasticities of demand. Demand forecasting. Supply function and market equilibrium analysis. Cost concepts; cost function; Break-Even Analysis; Equilibrium Analysis of firm in an open economy.

Module II: Pricing and output under different market situations. Recent advances in Pricing theory and practices. Production analysis and Input Demand Functions. Project appraisal techniques. Social cost benefit analysis. Investment decisions under risk and uncertainty.

Module III: National Income concepts, their interrelationships. Inflation analysis; (Indian) Monetary System and Banking Structure. Monetary policy analysis and its implications to industry. Issues of economic development and planning. Managerial analysis of Indian Five Year Plans. Industrial development planning and strategy. Regulation of industry and business. Industrial sickness. Fiscal policy and its managerial implications. Business cycles and economic stabilisation. Balance of payments, Exchange Rate. Analysis of Economic Survey and Government Budget.

SMP791 Computer Laboratory

1 credits (0-0-2)

Introduction to Computers, DOS, WINDOWS. Working with Word Processing and Graphics Packages. Familiarity with Spread Sheet and Data

base Packages. Appreciation to special packages for Management Research (SPSS, Dynamo, OR Packages, Expert Choice).

SMV793 Statistics for Management

1 credit (1-0-0)

Nature and role of statistics for management. Introduction to probability theory; Measures of central tendency and dispersion. Probability distributions; Sampling distributions. Estimation and hypothesis testing; t-tests; ANOVA; Chi-square tests; Non-parametric statistics; Correlation and regression analysis. Introduction to, and hands-on sessions on, packages for statistical modelling.

SMV794 Communication Skills

1.5 credits (1-0-1)

Communication effectiveness, Formal and informal communication. Interpersonal skills and rapport. The art of listening. Role expectation/role ambiguity and conflict. Organisational strategies for effective communication, Written communication. Presentations, use of audio visual aids. Managerial report writing.

SMV795 Systems Thinking

1 credit (1-0-0)

Systems thinking in evolution of Management thought. Hard and Soft Systems thinking, Open Systems thinking. Socio-technical systems, Flexible Systems thinking, Analytic and synthetic approaches. Basic systems concepts, principles, and metaphors. General system theory. Principles of cybernetics.

SMV895 Management Research Methodology

1 credit (1-0-0)

Problem conceptualization and definition. Hypothesis formulation. Selection of Research Methods, Flexible Systems Methodology for preparing research design, Scaling, sampling methods, Questionnaire design, validation and pretesting. Interview design, Case study, Field experiments, Quasi experiments. Qualitative research methods. Statistical techniques and implementation of research plan using statistical packages.

SMV896 Human Values in Management

1 credit (1-0-0)

Values-driven management, Value conceptualization and construction. A strategy and vision of value, creating a

shared vision of value. Ingraining practical ideals. Human technology. Fundamental human pursuits. Importance of action and the technique of right action. Values for effective managers. Specific problem areas: stress, motivation, quality, and leadership, Quality of life. Enlightened and liberated organisation.

SML700 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 challenges. Issues of concern in Management of New Technology. 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. Environment impact study. Factors promoting technology acquisition. Flexibility in Technology Management. Technology transfer and absorption. Modes of global technology transfer. Technological Entrepreneurship.

Module III: Managing productivity and quality in technology age. 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.

SML701 Strategic Technology Management

3 credits (2-0-2)

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.

SML702 Management of Innovation and R&D

3 credits (2-0-2)

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.

SML703 Management of Technology Transfer and Absorption

3 credits (2-0-2)

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.

Module III: Absorbent Strategy: Japanese technology absorption, Technology Absorption: product and process technologies, Reverse engineering. Appropriate technology. Vendor development. Adaptation and assimilation of technology.

SML704 Science and 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 partnerships, S&T in Indian Economic Policy. Government policy 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.

Module II: National technology Policies, Regulatory Policies: Industries Development and Regulation Act, MRTP, FERA, Intellectual Property Rights, Patents act, Environment Protection Act, R&D Cess Rules, Import Export Policy; Development Policies: Industrial Policy Resolution, Scientific Policy Resolution, Technology Policy Statement, New Technology Policy, Policy on Foreign Investments and Technology Imports. Role of UN and other International Agencies.

Module III: Support Systems: Technology infrastructure, technology parks, Technology development and utilization schemes by government and Financial Institutions, Venture capital financing, TIFAC, Technology mission, Standards, Support to Small scale sectors. Research laboratories, and institutions. S&T in five year plans, Fiscal incentives. Organization set up for Science and Technology. R&D in corporate sector.

SML713 Information Systems Management 3 credits (2-0-2)

Module I: Survey of Information systems and technology. Concepts of information; Information as a resource. Types of information systems- management information systems, decision support systems, transaction processing systems, on-line systems, executive support systems, real-time systems, expert systems.

Module II: Information Systems planning, architecture, and prioritization, Flexibility in Information systems and MIS success, Quality and value of Information, User Involvement, MIS life cycle. Evaluation of Information Systems. Role of Top Management.

