1. **Syllabus for 1 yr Post Graduate Diploma in Project Management-Eligibility Minimum BE/ BSc/ B Com/ BA – MSc**

Semester I

Programme of Studies

Duration-6 Months   **Total marks-600**

Papers(Semester System)	Final Exam.	Internal Exam.	Total Marks.
Six Sigma Green Belt & Black Belt.	75	25	100
Supply Chain, Quality & Safety Management	75	25	100
Time & Team Management	75	25	100
Effecting Communication & Business Writing	75	25	100
Basic Computer & Internet	75	25	100
Job Project Training(1)		100	100
Total marks in Semester 1(One)	375	225	600

Detail Syllabus of First Semester :

Paper 1: Six Sigma Green Belt & Black Belt :

What is Six Sigma: Six Sigma is a **business management strategy**, originally developed by Motorola that today enjoys widespread application in many sectors of industry. **Six Sigma** seeks to identify and remove the causes of defects and errors in manufacturing and business processes. It uses a set of quality management methods, including statistical methods, and creates a special infrastructure of people within the organization ("Green Belts, Black Belts" etc.) who are experts in these methods. Each **Six Sigma project** carried out within an organization follows a defined sequence of steps and has quantified financial targets (cost reduction or profit increase).

Contents :   1) Project charter, 2) Voice of the customer (VOC), 3) Quality function deployment (QFD), 4) Pareto charts, 5) Critical to quality, 6) Cause and effect diagrams, 7) Scatter diagrams, 8) Failure mode and effects analysis (FMEA), 9) Sampling, Design of experiments (DOE), 10) Analysis of variance (ANOVA), 11) Hypothesis testing, 12) Control charts

Black Belt Course

Contents: 1) Process Maps 2) Cost of Poor Quality, 3) Process Matrices, 4) First Time Yield-FTY, 5) components of Waste,6) 5S Principles,7) Hypothesis Testing, 8)Contingency Tables, 9)Chi-Square Test, 10)Process Modelling,11) Full and fractional Factorial Experiments,12) Regression Analysis, 13) Advanced Capability,14) Lean Controls,15) Statistical Process Control(SPC)

Paper 2: Supply Chain, Quality & Safety Management :

Supply chain management is a cross-functional approach to manage the movement of raw materials into an organization, certain aspects of the internal processing of materials into finished goods, and then the movement of finished goods out of the organization toward the end-consumer. As organizations strive to focus on core competencies and becoming more flexible, they have reduced their ownership of raw materials sources and distribution channels.

Contents:

- **Logistics & Supply Chain Management models:**
  o   Business logistics, logistics applications, logistics costs, key factors and issues in logistics.
  2. **Demand forecasting** 3. **Customer Service:**
  o   Product life cycle and logistics, service capability, gap analysis.

- **Inventory management :**
  o   Functions of inventory, inventory costs, inventory models, inventory control systems.

- **Supply planning & MRP, DRP & JIT concepts**

- **Transportation :**
  o   Transportation model, load- distance models, solving quantitative problems relating to transportation, transportation infrastructure providers, inter-model transportation, transportation economic concepts.

- **Warehousing:**
  o   Warehousing functionality, economic benefits, warehousing costs, warehouse functionality, warehousing alternatives, warehouse design principle, warehousing strategies.

- **Procurement & purchasing :**
  o   Types of packaging systems and functions, containment and protection, selection of logistical packaging systems, utilization and channel integration.

- **Integrated Logistics Management :**
  o   Network design, network elements, performance cycles, integrated logistics, managing operational uncertainties, barriers to internal integration.

- **Technology in Supply Chain Management :**
  o   Bottlenecks and remedies.
Training Packages offered :

- **Bronze Package :**
  - E-learning content + study material + trainer support through e-mails+ IACT Certification.

