



---

## Course Outline – Project Management Overview Seminar

---

**Course Topic:** Project Management Overview Seminar (In Development)

**Recommended Contact Hours:** 15 hrs.

### Course Description:

Project management is the process and activity of planning, organizing, motivating, and controlling resources, procedures and protocols to achieve specific goals in scientific or daily problems. A project is a temporary endeavor designed to produce a unique product, service or result with a defined beginning and end (usually time-constrained, and often constrained by funding or deliverables), undertaken to meet unique goals and objectives, typically to bring about beneficial change or added value. The temporary nature of projects stands in contrast with business as usual (or operations), which are repetitive, permanent, or semi-permanent functional activities to produce products or services. This course will provide an overview of the project management process and implementation.

---

### *Course Outcomes and Objectives*

---

#### **PM-1 Explain and describe the project management phases and project management Roadmap**

- Identify projects by using the typical project characteristics.
- Define project targets (product and approach targets) for a project.
- Define relevant project constraints.
- Define project scope (work packages) by using the main principles (work break down structure.
- Assign project scope (work packages) to project members
- Design rough project timing by defining project phases and milestone (phase and MS plan).
- Determine needed project resources (material, cost/ financial) to deliver the project scope.
- Identify main project risks by using simple creativity techniques and to recommend preventive and corrective actions.
- Identify and document the project status and project deviations.

#### **PM-2 Identify the key tools and techniques in project management**

- Create a logical sequence of work packages project and a GANNT chart and to apply to a typical Mechatronic project.





---

## Course Outline – Project Management Overview Seminar

---

**PM-3 Explain why project management is important and the role that technicians play in the project management process**

### Content Outline

- I. Overview of targets and outcomes
- II. Project definition
- III. Project goals for product and program
- IV. Project and project environment company, customer,..)
- V. Project (Management) Phases (APQP, 5 phase approach, AIAG)
- VI. Project planning (scope, time, resources, costs, risks,..)
- VII. Project monitoring and controlling
- VIII. Project documentation
- IX. Project performance, feedback and continuous feedback
- X. Review generic/general program timing and discuss interaction and relationships among:
  - a. project quote and definition
  - b. component sourcing and PPAP submission
  - c. equipment sourcing, qualification, installation and requalification facility readiness
  - d. PPAP to customer & PPAP process of record execution, performance review, feedback, improvement





---

## Course Outline – Project Management Overview Seminar

---

### **SAFETY DISCLAIMER:**

M-SAMC educational resources are in no way meant to be a substitute for occupational safety and health standards. No guarantee is made to resource thoroughness, statutory or regulatory compliance, and related media may depict situations that are not in compliance with OSHA and other safety requirements. It is the responsibility of educators/employers and their students/employees, or anybody using our resources, to comply fully with all pertinent OSHA, and any other, rules and regulations in any jurisdiction in which they learn/work.

M-SAMC will not be liable for any damages or other claims and demands arising out of the use of these educational resources. By using these resources, the user releases the Multi-State Advanced Manufacturing Consortium and participating educational institutions and their respective Boards, individual trustees, employees, contractors, and sub-contractors from any liability for injuries resulting from the use of the educational resources.

### **DOL DISCLAIMER:**

This product was funded by a grant awarded by the U.S. Department of Labor's Employment and Training Administration. The product was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability, or ownership.

### **RELEVANCY REMINDER:**

M-SAMC resources reflect a shared understanding of grant partners at the time of development. In keeping with our industry and college partner requirements, our products are continuously improved. Updated versions of our work can be found here: <http://www.msamc.org/resources.html>.