Module III: Organizing for managing information resources; data administration and information management, Data center administration. The application development backlog, Outsourcing, Information system security. Managing technology-driven change. End-user computing. Training for IS users and managers.

SML714 Organisational Dynamics and Environment 3 credits (3-0-0)

Module I: Organisational systems vis. 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.

SML715 Quality and Environment Management Systems 3 credits (2-0-2)

Module I: Concept of Total Quality, Quality Management Systems as a means of achieving total quality. Linkage of Quality and Environment Management System. Strategic concern for Environment. Need and relevance of documentation and standardization of Management Systems. Various tools of documenting and recording the Management Systems, Various standards for Management Systems. Flexibility and change in Management Systems and documented procedures.

Module II: Quality Management Systems, ISO 9000, Quality Policy, Data, Records and Traceability. Documenting the Quality System: Quality Manual, Quality Audit, Design and Change Control, ISO 9000 Registration. Six Sigma. Awards and appreciation.

Module III: Need for proper Environment Management Systems and their economic implications. Environment Management Systems, Green Products and Strategies, Environment Assessment: Environment Protection Act, ISO 14000.

SML716 Fundamentals of Management Systems 3 credits (3-0-0)

Module I: The concept of a system, systems and cybernetics, Systems Approach to management. Emerging paradigm, customer centred management systems, Flexible Management Systems. Management Systems in various countries: Western Management Systems, Japanese Management Systems, Indian Management Systems. Organisational Culture and Value System.

Module II: Management systems in operation: Strategic Planning Systems, Management Control Systems, Financial Information Systems, Marketing Management Systems, Logistics and Distribution Systems, Systems for

Human Resources Planning and Management.

Module III: Methodology for developing Management System. Optimization and Learning Systems methodologies, Microworld, Continuous Improvement and Reengineering of Management Systems. Organizing to improve systems.

SML717 Business Systems Analysis and Design

3 credits (2-0-2)

Module I: System development methodologies; Requirements analysis and determination. Requirements engineering. Structured approaches to business systems analysis. User driven business analysis. Role of the consultant.

Module II: Requirements specification. Application prototyping. CASE methodologies and techniques; Systems design; Data-driven approaches (E-R Modelling). Process-driven approaches (Gane and Sarson and Yourdon techniques). Traditional work flow methods.

Module III: Object-oriented analysis and design. Verification and validation of business system design. Limits to analysis and design trade offs. IBM's Business Systems Planning approach. Business Systems Applications. Enterprise Resource Planning.

SML 723 Telecommunications System 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.

SML726 Telecom Systems Analysis, Planning, and Design

3 credits (3-0-0)

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.

SML728 International Telecommunication Management

3 credits (3-0-0)

Module I: Role of select International Institutions. Historical development and evolution of telecom, Patterns of Transaction in international telecom management; managing the market growth.

Structure of the Telecommunications sector of developed and developing in select countries; trends in privatization; liberalization and deregulation.

Module II : Role of telecommunications in socio-economic development; new technologies and services for international telecommunications; business application of global networks. Regional prospectus on development of Telecom.

Module III : Current issues and implications for the industry, Indian

markets, policy issues, skill formation for ITM, problems, challenges of growth.

SML801 Technology Forecasting and Assessment

3 credits (2-0-2)

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, Analogy method, Organising for Technology Forecasting.

Module III: Technology assessment: Components, problem definition, Social description, Measure, Impact assessment. Strategies for assessment, Economic impact analysis. Assessment of risk and uncertainty. Safety and environment considerations.

SML802 Management of Intellectual Property Rights

3 credits (3-0-0)

Module I: Nature of Intellectual Property: Patents, Designs, Trademarks and Copyright. Process of Patenting and Development: technological research, innovation, patenting, development. International cooperation on Intellectual Property. Procedure for grants of patents, Patenting under PCT.

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, Computer Softwares etc. Traditional knowledge Case Studies, IPR and IITs.

SML 804 Technical Entrepreneurship

3 credits (3-0-0)

Module I: Basis and challenges of entrepreneurship Technological entrepreneurship, Innovation and entrepreneurship in technology based organisations, High tech. entrepreneurship. Entrepreneurial characteristics. Concept of new ventures. Technology absorption, Appropriate technology. Networking with industries and institutions.

Module II: Starting a new technological venture and developing the business: Business idea, Business plan, Marketing plan, Financial plan, Organisational plan. Financing a new Venture: Sources of Capital, Venture Capital, Going public.

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 or acquisition, Entrepreneurship, International Entrepreneurship.

SML811 Management Control Systems 3 credits (3-0-0)

Module I: Nature of Management Control Systems: planning and control process. Essentials of Management Control System. Behavioural aspects of Management Control-motivation and morale, goal congruency, and so on. Management Control Process: Programming, Budgetary Planning and Procedures, Fixed and Flexible Budgeting, Zero Base Budgeting. Internal Audit and Internal Control. Standard Cost Accounting Systems as measures of operating performance.