- **Silver Package**
  - E-learning content + study material +trainer support through e mails + 60 minutes telephonic session with the expert trainer + frequently asked Interview questions booklet + sample papers for the final online examination + IACT Certification.
- **Gold package (Study centre training) :**

Silver package + 15 hours classroom session + IACT Certification

Quality Management :

Learn how to apply the **fundamentals of total quality**. Understand what quality is and learn about the history of the **quality movement** by studying concepts of Deming, Juran, Crosby and others. Discover the role of customers in quality and determine the major elements of a quality system.

1) Cost of quality, 2) Quality Circles, 3) Process Engineering, 3) ISO , 4) Six Sigma, 5) Benchmarking, 6) Vendor Management,

Safety Management :

General Safety Training: An education and training program for safety is one of the most necessary and basic elements of an employee safety program. Education and training are essential to communicate practical understanding to employees. This training program addresses specific safety responsibilities and provides risk prevention and loss control information for employees. Safety education and training is most effective when it is immediately incorporated into standard operating procedures, workplace practices, and individual job performance requirements.

Module -1 Fire Protection

- Segmentation of General Safety Training
- Exit Marking and Emergency Action Plan

Module -2 Flammable and Combustible Liquids

- Flammable and Combustible Liquids
- Bonding, Grounding and Ventilation

Module -3 Electrical safety

- Electrical Burns and Falls
- Electrical Hazards

Module -4 Hazard Communication

- Labelling of Chemicals
- Material Safety Data Sheets

Module -5 Machine Guarding

- Methods of Machine Safeguarding
- Machine Guarding Requirements

Module -6 Personal Protective Equipment

- Engineering and Work Practice Controls
- PPE Program and Training

Module -7 Safety and Health Programs

- Responsibility and Worksite Analysis

Safety and Health Inspections

Safety Training Program :

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ISO 9001 :

An **ISO 9001 certificate** proves that your **Quality Management System** has been certified against a best practice standard and found compliant. Issued by a third party certification body/registrar, the certificate lets customers know they can trust that you have implemented the necessary internal processes to meet obligations. The **internationally recognized ISO 9001** standard is generic. It is not a product standard, but applicable to any manufacturing or service industry. Created by the **International Organization for Standardization** (ISO), its objective is to set international requirements for Quality Management Systems.

- Introduction to ISO 9001
- Establishing a Quality Management System
- Management Responsibility
- Resource management Requirements
- Product Realization Requirements

Paper 3: Time & Team Management :

Time Management : As a manager or an executive, time is the most valuable asset. To improve time management skills you will need to learn to prioritize tasks and activities, eliminate unnecessary activities, and manage your personal and professional time efficiently.

- Time delegation techniques
- Determining what to do first
- Time Management Worksheets
- Analysis of participant's own time usage
- Limit Interruptions
- Get more work accomplished each day
- Eliminate piles of clutter from your table

Managing a Team :

Teams often work with a "ready-fire-aim" mentality, focusing on results and ignoring process. People share skills and experience without understanding the values and attitudes driving individual behaviour and team norms. With this dynamic, "teams" are merely groups of people working as isolated individuals

When team members are able to communicate openly and honestly, the quality of results surpasses what any individual might have achieved alone. By communicating honestly and openly about their differences and points of agreement, team members may be able to come up with an idea that is better than either individual idea.

- Improve clarity of purpose within the team
- Develop quicker decision making
- Promote creativity and generation of new ideas
- Achieve better solutions for customers
- Identify strengths and areas for development within the team
- Reduce internal conflict
- Improve cross-functional teamwork

Negotiation :

If you have an important or difficult upcoming negotiation, our program will prepare you to achieve maximum results. This learning experience will have a lasting effect on your future success. You will gain first hand information on how to refine your negotiating skills with our methods.

- Discover new solutions to business problems

- Prevent or resolve disputes and conflicts
- Improve selling/purchasing skills
- Negotiate in any situation with skills that will last a lifetime
- Unveil hidden meanings & analyze the opponent's nonverbal behaviour
- Prepare for a negotiation

Paper 4 : Effecting Communication & Business Writing :

Effective Communication :

If you often find yourself at a loss for words or lack confidence in your communication abilities, you will appreciate this program. Words, facial and body movements, tone of voice, even clothing form an intricate system that must be translated. This program will make you more aware of your strengths and weaknesses as a communicator.

