COURSE CURRICULUM FOR PM/SM/BA CLASS

PROJECT MANAGEMENT CLASS (REFERENCE PMI & PRINCE2)

- Introductions/Careers using Project Management skills
- Project Attributes
- 1. What is a Projec
- 2. Characteristics of a Project
- Case Study 1
- 3. The Project Management Structure
- 4. The Project Life Cycle (Initiation, Planing, Implementation & Closing)
- Case Study 2

5. Introduction to Project Management Knowledge area (Startup/initiation, Project Scope, Project Schedule & Time management, Cost, Quality, Team, Communication)

- 6. Project Schedule and Planning
- Case Study 3
- Resource planning, Resource Estimation, project schedules & Critical paths
- 7. Quality Planning
- 8. Communication Plan
- 9. Risk Management
- 10. Change Control
- 11. Project Closure
- 12. Post Project Evaluation

AGILE PROJECT MANAGEMENT (SCRUM) CLASS

- 1. Introduction to Agile Project Management
- 2. The Agile Manifesto
- 3. Agile Methods (Scrum, Kanban, Extreme Programming, Crystal Clear, Lean, DSDM)

- 4. Scrum Overview
- 5. Project Roles
- 6. Project Teams (Relationship between interested and committed)
- 7. Primary Roles
- 8. Specifications in Agile
- 9. Backlog
- 10. Estimating Efforts
- 11. Starting a Sprint
- 12. Sprint Planning Meeting
- 13. Scrum Meeting (Daily Stand Up)
- 14. Burndown & Burn up Charts
- 15. Finishing a Sprint
- 16. Sprint Review
- 17. Kaizen and Sprint Retrospective
- 18. Tools.

BUSINESS ANALYSIS CLASS (REFERENCE- PMI)

- Introduction
- What is Business Analysis
- Skillset & Expertise needed for the Business Role
- How organizations Implement Business Analysis
- Relationships between Project Management, Business Analysis and other roles
- Definition of Requirement
- Requirement Types
- Business Analysis Planning
- Requirement Elicitation and Analysis

Traceability & Monitoring

- \Leftrightarrow Need Assessment
- Identify Problem or Opportunity
- Identifying Stakeholders
- Investigating problem or Opportunity
- Gathering Relevant Data to Evaluate the Situation
- SMART Goals and Objectives
- SWOT analysis
- Performing Root Cause Analysis
- The Five Whys
- Cause and Effect Diagram
- Operation, Feasibility, Technology/System Feasibility *
- Most Viable Option
- Cost Benefit Analysis
- Payback Period (PBP)
- ROI
- Internal Rate of Return (IRR)
- Net Present Value (NPV)
- * **Business Analysis Planning**
- Business Analysis and Project Management Planning
- Job Analysis
- Persona Analysis
- Understanding How The Project Life Cycle Influences Planning Decisions
- Lesson Learned
- Requirement Prioritization Process
- $\dot{\mathbf{v}}$ **Requirement Elicitation and Analysis**
- What it means to elicit information
- Techniques for eliciting information
- How to ask the right questions, Listening, Closing, & Followup
- Prototyping
- Model and Refine Requirements
- PRIDE - Ecosystem Map, Context Diagram, Use Case Diagram, Process Flow, User Story

ED.

- Decision Tree & Decision Table
- Entity Relationship Diagram, Data Flow Diagram
- Business Requirement Document
- Traceability and Monitoring *
- What is Traceability
- Benefits of Tracing Requirements
- The Traceability Matrix
- Relationships and Dependencies
- Relationships of Requirement Baseline, Product Scope and Project Scope
- Maintaining the Product Backlog
- Managing Changes to Requirements
- * Solution & Evaluation
- Plan for evaluation of solution
- Key Performance Indicators
- Project Metrics, Customer Metrics, Sales & Marketing Metrics, Operational Metrics
- Acceptance Criteria
- Exploratory Testing and User Acceptance Testing
- Expected vs Actual for functionality and Non Functionality Requirements
- Outcome Measurements and Financial Calculation of Benefits
- Evaluating Acceptance Criteria & Address Defects.