Module II: Variance Analysis and reporting of financial performance: Material, Labour and Overhead Cost Variances, Revenue Variances, Profit Variances, Variance Reporting.

Module III: Management Control Structure: Responsibility Accounting System- Concept of Responsibility Centre, Expense Centre, Profit Centre, Investment Centre. Inter-Divisional Transfer Pricing System, Measurement of Division Performance.

SML812 Flexible Systems Management 3 credits (2-0-2)

Module I: Emerging management paradigms: Total Quality Management, Business Process Reengineering, Learning Organisation, World Class Organisation, Flexibility in Management. Liberalisation, Globalisation and change. New Organisation forms.

Module II: Concept and dimensions of Systemic flexibility. Managing paradoxes. Methodology and tools of flexible systems management. Underlying values, and guiding principles, Case Analysis using SAP-LAP framework.

Module III: Flexibility in functional systems, Information Systems flexibility, manufacturing flexibility, organisational flexibility, financial flexibility, and strategic flexibility. Linkage of flexibility with organisational performance.

SML813 Systems Methodology for Management 3 credits (2-0-2)

Module I: Introduction to systems methodology, Flexible Systems Methodology, Need and applicability of Systems methodology for management. Nature of managerial problems. System Dynamics Methodology- Philosophy, Foundation, Steps, building blocks, feedback structures, principles of systems, learning organisation.

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.

SML815 Decision Support and Expert Systems 3 credits (2-0-2)

Module I: The management support framework for computers. Fundamentals of decision theory and decision modelling. Humans and information processors and information systems as decision systems. Human decision styles.

Module II: Models, heuristics, and simulation. Overview of DSS- database, model base, user interface. DSS development methodology and tools. Need for expertise in decision models and expert systems. Expert systems fundamentals. Knowledge engineering, knowledge representation and inferencing. Building expert systems.

Module III: Integrating expert systems and DSSs. Strategies for implementing and maintaining management support systems. Case studies, and laboratory and filed projects.

SML819 Business Process Reengineering 3 credits (2-0-2)

Module I: Nature, significance and rationale of Business Process

Reengineering, Reengineering scenarios in major countries, Problems issues, scope and trends in BPR, Implementing BPR: Methodology and steps, IT enabled reengineering, mediation and collaboration.

Module II: The paradigm of Mass customization, managing organisational change, Transforming/ Reinventing the enterprise, Team building. Case studies of success as well as failure.

Module III: People view, empowering people, reengineering management. Issues of purpose, culture, process and performance, and people.

SML820 Global Business Environment 3 credits (3-0-0)

Module I : Global Scene.

Historical and economic background, firms and International Business. The global scene and the challenges ahead, challenges to free International Trade Political Risk, Protection, Accounting, Taxation and Legal practices. The International debt risks.

Module II: Regional Issues.

Global Monetary Institutions and Trade Agreements, Regional Trade Agreements and Facts. Socio-cultural context of International Business: European countries, U.S.A. developing of newly industrialized countries and Japan. Management of Multinational firms.

Module III: Globalization of Indian Economy.

Liberalization and globalization of Indian business. India's multinationals, Indian laws and policies relating to investment in India by international firms and outside India by Indian firms.

SML821 Strategic Management 3 credits (2-0-2)

Module I: Strategic Management Process.

The Strategic Management Process, Flexible system view of Strategic Management, Strategic Situation Analysis, PEST analysis, The use of scenario, Structural analysis of the competitive environment, Competitive Advantage Profile, Industry foresight. Strategic Capability Analysis- Resource audit, value chain analysis, comparative

analysis, financial analysis, SWOT analysis, core competencies, culture and stakeholder expectations.

Module II: Strategy Formulation.

Strategic Intent, Vision, Mission and objectives. Strategic architecture, crafting a strategy. Alternate directions for strategy development. Alternate methods for strategy development: Portfolio analysis, life cycle analysis, value chain analysis, culture fit, screening strategic option, Analysing return risk and feasibility, selection of strategies.

Module III: Strategy Implementation.

Implementing strategy: Core competencies, Budgets, Policies, Best practices, Support Systems, Rewards. Culture and Leadership, Functional strategies.

SML 822 International Business

3 credit (2-0-2)

Module I: Key Issues in International Business.

Socio-cultural, economic and political forces facing business. Exchange rate determination, hedging: international sourcing. Understanding the determinants of competitive advantage in international business at the national, industry and firm level, global forces transforming international business. International Strategic Management. Multinational Corporation. Problems and Prospects in an International Environment, competitive and cooperative business strategy.

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.

Module III: Globalization Strategy.

Globalisation strategy, strategies of Multinational Corporation, Competing to shape the future, Embedding the Core competence perspective, coalition formation. Implications for functional strategies: marketing, HR, planning, organisational structure, production, Global Information Systems, Strategy Alternatives for Global Market entry and expansion, International negotiations.

SML823 Strategic Change and Flexibility

3 credit (2-0-2)

Module I: Managing Change and Flexibility.