- Concepts of verbal and nonverbal expression
- Listening
- Relationship dynamics
- Self-esteem
- Conflict management
- Cultural and gender communication differences
- Examples, graphics, and theoretical models

Business Writing :

If you communicate with others in writing, you need this course to help you identify and eliminate problem areas. By the end of this course, you will know the secret to developing powerful written documents.

- Social Correspondence
- Social and Business Cards
- Sending and Answering Invitations
- Thank-you Notes
- Corporate Correspondence

Paper 5 : Basic Computer & Internet :

Most jobs today require a working knowledge of certain computer skills. This course is designed to provide the fundamental computer competencies you need to survive and prosper in today's fast-changing workplace.

- Use a spreadsheet for analysis
- Use a text editor to prepare a report
- Printing of reports and documents

- Transferring files from one source to the other

Microsoft Office Applications :

Microsoft Excel,Microsoft PowerPoint, Microsoft Word

Internet Basics :

Not being net-savvy can leave you as a misfit in today's society! So learn where the Internet came from, what makes it tick, and where it's headed

- Send and receive e-mail messages
- Locate, download and open any file type
- Search so that you can find answers to virtually any question
- Get free help on almost any subject
- Conduct conferences over the Internet through Internet Telephony
- How to develop a website on the internet for free
- Use the internet for surfing

Semester II

Programme of Studies

Duration-6 Months   **Total marks-600**

Papers(Semester System)	Final Exam.	Internal Exam.	Total Marks.
Project Management, Analysis & Design	75	25	100
Basic ERP & Microsoft Project	75	25	100
Software Testing & Information Security	75	25	100
Management Basics Part I	75	25	100
Management Basics Part II	75	25	100
Job Project Training(2)		100	100
Total marks in Semester 1(One)	375	225	600

Detail Syllabus of Second Semester :

Paper 1: Project Management, Analysis & Design :

As the number of projects swell, the pool of credentialed talent is not keeping pace. In Asia alone — where entire cities are being built, seemingly overnight — a shortage of 6 million skilled project professionals is expected by 2013. Add to that the fact that, of the 20 million people participating in projects worldwide, just one million have professionally recognized formal training on how to best execute those projects. One thing becomes clear: The demand for skilled project managers is at a critically urgent level.

Associate Project management:

As the number of projects swell, the pool of credentialed talent is not keeping pace. In Asia alone — where entire cities are being built, seemingly overnight — a shortage of 6 million **skilled project professionals** is expected by 2013. Add to that the fact that, of the 20 million people participating in projects worldwide, just one million have professionally recognized formal training on how to best execute those projects. One thing becomes clear: The demand for **skilled project managers** is at a critically urgent level.

Certified Associate in Project Management or CAPM:
The **CAPM credential** recognizes a demonstrated understanding of the fundamental knowledge, processes and terminology as defined in A Guide to the Project Management Body of Knowledge (PMBOK Guide) that are needed for effective **project management performance**.

- Introducing Project Management
- Project Life Cycles
- The Process Management Framework
- Project Integration Management
- Scope Management
- Cost Management
- HR & Communications Management
- Risk Management
- Procurement Management
- MS Project

Customer Service & Manufacturing

In this course, discover innovative methods for **measuring customer service**, interpreting the data to identify gaps and learning to anticipate the needs of customers. Learn how to lead by example in setting new trends for **customer service** in your business.

- Handle complaints effectively
- Develop customer service index
- Interact positively in face to face interactions
- Interact positively in telephonic interactions
- Creating effective customer databases

Manufacturing

Learn about the global and Indian manufacturing industry. Understand how manufacturing has evolved and its importance in the economy.
- Basics of manufacturing
- Process manufacturing
- Repetitive manufacturing
- Manufacturing planning & control
- JIT & lean manufacturing
- Automation in manufacturing
- Workforce management

Business Analysis & Decision Making

Through this course, understand analytical skills that are consistently in high demand. This course will teach powerful quantitative methods that will help in making better, more informed, and more effective business decisions. The days of making critical business decisions by instinct are long gone.

