

2. Syllabus for 6 months certificate course in Project Management Minimum BE/MSc

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
Basic ERP & Microsoft Project			
Project Management, Analysis & Design	75	25	100
Job Project Training(1)		100	100
Total Marks all subject	375	225	600

Detailed Syllabus :

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:**
 - Business logistics, logistics applications, logistics costs, key factors and issues in logistics.
- 2. **Demand forecasting** 3. **Customer Service:**
 - Product life cycle and logistics, service capability, gap analysis.
- **Inventory management :**
 - Functions of inventory, inventory costs, inventory models, inventory control systems.
- **Supply planning & MRP, DRP & JIT concepts**
- **Transportation :**
 - Transportation model, load- distance models, solving quantitative problems relating to transportation, transportation infrastructure providers, inter-model transportation, transportation economic concepts.
- **Warehousing:**
 - Warehousing functionality, economic benefits, warehousing costs, warehouse functionality, warehousing alternatives, warehouse design principle, warehousing strategies.
- **Procurement & purchasing :**

- Types of packaging systems and functions, containment and protection, selection of logistical packaging systems, utilization and channel integration.

- **Integrated Logistics Management :**

- Network design, network elements, performance cycles, integrated logistics, managing operational uncertainties, barriers to internal integration.

- **Technology in Supply Chain Management :**

- 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 :

- **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.

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 : 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 5: 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.