Patterns of change, liberalization, globalization and privatization, changes in Social Political and Economic environment, Technological and organizational change. Changes in customer requirements. Impact of change of business and workforce. Need for flexibility, concept of Strategic Flexibility: Openness, Adaptiveness, Change, and Resilience. Understanding the process of strategic change. Managing chaos strategically. Regenerating strategies.

Module II: Top Down Restructuring.

Corporate restructuring, Alliances, joint ventures, acquisitions and merges. Reorganising the firm, Financial and strategic analysis for restructuring. The merger process, stages of merger and acquisition, the impact of mergers and acquisitions on organizational performance.

Module III: Implementation.

Reengineering the corporation, identification of key business processes. Organization of the future. Implementing Strategic Change. Transforming the organization. Sustaining change. Consolidating gains and producing more change. Anchoring new approaches in the culture. Leading a high-commitment high-performance organization.

SML824 Policy Dynamics and Learning Organization

3 credit (2-0-2)

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 organization, clarifying vision and opportunities for change in a learning organization.

Module II: Micro World and Policy Dynamics.

Systems-linked organization model. Micro world for policy learning. System

Dynamics modeling applied to policy formulations, conceptual model. The language of systems thinking links and qualitative system dynamics, Flexibility Influence Diagram, Collaboration Diagram, Archetypes, leverage points, Integrative simulation models.

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.

SML825 Strategies in Functional Management

3 credit (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.

SML826 Business Ethics

3 credit (3-0-0)

Module I: Ethics in Business

Historical perspective, culture and ethics in India, codes and culture. Economics and the Environment: green business, Ethics and Competition. The ethical code, social audit. A framework for analysis and action. The sphere of personal ethics: consequences, rights and duties, virtue and character. Role of objectivity, practicability, judgement and balancing acts. The individual and the corporation.

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.

Module III : Ethics in Functions.

Ethical responsibilities of organizations

leader: power, leadership. Obstacles to ethical conduct. Pressures for conformity. Evaluation and rewards. Job pressures and issues. Organizational change. Ethics in use of Information technology. Intellectual Property Rights. Ethics in Marketing. Ethics of advertising and sponsorship. Freedom Vs State Control. Acquisitions and Mergers, Multinational decision making: Reconciling International norms.

SML827 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 II: Evaluating & Planning for Competitiveness

Frameworks of Competitiveness & Strategy, Evaluating Competitiveness, Enhancing Competitiveness, Competitiveness Processes & Initiatives, Leadership Dimension, Cases.

Module III: Practitioners Perspectives

Business Models for Competitiveness, Functional (e.g. HR, Operational, Financial, Technological) Linkages, Partnerships/ Cooperation for Competitiveness, Emerging Issues/ Practices.

SML828 Global Strategic Management

3 credits (2-0-2)

Module I: The Process of Globalization and Global Strategy.

Globalization of markets and competition, globalization and localization, Diagnosing Global Industry Potential, Designing a global strategy, Making Global strategies work, Global strategic alliances, M&A.

Module II: Regional Strategy and Entry Strategy.

Regional Strategy, Emerging Markets Assessing Country Attractiveness, Entry Strategies: Subsidiaries, acquisitions, joint ventures, Licensing, Franchising, Agents and Distributors.

Module III: Managing Globally and Future Challenges.

Designing a global organization, Global Marketing and Operations, Cross Cultural Management, Leadership and Global manager, Globalization and the Internet.

SML829 Current and Emerging Issues in Strategic Management

3 credits (3-0-0)

(Relevant current and Emerging Issues)

SML830 Organisational Structure and Processes

3 credits (3-0-0)

Module I: Organisational structure- classical and neoclassical theories. Strategy and structure. Modern Organizational theory- systems view of organisation and integration. Micro, intermediate, macro environment. Participative structures.

Module II: Work culture and organization processes. Decision processes, balance and conflict processes. The process of role and status development. Influence processes and technological processes. Capacity development in organizations.

Module III: Interface of structure and processes- structural functionalism of Talcott Parsons; Allport and Event-Structure theory. Organizational Governance- organizations as a subject of political enquiry, Models of organizational governance. Making and breaking patterns.

SML831 Management of Change

3 credits (2-0-2)

Module I: Process of change and organization theory and practice. Elements of change. Achieving Systematic change. Domains of systematic change- strategy, technology, structure and people. Planning for change.

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.

Module III: Change through behaviour modification. Positive and negative reinforcement. Training for change. Managing conflict. Implementing change. Adjustment to change and organising for growth. Prerequisites and consequence of change. The change Dynamics.

SML832 Managing Innovation for Organisational Effectiveness

3 credits (3-0-0)

Module I: Elements of creativity person, creative organization, nature of innovation. Assessing creativity. Tools

and techniques for enhancing creativity. Innovation and risk.

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.

Module III: Practices of creativity and intervention strategies- organization excellence: Criteria and practice- innovation and quality, Innovation and BPR/appraisal system- interventions. Innovation and competitiveness.

