## MACHINIST, ASSOCIATE IN SCIENCE DEGREE

**Banner Code:** 1\_AS\_MTMC **Financial Aid Eligible** 

The Machinist certificate program trains students for positions as entry-level operators, which often are the first manufacturing jobs for industrial employees. This certificate program provides the skill and knowledge necessary for job candidates to become successful wage earners. This program also comprises the core courses for the more advanced certificates.

Complete the Machinist Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## **Program Outcome**

Machine precision manufactured parts using conventional lathes and milling machines and perform necessary measurements.

Review Graduation Requirements (https://catalog.cccd.edu/orange-coast/graduation-requirements/associate-degree/) and General Education (https://catalog.cccd.edu/orange-coast/general-education-patterns/).

Course	Title	Units
MACH A100	Introduction to Machine Shop	3
MACH A105	Lathe	5
MACH A110	Milling Machine	5
MACH A115	Production Machining Techniques	2
MACH A120	Measurement and Blueprint Reading	3
MACH A121	Computations for Machinists	3
MACH A130	Introduction to CNC and Manual Programming	3
Total Units		24

Requirement	Units
Program Major Units	24
AS General Education Option 1, 2, or 3	Varies
Transferable electives to satisfy unit requirement	Varies
Total Degree Units	60

## **Program Sequence**

These sequences at Orange Coast College are general course curriculum maps for students to finish all major and general education requirements for two-year completion of degrees, and/or fulfillment of transfer requirements. The course sequence may include course prerequisites and other placement requirements. Students are advised to meet with an Orange Coast College Counselor to review course selections and sequences to ensure that completion of this program will meet a student's transfer and career goals.

Course Year 1	Title	Units
Semester 1		
MACH A100	Introduction to Machine Shop	3
MACH A120	Measurement and Blueprint Reading	3
OCC AS GE AREA A1 - CHOOSE ONE		3
OCC AS GE AREA C1 - CHOOSE ONE		3
ELECTIVE (DEGREE APPLICABLE)		3
	Units	15
Semester 2		
MACH A110	Milling Machine	5
MACH A121	Computations for Machinists	3
OCC AS GE AREA A2	- CHOOSE ONE <sup>1</sup>	3-4
OCC AS GE AREA D -	3	
ELECTIVE (DEGREE A	3	
	Units	17-18
Year 2		
Semester 1		
MACH A105	Lathe	5
OCC AS GE AREA B - CHOOSE ONE		3-4
OCC AS GE AREA C2 - CHOOSE ONE		3
ELECTIVE (DEGREE A	APPLICABLE)	3
	Units	14-15
Semester 2		
MACH A130	Introduction to CNC and Manual Programming	3
MACH A115	Production Machining Techniques	2
	owing or satisfy Math competency School Algebra 2 with a "C" or better):	3-4
MATH A030 or MATH A045	Intermediate Algebra <sup>2</sup> or Combined Elementary and Intermediate Algebra	
ELECTIVE (DEGREE A	8	
	Units	16-17
	Total Units	62-65

- OCC AS GE AREA A2 Required if 100-level MATH will not be taken to meet Math competency. If MATH A100 or higher will be taken, then needs to take 3-4 degree applicable elective units
- Math A030 or higher OR take 3-4 degree applicable elective units if math competency was met through completion of High School Algebra 2 with a "C" or better; \*100-level Math courses satisfy AS Math Requirement and OCC AS GE AREA A2
- <sup>3</sup> VARIES TO REACH MINIMUM 60 DEGREE APPLICABLE UNITS