- Sales & Marketing
- Project Management
- Finance Fundamentals
- People Management
- Problem solving techniques
- Understand concepts of mean & standard deviations
- Use of statistics and probabilities in business analysis
- Qualitative and Quantitative forecasting
- Business Modelling
- Cost benefit and break even analysis
- PERT (Program Evaluation and Review Technique) and CPM (Critical Path Method)
- Simulation exercises

Design in Business Plan

A business plan should be a living roadmap to success, not just a one-time document. Many Venture Capital and Private Equity firms ask for business plans. In order to raise capital, an organization should develop the business plan. With the help of the business plan template developed by Ex Andersen & KPMG Consultants learn what lenders, partners, and investors expect to see in your business plan.

This business plan template is in a format which can be used by different industries and for different ideas. Use it as a guideline to help write your own business plan or simply fill in the text in the templates provided according to your specific needs or requirements.

- **Executive summary** of all modules
- **Industry landscape** details the industry, competitors, trends and business objectives
- **Target market and service offerings** highlights how to target market and positioning your business vis-à-vis the competitors
- **Franchisee operating model** (optional) is useful in case you wish to franchise your business
- **Marketing Strategy** talks about important elements of marketing strategy and pricing strategy
- **Organization structure** gives a direction on designing the structure of an organization in respect to job descriptions etc.
- **Potential alliances** is useful in building credibility and capability
- **Financials** covers Revenues, Costs, Investments and P&L Statement
- **Action plan** lays out road map in terms of timelines and responsibilities
- **Risk assessment** highlights the top risks for success of the business

Option 2: Option 1 + Financial Model (in MS Excel) for 5 years

- 85 Page PowerPoint presentation
- Financial Model in MS excel including
  - Revenues

- Costs
- Investments
- Profit and Loss Statement
- Excel sheet which contains all the formulae. Enter the values to get the results.

Option 3: Option 2 + Online access to voice based learning (**Most Popular Option**)

- 85 page PowerPoint divided into 10 modules
- Financial Model in MS Excel for 5 years
- Online access to voice based learning content on Business Plan divided into 3 modules covering
  - Introduction and concept of Business plan
  - Components of a Business plan
  - Writing a Business plan
- The Business plan course covers the most important topics to consider in starting or operating a business, your business plan can easily be organized into this same format.

Paper 2 : Basic ERP & Microsoft Project :

ERP Basics & Marketing Research

What is Marketing Research?

Marketing research is the systematic gathering, recording, and analysis of data about issues relating to **marketing products and services**. The term is commonly interchanged with market research. Market research deals specifically with the gathering of information about a market's size and trends. Marketing research covers a wider range of activities. While it may involve market research, marketing research is a more general systematic process that can be applied to a variety of marketing problems.

Managers need information in order to introduce products and services that create value in the mind of the customers. But the perception of value is a subjective one, and what customers' value this year may be quite different from what they value next year. As such, the attributes that create value cannot simply be deducted from common knowledge. Rather, data must be collected and analyzed. The **goal of marketing research** is to provide the facts and direction that managers need to make their more important marketing decisions.

The objective of the programme is to simplify various aspects of the marketing research. In the absence of relevant information, consumers' response to marketing programs cannot be predicted reliably or accurately. The given **marketing research programme** provide information on nature and scope of marketing research, types of research designs, processing of data and analysis.

The programme is targeted for the middle level executives like Product / Marketing Managers, Research Executives, **Marketing Analyst** and so on. Middle managers from other functional area or a nonmarketing background who support the marketing activities would also find the programme relevant.

The programme covers some of the key aspects of marketing research; both conceptual and application. The information revolves around some of the key topics like:

- The Research Process
- Processing of Data and Analysis
- Attitude Measurement
- Segmenting the Market
- Product Research
- Advertising Research
- Sales Analysis and Forecasting
- Applications of Market Research in India

Today, recognising the potential of ERP training, professionals from as diverse streams as sales and marketing to human resources to production planning and supply chain management, are ready to pay through their nose to get themselves trained and certified for a much sought after global career. The common ERP packages are—SAP, Oracle Financials, Baan, PeopleSoft and JD Edwards. Among these, SAP courses are most popular.