SML833 Organisation Development

3 credits (3-0-0)

Module I: Organisation Development- nature and scope. The generic and contextual element of developing organisation. Introduction to process change. Theories, strategies and techniques of organizational diagnosis for improving organisation's problem solving and renewal process.

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.

Module III: Personal change. Laboratory learning techniques. Managerial Grid. Sensitivity training. Transactional analysis. Inter-group and team building interventions. Management by objectives. Total system interventions- stabilising change.

SML835 Labour Legislation and Industrial Relations

3 credits (2-0-2)

Module I: Introduction of industrial relation and a systematic view of personnel. Labour Relations. Introduction to Indian Trade Unionism. Industrial relations and conflict in industries. Introduction of Labour Regulation Act, Factories Act, Trade Union Act, and Safety Act.

Module II: Role of Industrial Legislation. Introduction of Industrial Dispute Act. Different jurisdiction of Labour Court. Issues in recognition of unions. Tribunal and national tribunal. Strategies for resolving Industrial Conflict, Collective bargaining. Works committee and joint consultative committee, Negotiation process.

Module III: Influence of Government regulations. Third party intervention in industrial disputes. Rules of grievances. Discipline in Industry. Contribution of tripartite bodies. Labour Welfare Participative Management. Workman's Compensation Act. Productivity in Industry. Healthy industrial relations and economic development.

SML839 Current and Emerging Issues in Organisation Management
3 credits (3-0-0)

(Relevant current and Emerging Issues)

SML840 Manufacturing Strategy
3 credits (3-0-0)

Module I: Manufacturing and operations strategy-relevance and concepts. Strategic issues in manufacturing & operations, Capacity planning, International innovations in manufacturing. Choice of technology and manufacturing process in the prevailing environment.

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

Module III: Strategic implications of Experience Curve. Focused manufacturing-green, lean and mean. Strategic issues in project management and implementation of manufacturing policies. Perspectives of Manufacturing Strategy. Case Studies.

SML843 Supply Chain Logistics Management
3 credits (3-0-0)

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.

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.

Module III: Supply Chain Logistics Mix Management.

Logistical Connectivity: Transportation modes, rate structure, legal aspects; maintenance, spares and repairs; test and support equipment, Routing of freight flows. Management and Organization of the Logistics Systems; Organization, Information and cost control; Logistical information Systems, Computer aided logistics management. Case Studies.

SML844 Systems Reliability, Safety and Maintenance Management
3 credits (3-0-0)

Module I: Reliability, Safety, Risk Assessment Perspective.

Introduction to reliability, availability and safety engineering and management. Select statistical concepts and probability distributions. Optimization techniques for systems reliability, availability and safety. Reliability, availability, safety and maintainability. Risk assessment and management for reliability and safety.

Module II: Maintenance Planning and Control.

Maintenance management objectives and functions. Classification of Maintenance system. Maintenance Planning and Scheduling. Issues of Replacement versus reconditioning and imperfect repair maintenance models. Spare parts Inventory Planning and Control for single and multi-echelon systems. Diagnostic tools of failure analysis: Failure Mode Effect and Criticality Analysis, Fault Tree Analysis.

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.

SML845 Total Project Systems Management
3 credits (2-0-2)

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.

Module III: Funds planning, performance budgeting and control. Project materials management. Pricing, estimating, and Contract Administration, Building and Bid evaluation and analysis. Project implementation and monitoring, Project management information and control systems. Project systems management performance indices. Software Packages application for Project Systems Management. Case studies.

SML846 Total Productivity Management
3 credits (3-0-0)

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.

SML849 Current and Emerging Issues in Manufacturing Management
3 credits (3-0-0)

(Relevant current and Emerging Issues)

SML859 Current and Emerging Issues in Information Technology Management
3 credits (3-0-0)

(Relevant current and Emerging Issues)

SML850 Management of Information Technology
3 credits (3-0-2)

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 Strategy Development and Planning Techniques.

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.

SML851 Database Design and Data Management
3 credits (2-0-2)

Module I: Introduction to Database Systems.

Evaluation of database technology; Limitations of file systems; Database systems- hierarchical models (IMS

architecture- DBD, PSB), network models (DBTG DDL and DBTG DML), and relational models normalization and relational calculus);

Module II: Database Design.

Database systems- hardware software, data people; database systems and their organizational development; Database development lifecycle; Logical database design; implementation design.

Module III: Strategic Issues Related to IT Management.

Database implementation; Knowledge base systems and natural languages; Database administration and control; Distributed database systems. Data mining, data warehousing.

SML852 Network System: Applications and Management
3 credits (3-0-0)

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, Digital's DNA, Internetworking; 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.

SML855 Electronic Commerce
3 credits (2-0-2)

Module I: Business Opportunities with or without Internet : Business revolution and e-commerce: issues of competitive advantage, physical distribution system and supply chain improvements, value chain analysis.

Networks and commercial transactions, The Internet environment, on-line

commerce solutions.

