



**Gwani Software**



**TRAINING DEPARTMENT**  
***(Knowledge & Expertise)***

**Project Management Fundamentals**  
**Curriculum**

**September 2013**

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equivalent to

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## Gwani Software

### TRAINING DEPARTMENT

#### **Project Management Fundamentals**

**General Description:** - This course is intended to give the trainee basic skills theory and in practice on the fundamentals of Project Management based on PMBOK®.

**Aims:** - The aims of this course are:

1. To introduce the trainee into theories regarding project and how best to manage it.
2. To drill trainee on how to plan project.
3. To guide the trainee on how to know and use the project management knowledge areas.
4. To drill the trainee on how to use project management tools like PERT and Gantt chart.
5. To guide the trainee on how to best analysis world leading projects

**Objectives:** - The trainee at the end of the training session should:

- Know the fundamentals theories of project management.
- Know how to plan a project, particularly ICT oriented one.
- Know and be able to effectively use project management knowledge areas.
- Know how to use common tools applied in project management particularly PERT and Gantt chart.
- Know the current world leading projects and their success stories.

**Target Audience:** - This course should be taken by Project Managers, Project Management Instructors, writers of project management texts, Top management staff, Student of Project Management, Student wishing to write project management certification exams and anyone interested in project management.

**Pre-requisite:-** There is no any course that stands as a pre-requisite to this course. However, Internet Guide to Veterans is an added advantage.

**Approximate Duration:** - The course requires 21 hours of class sessions with practical on the internet.

**Method of assessment:** - Trainee is to be assessed with an examination on lessons covered.

**Methodology:** - The class takes a lesson discussed it, provide practical instances to study the lesson; then move to the next lesson in the same fashion until all the lessons are exhausted.

**Recommendations resource materials:** - The following materials are recommended for the trainee study:

1. K. Heldman, C. Baca & P. Jansen, (2005), '**PMP: Project Management Professional Study Guide**', Wiley Publishing, Inc. Canada.
2. '**An introduction to Project Management**', US Department of the interior, Bureau of reclamation.
3. Department of Computer science, (2001), '**Project Management Basics**', University of Toronto, USA.
4. Method 1,2,3 Empowering managers to succeed, (2003), '**Project Management GuideBook**', [www.method123.com](http://www.method123.com)

5. Project Management Institute, (2000), '**A Guide to Project Management Body of Knowledge (PMBOK ® Guide)**', Project Management Institute, Pennsylvania, USA.
6. '**IT project management practices guide**'
7. '**Project Management Guide**'
8. Office of Research, '**Growing as Research Professional, Project Management**', University of Tennessee
9. N.M. Choudhuri, '**Project Management Fundamentals**', ITC InfoTech, Ltd, India
10. S.T. Modesto, and S.P. Ticaphondwa, '**Successful Project Management – Insights from distance education practice**', Virtual University for the small state of Commonwealth.

Day	Lesson
1	<b>Getting Started with Project Management:</b> - Definition of project, characteristics of a project, differences between project and operation, operation manager, roles of operation manager, project manager, roles of project manager, what project manager is managing(Resources, time, scope, risk, and quality), skills needed by a project manager(communication, organization & planning, budgeting, conflict management, negotiation & influencing, leadership, and team building and motivation), differences in roles between operation and project manager.
2	<b>Getting started contd.:</b> - Definition of project management, application areas of project management, organization structure base on project management, functional organizations, projectised organizations, weak matrix organizations, strong matrix organizations, balanced matrix organizations, basic characteristics of organization structure base on

