



# Aeronautical Non-Destructive Inspection, Leadership Management, Metrology Sciences for Aerospace Manufacturing Certificates 23-24

## Aeronautical Non-Destructive Inspection

Term 1 (Semester: Maximum 19 units, 15 units recommended)	Units
ANDI 110, Non Destructive Inspection: Visual Inspection, Liquid Penetrant, and Magnetic Particle	5
ANDI 115, Non Destructive Inspection: Eddy Current	3.5
Term 2 (Semester: Maximum 19 units, 15 units recommended)	Units
ANDI 120, Non Destructive Inspection: Ultrasound Inspection	3.5
<b>Total</b>	<b>12</b>

### Graduate

*This program is designed to introduce students to the principles of nondestructive inspection (NDI) and nondestructive testing (NDT). Non-destructive testing (NDT) is a testing and analysis technique used by the aerospace industry to evaluate the properties of a material, component, and structure for characteristic differences without causing damage to the aircraft structures. Inspection methods covered in this course are Eddy Current and Ultrasonic inspection. Classroom lecture and hands-on practice with NDI testing equipment, processes, and procedures.*

## Aerospace Leadership and Management

Term 1 (Semester: Maximum 19 units, 15 units recommended)	Units
ALM 110, Leadership and Administration	3
ALM 115, Manufacturing Processes and Controls	3
ALM 120, Lean Manufacturing	3
ALM 130, Total Quality Management	3
<b>Total</b>	<b>12</b>

### Graduate

*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*

## Metrology Sciences for Aerospace Manufacturing

Term 1 (Semester: Maximum 19 units, 15 units recommended)	Units
MSAM 110, Fundamentals of Dimensional Metrology	4
MSAM 115, Metrology Systems and Application	6
<b>Total</b>	<b>10</b>

### Graduate

*This program is designed to familiarize students with the standards and practices of metrology used in the aerospace manufacturing industries, which includes hands-on training and familiarization with metrology tooling, equipment, and systems. Jobs associated with this certificate are Tool & Die Maker, Machinist, Metrology Tech, Dimension Control Tech, Tool Design, and Tool Engineer.*

**Residency:** Minimum of 12 units completed at AVC with a minimum of 9 of those units completed from the certificate/major. (credit earned by examination will not be included in these 12 units) Title 5, Section 54000:<http://ccr.oal.ca.gov>

**Requirements for Two or More Associate Degrees:** To be eligible for multiple associate degrees, a student must have completed all of the graduation requirements for each degree.

**Transfer:** Students planning to continue studies at a four-year college or university after AVC should visit the Transfer Resource Center or the Counseling Center and consult with a counselor as soon as possible to develop a plan of studies. Additional preparation for the major information on official transfer articulation agreements from AVC to many CSU/UC campuses can be found at the following Web site: [www.assist.org](http://www.assist.org)

The “**Catalog Rights Policy**” sets forth the criteria used for determining the degree requirements under which students may graduate. Please refer to the AVC Catalog for a detailed description or consult with a counselor.

**Advisory:** A condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program.

**Prerequisite:** A condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program. Prerequisites are enforced and a student will be blocked from enrolling or involuntarily dropped after enrolling if the student does not meet the stated prerequisite. A student must complete a course prerequisite with a satisfactory grade of A, B, C or P (pass).

**Corequisite:** A condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course. Corequisites are enforced and a student will be blocked from enrolling if the student does not meet the stated corequisite.

### Other Requirements:

- Minimum grade of “C” required on each course
- Refer to catalog or online website for course listings and descriptions
- Maximum of 6 pass/no-pass units accepted for Certificates