

CNC MACHINE PROGRAMMER, CERTIFICATE OF ACHIEVEMENT

Financial Aid Eligible
Banner Code: 1_CT_MTMP
Control Number: 19543

The CNC Machine Programmer certificate includes courses designed to upgrade the skills and knowledge of the machinist or the CNC machine operator to the level of the CNC machine programmer. If you are a machinist and have minimal experience with CNC machines or machine language programming, you will first want to complete the CNC Machine Operator Professional Upgrade Certificate. If you have both machining experience and CNC experience, the software used for the Machine Technology A133 and A134 courses provides excellent experiences in computer-assisted CNC programming. All of our programming courses require the use of a personal-type computer. If you have no computer experience, we strongly suggest you enroll in a basic computer use type course first (Computer & High Technology A100 or Computer Information Systems A100).

Program Outcome

1. Write part machine programs for controlling CNC lathes and milling machines.

Certificate Requirements

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

1. **Certificate of Achievement** - 8 units or more in a state-approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services or online at the beginning of the semester in which the student will be completing his or her final requirements. The petitioning periods are listed in the Graduation Requirements (<https://catalog.cccd.edu/orange-coast/graduation-requirements/>) section of this catalog.
2. **Certificate of Specialization** - 16 units or less in a locally approved program. Certificates of Specialization are not automatically awarded, not printed on official academic transcripts, and there is no acknowledgment of completion given at graduation. Please contact the division for details regarding the submission of petitions as procedures for each division vary. Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript while some divisions allow petitions for Certificates of Specialization before finishing.

Minimum Grade Requirement

In order to be awarded a certificate, students are required to obtain a grade of "C" or better in all program-required courses. Grades of "CR" or "P" will be accepted whereas "CR" or "P" meets the equivalency of a "C" or better. A list of certificate programs can be found in the Programs A-Z (<https://catalog.cccd.edu/orange-coast/programs-study/>) section of this catalog. Check with a counselor to determine the requirements for completion.

Required Prerequisites

Machinist Certificate of Achievement

Course	Title	Units
Year 1		
Fall		
MACH A100	Introduction to Machine Shop	3
MACH A105	Lathe	5
MACH A120	Measurement and Blueprint Reading	3
MACH A121	Computations for Machinists	3
	Units	14
Spring		
MACH A110	Milling Machine	5
MACH A115	Production Machining Techniques	2
MACH A130	Introduction to CNC and Manual Programming	3
	Units	10
	Total Units	24

Subtotal 24

Course	Title	Units
Year 1		
Fall		
MACH A125	CNC Machine Operation 1	3
	Units	3
Spring		
MACH A126	CNC Machine Operation 2	2
MACH A142	Mastercam Solids	2
	Units	4
Year 2		
Fall		
MACH A134	CNC Programming-Mastercam 2	3
MACH A141	Mastercam Lathe	1.5
	Units	4.5
	Total Units	11.5

Total Units 35.5