Types of e-commerce: web store, auctions, discounting, advertising and promotions (case studies) etc., risks in internet commerce, jobs in cyberspace.

Business Models for e-commerce, on-line commerce options: customer choices and merchant choices, Advertising and marketing on internet. Consumer-oriented commerce. Network infrastructure for EC. Business of Internet commercialization.

Module II: Technology of e-commerce: Technology Basics: all the nets (internet, intranets & extranets), telecommunication infrastructure of internet, protocols & convergence.

Business technologies for WWW: database integration, web databases and software developments.

Security technologies: encryption, cryptography, public key solutions, key distribution and certification, Electronic payment methods: technologies (EDI, EFT, EFTPOS etc.), secure transaction models, Protocols for the public and private information (Secure sockets layer (SSL) and Secure electronic transaction (SET)).

Electronic Payment Systems : First virtual internet payment system, cyber cash.

Digital Currencies : Basics, eCash, Smart cards.

Re-intermediation at work, intelligent agents, datamining tools.

Module III: Setting up a e-business (Legal Commercial Framework).

Strategy for setting up a web site, creating commercial web site, shopping agents.

Taxation implication of i-commerce : Income tax, sales tax, tax reforms and trade policy, Action and gambling on Internet. Ethics and legal issues : cyber laws. NP Future trends : Convergence of technologies, Virtual concepts, Government internet commerce.

SML856 Business Intelligence
3 credits (3-0-0)

Module I: Data Warehousing.

Problems of modern databases & the nature of BI Warehousing, Multidimensional Modeling, Online Analytical Processing (OLAP) Systems Interface of BI with organization capability Paperless office & Virtual Organization.

Module II: Data Mining.

Knowledge Discovery, Data Mining tools, Market Basket Analysis, Management Applications Customer Relations Management (CRM) Data Visualization and Multidimensionality Geographical Information Systems (GIS) and Business applications.

Module III: Other Decision Supporting Technologies.

Executive Support Systems, Knowledge Management Characteristics and Capabilities of DSS Collaborative Computing Technologies: Group Support Systems Intelligent Support Systems (Expert Systems, ANN, Genetic Algorithm etc.) and their Managerial Applications.

SML857 Database Management Information Systems

3 credits (3-0-0)

Module I: Introduction to database.

Role of information in an organization: Need for a data architecture, Need for Information Resource Management, Data concepts and data modeling, Entity- Relationship modeling, Relational Modeling including normalization, Mapping Entity-Relationship Model to Relational Model.

Module II: Database Information Systems.

Structured Query Language, Data storage and file organization, Technology of DBMS, Concurrency control, Recovery management. Use of database and application development tools. Database security.

Module III: Emerging data management techniques.

Distributed database systems and object databases. Data warehousing and data mining; Executive information systems and decision support systems.

SML861 Market Research

3 credits (2-0-2)

Module I: Research concepts; exploratory, descriptive and conclusive research. The marketing 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.

SML862 Product Management

3 credits (3-0-0)

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 II : New product development and launching. Challenge of change-opportunity and risk-product innovation, modification, addition and elimination product proposals-sources, generation, processing and selection. Establishing techno-economic feasibility product testing and test marketing. Developing the strategy and the plan. Implementing the plan, coordination and control. Brand identity, Image, Equity, Brand Plan and Management, New Product Development Process.

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.

SML863 Advertising and Sales Promotion Management

3 credits (3-0-0)

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.

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.

SML865 Sales Management

3 credits (2-0-2)

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.

Module III: Operational Management, Staffing: Its advantages, responsibility for staffing, tools and methods of selection. Sales training: Its objectives, programme content, Methods of training, concepts of territorial management for field sales force. Measurement and control: General considerations governing evaluation and sales performance and control.

SML866 International Marketing

3 credits (3-0-0)

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 III : Export credit system pre-shipment and post-shipment, finance, medium and long term credit financing; ECGC; 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.

SML867 Industrial Marketing Management

3 credits (3-0-0)

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.

Module III: Marketing Research for industrial product Marketing control (variance analysis audit). Industrial purchase behaviour and processes, new product launch. Forecasting methods.

SML869 Current and Emerging Issues in Marketing

3 credits (3-0-0)

(Relevant current and Emerging Issues)

SML870 Advanced Financial Management

3 credits (2-0-2)

Module I: Aims and objectives of Financial Decisions. Integrated approach to Corporate Financial Decisions. Effect of Taxes on Financial Decisions. Capital Budgeting Decisions under conditions of Risk and Uncertainty. Unequal expected lives and investment outlays. Capital Asset Pricing Model: meaning, Systematic and Unsystematic risk, calculation of Beta, CAPM and Cost of Equity Capital. Business Valuation Cases and Problems.

Module II: Capital Structure Decisions: Operating and Financial Leverage, Optimum Capital Structure and Capital Structure Theories, EBIT/EPS Analysis, Designing Capital Structure in practice. Cases and Problems.

