PROGRAMME CURRICULUM

SEMESTER I

1. Principles and Practice of Management

- 1. Business- The Purpose of Management
- 2. Designing Organization for Business
- 3. Need for Managing Organization and Business
- 4. Management of Standard Functions
- 5. Managing Resources
- 6. Planning
- 7. Decision-Making
- 8. Organizing
- 9. Staffing
- 10. Leading: Directing | Communicating
- 11. Controlling
- 12. Coordinating (Synchronizing)
- 13. Evolution of Management Thought
- 14. Pursuing Management as a Career

2. Operations Strategy and Management

- 1. Introduction of Operations Strategy
- 2. Competitive Dimension
- 3. Operations Performance
- 4. Capacity Strategy
- 5. Purchasing and Supply Strategy
- 6. Process Technology Strategy
- 7. Improvement Strategy
- 8. Product Development Strategy
- 9. Process Operation Strategy

3. Introduction to Project Management

- Project Management: Genesis, History & Evolution
- 2. Project Phases and Organization
- 3. Understanding and Meeting Client Expectations
- 4. Project Planning
- 5. Working with People on Projects
- 6. Networks for Project Management
- 7. Resource Levelling and Project Crashing
- 8. Project Implementation and Monitoring
- 9. Controlling Projects
- Introduction to Projects Contracts
 Management
- 11. Focused Areas From PMBOK 6 & 7
- 12. Introduction of Other Useful Frameworks

4. Project Scope, Time, Cost and Total Quality Management

- 1. Project Management: Triple Constraint
- 2. Project: Work Breakdown Structure
- 3. Project: Time (Schedule) Management
- 4. Project: PERT and CPM
- 5. Schedule Management: Project Crashing
- 6. Introduction to Project Cost Management
- 7. Operating Cycle: Budget and Control
- 8. Earned Value Management
- 9. Variance & Earned Value
- 10. Cost Overrun Dilemma
- 11. Project Quality Control, Assurance-TQM and its Impact on Time and Cost
- 12. Quality Management Tools

PROGRAMME CURRICULUM

SEMESTER II

1. Mis, Project Analytics And Dashboard

- 1. Introduction & Importance of Project Analytics
- 2. Data-Driven Decision Making
- 3. Statistical Tools
- 4. Analytic Hierarchy Process
- 5. Lean Six Sigma
- 6. Statistical Application in Project Management

2. Project Risk Management

- Introduction & Components of Risk Management
- 2. Definition and Tolerance of Risk
- 3. Plan Risk Management
- 4. Risk Identification & Analysis
- 5. Qualitative & Quantitative Risk
- 6. Plan Risk Response
- 7. Monitor and Control Risk
- 8. Holistic Approach for Risk Management
- 9. Lessons Learned
- 10. Risk Management in Procurement

3. Agile Project Management Using Scrum

- 7. Introduction to "Agile" & Its Evolution
- 8. Introduction to Scrum
- 9. Project Planning Using Scrum
- 10. Release and Sprint Planning
- 11. Scrum Roles
- 12. Scrum Flow
- 13. Scrum Artifacts
- 14. The Team
- 15. Getting Maximum out of Sprint
- 16. Scrum for Software Development
- 17. Scrum for Service Industry
- 18. Scrum for Manufacturing Industry

4. Project Procurement Supply Chain and Contracts Management

- 1. Introduction To Procurement Management
- 2. Project Procurement Processes and Vendor Selection Strategies
- 3. Project Procurement Management Plan
- 4. Types of Contracts
- Contracts Principles & Terms and Conditions International Contracts
- 6. Legal Aspects of Project Procurement
- 7. Supply Chain Management in Projects
- 8. Closing out Project Procurement
- 9. Risk Management in SCM

PROGRAMME CURRICULUM

SEMESTER III

1. Moving from project management to project leadership

- 1. Project Leadership
- 2. Understanding Teamwork
- 3. Organization Structure & Culture
- 4. Team Dynamics 5 Dysfunctions of a Team
- 5. Change Management and Leadership
- 6. Interpersonal Skills & Emotional Intelligence in Leadership
- 7. Decision-Making and Problem-Solving Skills
- 8. Conflict Resolution and Managing Resistance
- 9. Ethical Leadership and Corporate Governance
- 10. Measuring Leadership Effectiveness & Future Trends in Project Leadership