- Financials 2. Materials Management 3. Sales & Distribution 4. Production Planning 5. Plant Maintenance 6. Human Resource Programming

Microsoft Project

Microsoft Project (or MSP) is a Project Management Software Program developed and sold by Microsoft which is designed to assist project managers in developing plans, assigning resources to tasks, tracking progress, managing budgets and analyzing workloads. Discover how to effectively plan, implement, and control projects using Microsoft Project.

- Convert lists and schedules into an integrated plan
- Organize details s& sequence tasks
- Produce a baseline
- Assign resources and costs
- Track progress
- Identify and analyze variances
- Share plans with customers & co-workers

Paper 3 : Software Testing & Information Security :

Testing (CSTE) :

The Certified Software Tester (CSTE) program was developed by leading software testing professionals as a means of recognizing software testers who demonstrate a predefined level of testing competency. The CSTE program is directed by an independent Certification Board and administered by the Quality Assurance

Institute (QAI). The program was developed to provide value to the profession, the individual, the employer, and co-workers. The CSTE certification entails an aggressive educational program that tests the level of competence in the principles and practices of testing and control in the Information Technology (IT) profession. These principles and practices are defined by the Certification Board as the Common Body of Knowledge (CBOK). The Certification Board will periodically update the CBOK to reflect changing software testing and control, as well as changes in computer technology. These updates should occur approximately every three years.

Software testing principles and concepts a) Lifecycle Technique b) Testing Techniques,(Building the test environment a) Management Support b) Test work process, (Managing the test project) a) Test Administration b) Test Supervision, (Test Planning a) Risk Analysis b) Risk management, (Executing the test plan) a) Test Case Design b) Defect Management, (Test Reporting a) Pre-requisites to test reporting b) Reporting test results, (User Acceptance Testing) a) Acceptance test planning b) Acceptance test execution, (Testing software developed by contractors) a) COTS Software Test Process, b) Contracted Software Test Process, (Testing Software Controls and the Adequacy of Security Procedures) a) Principles and concepts of internal control b) Internal control models, (Testing New Technologies) a) Risk Associated with New Technologies b) Newer IT technologies that impact software testing

ITIL (Information Technology Infrastructure Library (ITIL)

The **Information Technology Infrastructure Library** (**ITIL**) is a set of concepts and practices for managing Information Technology (IT) services (ITSM), IT development and IT operations.

ITIL gives detailed descriptions of a number of important IT practices and provides comprehensive checklists, tasks and procedures that any IT organization can tailor to its needs. ITIL is published in a series of books, each of which covers an IT management topic. The names *ITIL* and *IT Infrastructure Library* are registered trademarks of the United Kingdom's Office of Government Commerce (OGC).

Responding to growing dependence on IT, the UK Government's CCTA in the 1980s developed a set of recommendations. It recognised that without standard practices, government agencies and private sector contracts were independently creating their own IT management practices.

Module 1- Service Management as a practice : Service packages & Processes, Functions and Roles ,The ITIL Service Management Practices & The Service Lifecycle.

Module 2- Service Strategy : Scope & Processes.

Module 3- Service Design : Business Value & Key Principles.

Module 4- Services Transition : Scope & Processes.

Module 5- Service Operation : Goals and Objectives & Key principles.

Module 6- Continual Service Improvement : Business Value & Processes.

Module 7- Service Management Technology : Generic Requirements & Service Automation Strategy,Implementation& Monitoring and Control.