Module III: Divided Decisions: Dividend and Valuation- Walter's Model, Gordon's Model, Theory of Irrelevance of Dividends (MM Approach). Types and Determinants of Dividend Policy. Internal Financing and Dividend Policy. Stock Dividend (Bonus Shares) and Stock (Share) Splits. Lease Decisions: Fundamentals of Leasing, Types of Leases, Financial framework for evaluating Lease Versus Buy/Borrowing alternative. Break-even Lease Rental. Mergers Acquisition and corporate restructuring Cases and Problems.

SML871 Accounting for Decision Making

3 credits (2-0-2)

Module I: Conceptual Framework for Decision Making and Pricing Decisions

Concept of cost relevancy. Full-Cost Fallacy and Loss Minimization criteria, Differential Costs versus Variable Costs, Opportunity Loss. Concept. Developing relevant data for decision-making. Techniques of decision-making Differential Costing and Incremental Analysis. Pricing Decisions: Full-Cost versus , Selling at below normal price, pricing special orders. Case and Problems.

Module II: Product Decisions.

Make or Buy, Sell Now or Process Further, Operate or Shut-Down, Addition/ Discontinuation of Product Lines/ Divisions/Departments: Product Mix Decisions with Input Constraints(s), with and without samples Constraints. Decisions Relating to Disposal of

Inventories. Cases and Problems.

Module III: Restructuring Decisions.

Decisions relating to Investment in a New Project and New: Technology> Choice of Method of production. Restructuring and Expansion Decision. Mergers and Acquisition/Takeover. Cases and Problems.

SML872 Working Capital Management

3 credits (3-0-0)

Module I: Nature and Financial of Working Capital.

Nature of Working Capital, Trade-off between Profitability and Risk, Determinants of Working Capital. Factoring as a Sources Finance. Forecasting Working Capital requirements. Sources of financing Working Capital. Factoring as a source of finance. Bank credit and working capital Finance. Approaches to determine Financing Mix. Working Capital Leverage. Cases and Practical Problems.

Module II: Current Assets Management.

Cash Management, Inventory Management, Receivables Management. Cases and Practical Problems.

Module III: Analysis a Tools and New Development.

Operating Cycle, Ratio Analysis, Funds-flow Analysis and Cash -Flow Statement as tools of Working Capital Management. Recent changes and new developments. Practical Problems.

SML873 Security Analysis and Portfolio Management

3 credit (3-0-0)

Module I: Investment Environment.

Saving and Financial flows, Financial Intermediation, Investment in Corporate Securities and other Investment Outlets, New Issue market and Secondary Markets, Markets and Brokers. Sources of investment information. Tax incentives. Theoretical framework for investment Decision. Forecasting of future earnings, Concepts of Sustainable Earnings, Rating, Index. Interest Rate Structure and Yield to Maturity Curve. Regulatory Framework of Securities Markets in India. Practical Problems.

Module II: Valuation of Securities.

Valuation of Variable Income Securities (Equity Shares): Theory of Valuation-

Earnings and Dividend Model: Aggregate Economic Analysis, Industry Analysis, Fundamental Analysis, Technical Analysis, Growth Shares, Under and Overvalued Shares. Analysis of Fixed Income Securities like Preference Shares, Debentures/Bonds and other Financial Instruments Convertible Bonds: Warrants and Options, Practical Problems.

Module III: Portfolio Management.

General principles. Measures of Risk and Return, Required Rate of Return and CAPM Markowitz Portfolio Theory. Efficient Capital Market Theory. Alternative Efficient Market Hypotheses. Constructing the Optimum Portfolio. Practical Problems.

SML874 Indian Financial System

3 credits (3-0-0)

Module I: Overview of Indian Financial System.

Role of Financial Markets in capital formation and economic development; Indian Financial system- An overview. Commercial Banks and Industrial Finance- evolving role. Reserve Bank of India as a Regulator of Banking System and its other functions. Basel -I and Basel-II norms.

Module II: Financial Markets.

Money Market Organization in India- nature, constituents and instruments. Industries Securities Market in India: New Issue Market and Stock Exchange. Differences and similarities, functions, methods of New Issues, Regulatory Framework and SEBI.

Module III: Mutual Funds, Insurance and others.

Investment Policy and performance appraisal of Unit Trust of India, Insurance, IRDA. New Developments such as financial instruments, Private foreign investments, case studies and problems.

SML875 International Financial Management

3 credits (3-0-0)

Module I: Foreign Exchange Market and Risk Management: Environment of International Financial Management: Balance of Payments. Means of International Payments, Foreign Exchange Market, Currency Futures and Options Markets, Foreign Exchange Risk Management, Exchange Risk, Political

Risk, Interest Rate Risk, Measuring and Managing Foreign Exchange Exposure, Practical Problems.

Module II: Financing of International Operations : Determination of Exchange Rate, Exchange Market and Arbitrage, Exchange Rate Control, Financing of Exports and International Investments, International Monetary Systems, European Monetary System, International monetary and Financial Institutions, Practical Problems.