2. Soft skills for Project Managers

- 1. Persuasion & Negotiation
- 2. Critical Thinking
- 3. Conflict Management
- 4. Emotional Intelligence
- 5. Adaptability
- 6. Teamwork
- 7. Trust Building
- 8. Communication
- 9. Coaching
- 10. Motivation
- 11. Risk Management
- 12. Stakeholder Management

3. PROJECT MANAGEMENT TOOL BOX AND MS-PROJECT

- 1. Introduction to Project Management Tool Box
- 2. Project Selection Tools
- 3. Project Initiation Tools
- 4. Project Planning Tools
- 5. Schedule Development Tools
- 6. Budget and Cost Planning Tools
- 7. Project Implementation Tools
- 8. Project Performance Reporting Tools
- 9. Project Closure Tools
- 10. Risk Management Tools
- 11. Influencing Stakeholder Tools
- 12. Introduction to Microsoft Project
- 13. Using MS Project as Project Management Tool

4. Strategic Project Management & Competitive advantage

- Fundamentals of Strategic Project Management
- 2. Strategic Project Management (SPM)
- 3. Strategic Analysis and Assessment
- 4. Strategy Formulation and Decision Making
- 5. Strategy Formulation Additional Tools
- 6. Project Strategy Implementation and Execution
- 7. Strategic Project Monitoring and Control
- 8. Strategic Alignment and Integration
- Emerging Trends in Strategic Project Management
- 10. Taking Strategic Actions for Competitive Advantage

PROGRAMME CURRICULUM

SEMESTER IV

1. IT-Software Project management using DevOps

- 1. DevOps Introduction and Overview
- 2. DevOps Adoption
- DevOps for Optimizing IT Project Delivery Pipeline
- 4. DevOps for Driving Innovation
- 5. Leading DevOps Adoption in Organizations
- 6. Scaling DevOps for the Organization
- 7. Advanced DevOps

2. Project Management maturity model for excellence

- Fundamentals of Project Management Maturity Model for Excellence
- 2. Project Management Maturity Model for Excellence
- 3. Project Management Maturity Levels
- 4. Self-assessment of Project Management Maturity
- 5. Self-assessment of Project Management Maturity
- 6. Best Practices in Project Management Maturity
- 7. Project Management Competency Models
- 8. Key Competencies of a Project Manager
- PMO Functions & Types Maturity Model & Establishing PMO
- 10. Portfolio Committee Governance, Decision-Making, and Strategic Alignment
- 11. Quality Management in Projects ISO 10006:2017 Standard
- 12. Project Sustainability: Balancing People, Planet, and Profit

3. Project Management in New Product Development and Infrastructure Sector

SECTION – I PROJECT MANAGEMENT IN NEW PRODUCT DEVELOPMENT

- Understanding the Basics & Concepts of New Product Development
- Innovation and Creativity in New Product Development
- 3. New Product Portfolio & Strategic Alignment
- 4. 9E Model of New Product Development
- Product Concept Definition, Scope & Integration
- 6. New Product Development in Consumer Electronics
- 7. Risk and Quality Management in New Product Development Projects
- 8. Organizational Culture and Teamwork in NPD

SECTION - II
PROJECT MANAGEMENT IN INFRASTRUCTURE
SECTOR

- 1. Constructure & Infrastructure Sector Economic Perspective
- 2. Construction and Infrastructure Project Life-Cycle
- 3. Construction and Infra Project Estimates
- 4. Construction & Engineering Contracts EPC
- 5. Public-Private Partnerships (PPPs)
- 6. FIDIC Conditions of Contracts for Construction
- 7. Lean Construction Management
- 8. Technological Advancements in Construction Projects

4. Project Submission

- Identify live projects in your industry, Plan, execute and manage project using various tools, techniques and practices
- Preparation & submission of report as per the SCDL Project Preparation Guidelines