	project management.
3	<b>End product:</b> End-product of a project: unique product, service and result, Component products (e.g. Laptops, Ipad, CD Plates etc), Services (e.g. Network, internet access, sms gateway, webmail, training etc), results (reports, statistics, document, files etc), end-product management: Quality management, branding management, price management, sales management or usage management.
4	<b>Project Management:</b> Instances of project: producing new product (erecting structure, manufacturing hardware, establishing network etc), providing service (Creating private network, creating access point, Scheduling class session, workshop or seminar), Producing result ( Reports, papers, statistics, research document etc), industrial and expert knowledge for a project, general management skills for project, tools and methods for project, programs, portfolio, project management office, .
5	<b>Process groups:</b> Process, process groups: initiating, planning, executing, monitoring & controlling, closing. Project life cycle, project phases.
6	<b>Functions of Project Management Office:</b> Methodology development & implementation, team members' training, coaching and mentoring, policy management, coordinating and managing shared resources, coordination of communication, monitoring of policy adherence.
7	<b>Enterprise Environmental Factors:</b> Impact on project, the factors: organisation's structure, human resource available, infrastructure available, available regulations, nature of administration, market forces, politics, risk tolerance of stakeholders, project management information system, communication channels.
8	<b>Stakeholders:</b> Stakeholder, identification of stakeholder, itemizing

	stakeholders in selected projects, key stakeholder, differences between a stakeholder and key stakeholder, carrying stakeholders along in a project, sharing information between stakeholders, sponsor.
9	<b>Organisation's process Assets:</b> The definition of process asset, the dependency between process success and its asset, categories of process asset: procedures and corporate knowledge base.
10	<b>Project Management Knowledge Areas:</b> Management skills regarding areas, knowledge areas: project integration, project scope, project time, project, project cost, project quality, project human resource, project communication, project risk, project procurement.
11	<b>Project Charter:</b> Needs and demands, feasibility study, project charter inputs, tools and techniques, formalizing and publishing project charter. Use of ICT Project case study.
12	<b>Project Scope:</b> Defining project scope, scope planning & requirement collection, scope definition, creating WBS, scope verification, scope control, quality standard: quality inputs, quality planning tools and techniques, quality planning outputs.
13	<b>Risk Planning:</b> Planning for risk, risk management planning, identifying potential risks, risk identification inputs, risk identification tools and methods, risk identification outputs, qualitative and quantitative risks, developing risk response plan.
14	<b>Resource Planning:</b> Purchases & acquisitions, human resource and its planning, activity definition, activity sequence, Inputs and Outputs of resource planning.
15	<b>Project schedule &amp; budget:</b> Estimating inputs, tools and techniques for estimating, resource estimating, duration estimating, tools and techniques,

	schedule development, cost estimate inputs, tools and techniques, cost budgeting, inputs, tools and technique.
16	<b>Developing project team:</b> Acquiring project team, executing project plan, developing project team, distributing project information to team, building the team's confidence.
17	<b>Measuring &amp; controlling project performance:</b> Requesting Response, tools and techniques, selecting seller, tools and techniques of selecting seller, weighting system, independent estimate, screening system, contract negotiation, seller rating system, expert judgment, proposal evaluation technique, element of a contract, contract life-cycle, contract management plan, quality assurance, monitoring and controlling project, administering contract, managing project team, managing project stakeholders, establishing performance measurement.
18	<b>Monitoring &amp; controlling change:</b> How change occurs, change control concern, configuration management, change control system, managing cost changes, monitoring and controlling schedule changes, monitoring and controlling risks.
19	<b>Controlling result and closing out a project:</b> Utilizing perform control, verifying project scope, controlling scope changes, formulating project close out, closing out the project, contract closure, releasing project team members.
20	<b>Analysis of world leading projects:</b> International space station(The largest manned object sent into space), Three Gorges Dam in China(The largest project in China-100 towns levelled to give room for the dam), Big dig in US(The most expensive project in the world-\$14 billion expended), Yucca Mountain Nuclear Waste Repository in US (costing \$9 billion



stretching 80 miles), Dubai carnal in Dubai (The world longest man-made carnal stretching more than 46 miles creating desert oasis along the entire stretch of the carnal), Panama Carnal in Panama (It opens trade route from Atlantic ocean to Pacific Ocean reducing travel time), Pathway through the Berlin Strait in Germany (Costing \$200 billion to build), Transatlantic train (A submerged oceanic tunnel housing a supersonic train capable of maintaining 4,000 miles per hour), New York Subway system in New York (carrying commuters on average weekly ride of 5.2 million), Sky Cities (Housing thousands of people above Earth),.

*Exercise*

*The trainee should develop slides showing the uniqueness of world best ten ICT based projects among other contemporary projects; and present them to an audience.*

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**Revision.**