Module III: Financial Management of MNCs: Multinational Financial Management: Capital Budgeting Decisions for Multinational Corporation, Financing Decisions- Cost of Capital and Financial Structure, Working Capital Management and Control International Banking, International Transfer Pricing, Cases and Problems.

SML879 Current and Emerging Issues in Finance

3 credits (3-0-0)

(Relevant current and Emerging Issues)

SML881 Management of Public Sector Enterprises in India

3 credits (3-0-0)

Module I: Public enterprises, their status and role in developing societies. Central and State level PSUs. The role of public enterprise in the economic and industrial development of India. Structure and goals of public enterprise. Public enterprises. Government relationship. Issues of autonomy and accountability.

Module II: Political economy of public enterprises. Traditional economics Vs. Political economy. The nature of contending social forces. Planning and decision-making in public enterprises. Role of technology in public enterprises. Public enterprise-financial problems and issues of divestment and pricing in public enterprise.

Module III: Project management, monitoring and evaluation in public enterprises. Performance evaluation in public enterprises. Performance indices. Strategies for performance improvement. Concern of liberalisation and public sector undertakings.

SML 889 Current and Emerging Issues in Public Sector Management

3 credits (3-0-0)

(Relevant current and Emerging Issues)

SML734 Management of Small Scale Industrial Enterprises

3 credits (3-0-0)

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

Module II: Raising resources for new enterprises. Location, design, product and process. Choice of technique in small business. Survey needs for growth of the enterprise. Monitoring to avoid sickness. Development and diversification.

Module III: Integration with medium and large sector considerations. Informations network for new enterprises. Implication of WTO to SMEs. Globalisation & Competitiveness of SMEs.

SMP783 Management Laboratory

3 credits (0-0-6)

Module I: Introduction and overview of Management Laboratory- Interpretation of managerial process. Case development technology- Game development technology and simulation exercises- Data sources.

Module II: Research methodology in management and system sciences- Management systems instrument development technologies- Case analysis and report writing methodology.

Module III: Development of cases/ games/simulation experiments. Seminars and group discussion.

SML816 Total Quality Management

3 credits (2-0-2)

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. FMECA, 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.

SML817 Management of System Waste

3 credits (2-0-2)

Module I: Introduction to waste and waste management. The concept of wastivity and its inter-relationship with Productivity Quality and Flexibility. Systems concept of waste, complementarily of waste and resource management. Functional elements of waste management. Waste management and cost reduction. Taxonomy of wastes, JIT, TQM and waste.

Module II: Management of waste in industrial and service sectors. Management of manpower waste and unemployment. Management of energy waste in the national economy. Energy recycling, Waste management and energy conservation. Total energy concept, overall energy wastivity.

Module III: Interfaces of waste management: environment control, nature conservation, resource development, Quality and Productivity Management, Business Process Reengineering. Role of legislation and government. Waste management and national planning.

SML818 Industrial Waste Management

3 credits (2-0-2)

Module I: The concept of industrial system. Systems waste and waste management. Wastivity and productivity measurement. The categories of industrial systems waste. Stages and causes of waste generation in industrial systems. Waste reduction measures and systems in industry. Collection and disposal system of scrap, surplus and obsolete items. Recycling and processing of industrial waste. Industrial pollution and environment control.

Module II: Value engineering, design waste and cost reduction. Inspection rejects and quality management. Reliability, maintenance, breakdown and management of waste. Space waste and layout planning. Time management, manpower waste in industry, absenteeism. Capacity utilization. Waste heat recovery and energy waste in industry. Resource conversation/loss prevention in process industries. Data and information waste, management of hazardous waste. Waste treatment. Natural calamities. Accident prevention, industrial safety and waste management.

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.

SMD792 Minor Project

3 credits (3-0-0)

SML887 Business Law

3 credits (2-0-2)

Module I: Nature of Business law, Sources of Business law and their classification. Mercantile law, Statute I Case law, Customs and Usage. Agreement and their legal obligations. Essential elements of a valid contract, types of contract, Void and voidable contract. Unenforceable and illegal agreements. Offer and acceptance over the telephone.

Law of Arbitration-Definition of Arbitration, Effect of an arbitration. Arbitration without Intervention of Court. Powers and duties of Arbitrators.

Module II: Sale of Goods Act. Definition and essentials of a contract of sale, Distinction between sale and agreement to sell, sale and hire purchase, sale distinguished from contract for work and labour. Kinds of goods, perishable goods. Document to the title of goods. Rules regarding transfer of property, Transfer of Title on sale. Rules regarding delivery of goods. Buyers rights against seller, and unpaid seller's rights.

Consumer protection act. Consumers

rights, consumer's disputes redressal agencies, consumer protection council.

Module III: Negotiable Instruments 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.

SML897 Consultancy Process and Skills

3 credits (3-0-0)

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.

SML898 Consultancy Professional Practice

3 credits (3-0-0)

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.

SML899 Current and Emerging Issues in Consultancy Management

3 credits (3-0-0)