PD467
Project Management for Engineers & Technical Professionals

CEUs: 2.3
PDHs: 23
Number of Days: 3

Are you ready to gain project management insights and learn to apply project management methods to your career as an engineer?

This Project Management for Engineers & Technical Professionals course looks at some common challenges engineers face and takes advantage of well-established traditional project management practices that will allow you to utilize big-picture thinking, create repeatable processes, and increase efficiency.

This course makes use of all the interactive features of our virtual classroom. Come prepared for team-based activities and participation in breakout sessions. You will work in teams to plan a real-world mechanical engineering project.

The team environment amplifies and accelerates learning and prepares you to manage projects in the work environment. Each team will build an individual project idea from design to completion, emulating the traditional project management life cycle.

This course is 100% compliant with the Project Management Institute's (PMI's®) current Project Management Body of Knowledge (PMBOK) and introduces mechanical engineers to project management from a theoretical point of view.

By participating in this course, you will learn how to successfully:

- Differentiate between a project, program, and sub-project by identifying contrasting and related characteristics of each utilizing examples from engineering-specific industries.
- Employ an integrated, real-world engineering project to create deliverables, such as a work breakdown structure, project charter, scope statement, project network diagrams and time-driven schedule.
- Identify each of the following tools, techniques, or outputs using an automated project management tool: critical path, schedule compression, crashing, slack/float, fast tracking, and resource leveling
- Apply project scheduling concepts, geared toward typical mechanical engineering concepts, such as an activity Gantt chart, resource gram/histogram, resource spreadsheet, and resource-driven schedule.
- Compare and contrast project management to strategic management, operations management, and crisis management.

Who should attend?
This course is primarily designed for engineers and technical professionals who have or will be assigned project management responsibilities. Project managers, project leaders, or anyone performing in those roles within the engineering industry will also find it useful.

Course Materials (included in purchase of course)

- **Digital course notes** via ASME's Learning Platform

Topics Covered:

- Traditional project management principles and methodology
- Planning, controlling, and coordinating individual and group efforts.
- Contracts and procurement management
- Quality management.
- Structure and Culture
- Estimating Project Time and Costs
- Developing a Project Network
- Managing Risk & Group Activity
- Scheduling Resources
- Reducing Project Time
- Leadership
- Managing Project Teams
- Project Auditing
- International Projects
- Future of Project Management

Instructor
Brian E. Porter, P.E., PMP, AMA-CPM, PMI-ACP, is the Vice-President of Strategic Partnerships for Marcus Goncalves Consulting Group (MGCG). He is also the President of EEE Consulting in Fort Myers, FL. Mr. Porter has over twenty-five years of experience in project management, product development, engineering, safety listings, patent, business strategy and start-up management in computer sales, consumer products, hazardous waste industry, industrial manufacturing and retail product markets.

Mr. Porter holds a Bachelor of Science in Chemical Engineering from the University of Illinois at Chicago. He also holds a Master of Science in Management with a Specialty in Project Management from Boston University. Currently, he teaches graduate courses at Boston University, Nichols College and UIC in E-Commerce, Accounting, Financial Management, Project Management, and other disciplines. He also is Adjunct Professor for Nichols College in Creative Decision Making, New Product Development, Web Design, Effective Business Writing, International Business and International Marketing.

Mr. Porter has maintained his professional engineering license in the state of Illinois for nearly twenty years. He also holds multiple patents both domestically and internationally.

Mr. Porter is a member of the Project Management Institute and has credentials as a Project Management Professional (PMP) and Agile Certified Professional (ACP). His international efforts include working with firms in China, Canada, Mexico, Romania, Thailand, Malaysia, Australia, Japan, Sweden, Israel, Great Britain, Egypt, Italy, UAE (Dubai and Abu Dhabi), South Africa, Kiribati, Singapore, Germany, Brunei, and Fiji.

He has also completed books on Global Management Strategies, International Project Management and Natural Negotiation for Engineers besides other papers being published on project management topics. In 2012 his article “Split Decisions” was the cover story for *Mechanical Engineering* magazine. In the past few years, he has also published the *AMA-CPM Exam Prep Study Guide, The 7 Es of Motivating Employees,* and *Extreme Interviews and Resumes.*

Day One

- Modern Project Management & Quiz
- Alignment of the Project & Quiz
- Structure and Culture
- Defining a Project & Quiz
- Estimating Project Time and Costs & Group Activity
- Developing a Project Network, Quiz & Group Activity
- Managing Risk & Group Activity

Day Two

- Scheduling Resources, Quiz and Group Activity
- Reducing Project Time & Group Activity
- Leadership
- Managing Project Teams & Quiz
- Partnering & Quiz
- Progress and Performance and Quiz

Day Three

- Project Auditing & Quiz
- International Projects
- Future of Project Management
- Team Projects
- Course wrap up

Throughout this course, participants will achieve the following results:

- A clear differentiation between project, program, and subproject, identifying contrasting and related characteristics of each
- The ability to compare and contrast project management to strategic management, operations management, and crisis management
- The use of an integrated case study, to create each of the following deliverables:
  - Project charter
  - Scope statement
  - Work breakdown structure
  - Project networks diagram
  - Time-Driven schedule
- The demonstration of an automated project management tool (through multimedia presentation showing step-by-step procedures as per handouts delivered to participants), identifying each of the following tools, techniques or outputs:
  - Activity Gantt chart
  - Resource graph/histogram
  - Resource spreadsheet
  - Resource driven schedule