

CNC PROGRAMMER, CERTIFICATE OF ACHIEVEMENT

Banner Code: 1_CM_MTCP

Control Number: 41022

Not Financial Aid Eligible

This Professional Upgrade Certificate is 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 operator upgrade certificate. If you have both machining experience and CNC experience, the software used for the Machine Technology A133 and A134 courses provide excellent experiences in computer-assisted CNC programming. All of our programming courses require the use of a personal computer. If you have no computer experience, we strongly suggest you enroll in a basic computer use course first (Computer & High Technology A100 or Computer Information Systems A100).

Program Outcome

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

Review Graduation Requirements (<https://catalog.cccd.edu/orange-coast/graduation-requirements/certificates/#achievementtext>).

| Course | Title | Units |
|-------------------------|-----------------------------|-------------|
| Required Courses | | |
| MACH A126 | CNC Machine Operation 2 | 2 |
| MACH A133 | CNC Programming-Mastercam 1 | 3 |
| MACH A134 | CNC Programming-Mastercam 2 | 3 |
| MACH A141 | Mastercam Lathe | 1.5 |
| MACH A142 | Mastercam Solids | 2 |
| Total Units | | 11.5 |

Program Sequence

These sequences at Orange Coast College are curriculum maps for students to finish all requirements for the certificate. There may be advisories, prerequisites, or time requirements that students need to consider before following these maps. **Students are advised to meet with an Orange Coast College Counselor for alternate sequencing.**

Some courses in this program may be offered once per academic year.

| Course | Title | Units |
|-------------------|-----------------------------|----------|
| Year 1 | | |
| Semester 1 | | |
| MACH A133 | CNC Programming-Mastercam 1 | 3 |
| MACH A126 | CNC Machine Operation 2 | 2 |
| | Units | 5 |
| Semester 2 | | |
| MACH A134 | CNC Programming-Mastercam 2 | 3 |
| MACH A142 | Mastercam Solids | 2 |
| | Units | 5 |

| Course | Title | Units |
|-------------------|--------------------|-------------|
| Year 2 | | |
| Semester 1 | | |
| MACH A141 | Mastercam Lathe | 1.5 |
| | Units | 1.5 |
| | Total Units | 11.5 |