

Program Description

Students who complete the certificate have enhanced employability in the field of aerospace technology. This program helps current and aspiring leaders learn to promote positive change, make data-informed decisions, lead by example, and solve complex problems with sustainable solutions. Students must receive a minimum grade of “C” or better in all required core courses and the specific courses listed as program electives in order to qualify for the degree or certificate.

Staff

Please dial (661) 722-6300, then the 4 digit extension.

Division:

Greg Bormann, Dean	x.6327
Mari-Ali Baiza, Administrative Assistant	x.6327
Leyla Recinos, Clerical Assistant III	x.6327
Dr. Maria Clinton, Department Chair	x.6577

Faculty:

Alfred Brubaker	x.6098
Dr. Maria Clinton	x.6577

Instructional Assistant:

Tiffani Zinner	x.6049
Susanna Otis	x.6872

Career Options

Aerospace/Aviation Managers	Plant Manager
Supervisors and Leads	Manufacturing Supervisor
Production Supervisor	Machine Shop Manager
Production Lead	

(Careers may require education beyond the two-year college level.)

Program Learning Outcomes

Aerospace Leadership and Management

1. Demonstrate key competences, tools and techniques related to management, administration, manufacturing processes, lean management, and Total Quality Management (TQM).
2. Apply the theoretical knowledge, methods, and skills gained from their coursework to improve overall management and production quality.

Certificate Program

Aerospace Leadership and Management

Students who complete the certificate have enhanced employability in the field of aerospace technology. This program helps current and aspiring leaders learn to promote positive change, make data-informed decisions, lead by example, and solve complex problems with sustainable solutions. The certificate will provide students with leadership strategies and understanding / management of aerospace budgets and reporting. This course will provide students with process improvement strategies and required skills to become a successful in aerospace management.

Required Courses (12 units):

ALM 110, Leadership and Administration	3	units
ALM 115, Manufacturing Processes and Controls	3	
ALM 120, Lean Manufacturing	3	
ALM 130, Total Quality Management	3	
	Total	12

Aerospace Leadership and Management

ALM 110 LEADERSHIP AND ADMINISTRATION

3 units

3 hours weekly

This course is designed to provide students with a roadmap to achieving excellence in aerospace leadership. The course outlines the theoretical foundations of leadership, leadership styles, skills, roles, and functions of leaders in an aerospace organization. This course identifies common administrative tasks that are required for smooth day to day operations. (AVC)

ALM 115 MANUFACTURING PROCESSES AND CONTROLS

3 units

3 hours weekly

Prerequisite: Completion of ALM 110.

This course is designed to provide students with an understanding of manufacturing processes and shop controls. This course outlines policies, procedures, planning/scheduling, cost, quality, productivity, safety, and risk management. This course identifies the different controls and processes that are necessary for successful aerospace production. (AVC)

ALM 120 LEAN MANUFACTURING

3 units

3 hours weekly

Prerequisites: Completion of ALM 110 and ALM 115.

This course focuses on gaining an understanding of Lean principles, practices, and techniques from both technical and individual perspectives needed to effect the change and sustain improvement within the aviation industry. Emphasis will be placed on developing the individual skills needed to become a Lean thinker and champion building a roadmap for transitioning an organization from its current state to one of being a Lean operation. Six Sigma and the 5's systems will be covered. (AVC)

ALM 130 TOTAL QUALITY MANAGEMENT

3 units

3 hours weekly

Prerequisites: Completion of ALM 110, ALM 115, and ALM 120.

This course focuses on the importance of Total Quality Management (TQM) to the successful operation of the aerospace industry. This course will provide students with knowledge of continuous improvement techniques such as statistical process charts and assessment frameworks (e.g., Deming's philosophy, ISO 9100). Students will study and TQM implementation in aerospace organizations and understand the overarching impact TQM has on all aspects of the aerospace industry. (AVC)