MGT525: IT Project Management and Effective Communication

Managing Security Initiatives and IT Projects

SANS MGT525: IT Project Management and Effective Communication provides the training necessary to maintain the Project Management Professional (PMP)® and other professional credentials.

During this class you will learn how to improve your project planning methodology and project task scheduling to get the most out of your critical IT resources. We will utilize project case studies that highlight information technology services as deliverables. MGT525 follows the basic project management structure from the PMBOK® Guide and also provides specific techniques for success with information assurance initiatives. Throughout the week, we will cover all aspects of IT project management from initiating and planning projects through managing cost, time, and quality while your project is active, to completing, closing, and documenting as your project finishes. A copy of the PMBOK® Guide is provided to all participants. You can reference the PMBOK® Guide and use your course material along with the knowledge you gain in class to prepare for the GIAC Certified Project Manager Exam and earn PDUs/CPEs to maintain the Project Management Professional (PMP)® and other professional credentials.

The project management process is broken down into core process groups that can be applied across multiple areas of any project, in any industry. Although our primary focus is the application to the InfoSec industry, our approach is transferable to any projects that create and maintain services as well as general product development. We cover in-depth how cost, time, quality, and risks affect the services we provide to others. We will also address practical human resource management as well as effective communication and conflict resolution. You will learn specific tools to bridge the communications gap between managers and technical staff.

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Course Author Statement

"Managing projects to completion, with an alert eye on quality, cost, and time, is something most of us need to do on an ongoing basis. In this course, we break down project management into its fundamental components and galvanize your understanding of the key concepts with an emphasis on practical application and execution of service-based IT and InfoSec projects. Since project managers spend the vast majority of their time communicating with others, throughout the week we focus on traits and techniques that enable effective technical communication. As people are the most critical asset in the project management process, effective and thorough communication is essential."

— Jeff Frisk

"Jeff made the course so practical that I was able to apply concepts before the course was even complete. Jeff’s balance of prep for testing and real-world experience was great!"

— Brian Jennings, Eli Lilly & Company

“MGT525 offers tools and techniques that will directly improve the planning, execution, and closing of your projects.”

— Michael Long, ARCYBER

sans.org/mgt525

• Watch a preview of this course
• Discover how to take this course: Online, In-Person
Section Descriptions

SECTION 1: Project Management Structure and Framework
This course section offers insight and specific techniques that both beginner and experienced project managers can utilize. The structure and framework section lays out the basic architecture and organization of project management. We will cover the common project definitions, frameworks, and management methodologies. We will discuss the difference between projects and operations, project life cycles, and managing project stakeholders.

TOPICS: Definition of Terms and Process Concepts; Group Processes; Project Life Cycle; Types of Organizations; PDCA Cycle

SECTION 2: Project Charter Development and Project Scope Management
During Section 2, we cover project charter and scope management. We will go over techniques used to develop the project charter and formally initiate a project. The scope portion defines the important input parameters of project management and gives you the tools to ensure that from the onset your project is well defined. We will cover tools and techniques that will help you define your project's deliverables and develop milestones to gauge performance and manage change requests.

TOPICS: Formally Initiating Projects; Project Charters; Project Scope Development; Work Breakdown Structures; Scope Verification and Control

SECTION 3: Project Schedule Management
Our third section details the schedule and cost aspects of managing a project. We will cover the importance of correctly defining project activities, project activity sequence, and resource constraints. We will use milestones to set project timelines and task dependencies along with learning methods of resource allocation and scheduling. We introduce the difference between resource and product-related costs and go into detail on estimating, budgeting, and controlling costs. You will learn techniques for estimating project cost and rates as well as budgeting and the process for developing a project cost baseline.

TOPICS: Progress Flow; Task Lead and Lag Dependencies; Resource Breakdown Structures; Task Duration Estimating; Critical Path Scheduling; Cost Estimating Tools; Cost vs. Quality; Cost Baselining; Earned Value Analysis and Forecasting

SECTION 4: Project Resource Management
During Section 4, we move into project and human resource management and building effective communications skills. People are the most valuable asset of any project and we cover methods for identifying, acquiring, developing and managing your project team. Performance appraisal tools are offered as well as conflict management techniques. You will learn management methods to help keep people motivated and provide great leadership. The effective communication portion of the section covers identifying and developing key interpersonal skills. We cover organizational communication and the different levels of communication as well as common communication barriers and tools to overcome these barriers.

TOPICS: Acquiring and Developing Your Project Team; Organizational Dependencies and Charts; Roles and Responsibilities; Team Building; Conflict Management; Interpersonal Communication Skills; Communication Models and Effective Listening

SECTION 5: Project Quality Management
Section 5 focuses on quality and risk. You will become familiar with quality planning, quality assurance and quality control methodologies as well as learning the cost of quality concept and its parameters. We define quality metrics and cover tools for establishing and benchmarking quality control programs. We go into quality assurance and auditing as well as using and understanding quality control charts. The risk section goes over known vs. unknown risks and how to identify, assess and categorize risk. We use quantitative risk analysis and modeling techniques so that you can fully understand how specific risks affect your project. You will learn ways to plan for and mitigate risk by reducing your exposure as well as being able to take advantage of risks that could have a positive effect on your project.

TOPICS: Cost of Quality; Quality Metrics; Continual Process Improvement; Quality Baselines; Quality Control; Change Control; Risk Identification; Risk Assessment; Time and Cost Risks; Risk Probability and Impact Matrices; Risk Modeling and Response

SECTION 6: Project Procurement Management
We close out the course with the procurement aspects of project and stakeholder management, and then integrate all of the concepts presented into a solid, broad-reaching approach. We cover different types of contracts and then the make-versus-buy decision process. We go over ways to initiate strong requests for quotations (RFQ) and develop evaluation criteria, then qualify and select the best partners for your project. Stakeholder communication and management strategies are reinforced. The final session integrates everything we have learned by bringing all the topics together with the common process groups. Using a detailed project management methodology, we learn how to finalize the project management plan and then execute and monitor the progress of your project to ensure success.

TOPICS: Contract Types; Make vs. Buy Analysis; Vendor Weighting Systems; Contract Negotiations; Stakeholder Communication and Stakeholder Management Strategies; Project Execution; Monitoring Your Project's Progress; Finalizing Deliverables; Forecasting and Integrated Change Control

Who Should Attend
- Individuals interested in preparing for the Project Management Professional (PMP)® Exam
- Security professionals who are interested in understanding the concepts of IT project management
- Managers who want to understand the critical areas of making projects successful
- Individuals working with time, cost, quality, and risk-sensitive projects and applications
- Anyone who would like to utilize effective communication techniques and proven methods to relate better to people
- Anyone in a key or lead engineering/design position who works regularly with project management staff

GIAC Certified Project Manager
The GIAC Certified Project Manager (GCPM) certification validates a practitioner’s knowledge of technical project management methodology and implementation. GCPM certification holders have demonstrated the critical skill sets associated with making projects successful, including effective communication and time, cost, quality, procurement and risk management of IT projects and application development.

- Project management structure and framework
- Time and cost management, communications, and human resources
- Quality and risk management, procurement, stakeholder management, and project integration