The **IT Infrastructure Library** originated as a collection of books, each covering a specific practice within IT Service Management. ITIL was built around a process-model based view of controlling and managing operations often credited to W. Edwards Deming

Information Security :
- Access Control
- Application Security
- Business Continuity and Disaster Recovery Planning
- Cryptography
- Information Security and Risk Management
- Legal, Regulations, Compliance and Investigations
- Operations Security
- Physical (Environmental) Security
- Security Architecture and Design
- Telecommunications and Network Security

Paper 4 : Management Basics Part I :

Retail & Insurance Management : The **concept of rural marketing.** Analyzing rural market potential, Environment scanning of rural markets (competitive analysis and consumer behaviour), Problems in Rural Marketing, Rural Marketing Strategies

Retail is a highly complex industry with specialized processes and skills required. Learn about the global and the evolving Indian industry and the concepts behind the working of the industry

- Basics of the industry
- Retail formats
- Store location decisions
- Store layout & design
- Merchandising
- Store operations
- Marketing & promotions
- Pricing strategies
- Retail supply chain

Insurance Management :
- Basics of the industry
  - The industry ecosystem
  - Factors affecting the industry
  - Life insurance
  - Automotive insurance
  - Health insurance
- General insurance
- Re-insurance
- Selling & distribution processes

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Accountancy & Banking Management :

- Basics of double-entry bookkeeping
- How to analyze and record financial transactions
- How to prepare financial reports
- Accounts receivable, accounts payable, payroll procedures
- Taxation & other regulatory issues
- Common banking activities
- Ratios and what they mean.

Banking Management :

- Regulatory environment
- Process in a bank
- Corporate banking
- Personal banking & wealth management
- Investment banking
- Bancassurance
- Risk management in banks

Automotive Pharma

Learn about the global and Indian automotive industry. Understand how the industry has evolved and its importance in the economy.

- The industry ecosystem
- Factors affecting the industry
- Manufacturing processes
- Selling & distribution processes

Pharma & Healthcare

Learn about the global and Indian pharma & healthcare industry. Understand how the industry works and its importance in the economy.

Learn about:

- Pharmaceutical product lifecycle
- Drug Discovery
- Drug Development
- Manufacturing
- Sales & Distribution
- Hospital services

Training in Hospitality

Learn about the global and Indian hospitality industry. Understand how the industry works and its importance in the economy.

- Hospitality services
- Restaurant business
- Hotel business
- Travel & Tourism business
- Human resource management

Paper 5 : Management Basics Part 2 :

International Trade, Import & Export

Learn about the international trade industry, its procedures and other nuances. Understand how international trade works and its importance in the economy.

- International Economic Environment
- International Trade- Reasons and Motivation
- Emerging Trends in International Trade
- Relations between Economic Giants
- Role of Government in Foreign Trade
- Instruments of Payments
- Balance of Payments

Training in Textile, Apparel & Fashion

Learn about the global and Indian textile industry. Understand how the industry has evolved and its importance in the economy.

- The industry ecosystem
- Factors affecting the industry
- Manufacturing processes
- Selling & distribution processes

Consulting Management

Consulting is a niche industry with high skill requirements. Learn about the global and the Indian consulting industry and the concepts behind the working of the industry.

- Typical organization structure
- Types of consulting firm
- Challenges in consulting
- Client servicing
- Time & cost management
- Human resource management

Telecom Management

Learn about the global and Indian telecom industry. Understand how the industry works and its importance in the economy

- Fundamentals of Telecommunication Systems Management: Evolution, current state, and future
- Basics of Telecommunication Technologies such as: GSM, Blue tooth, WLAN, Wi Max, GPRS, * Data Network, Telecom Software, Sensors, Ad Hoc Network, 3G/4G, Network, etc
- Global best practices
- Telecommunication Service Quality --Management and Customers' perspective
- Telecommunication Project Management
- Telecom marketing, building brand equity for competitive advantage
- International Telecom Systems Management
- Competitiveness of Telecom sector in India Systems Management (TSM)
- Telecom Regulatory issues & National Telecom Policy.

Transportation Logistics

Transportation and Logistics is a multifaceted industry with specialized processes and skills required. Learn about the global and the Indian transportation & logistics industry and the concepts behind the working of the industry.

- Road transportation
- Rail transportation
- Sea transportation
- Air transportation
- Third party logistics services
- Network design & planning