

SNAP Employment and Training Program

Collegiate Certificate

CNC Manufacturing & Technology

Program overview

This 26-credit certificate program prepares the student for a promising career in manufacturing starting as a CNC machinist with the technical skills and materials knowledge to be a valuable member of a manufacturing team. The 26 credits earned for this certificate may also be used toward the fulfillment of the requirements of the AS Degree in CNC Machining or the BS Degree in Manufacturing Management. In this certificate program, the student is introduced to the basic manufacturing skills of safety and problem solving while being provided with the classroom and handson machining skills needed for CNC machining. The student will develop skills in understanding technical drawings, lean manufacturing principles and essential information on material properties and behaviors in the manufacturing process. Students will develop competencies in computer aided manufacturing to design multi-dimensional parts in Mastercam and work toward mastery of advanced CNC machining skills. In addition to class lectures, this program will provide the student with hands-on CNC/CAM experience. Laboratory sessions are coordinated with the lectures and emphasize experimentation and application of

the lecture content. Successful completion of this certificate program prepares participants to pursue a National Institute for Metal Working Skills (NIMS) credential as a CNC operator.

Curriculum

| Education Requirements - 26 Credits | | |
|-------------------------------------|--|---|
| BMM 102 | Safety Practices in Manufacturing | 1 |
| BMM 140 | Principles of Manufacturing Math | 3 |
| BMM 141 | Shop Math Lab | 1 |
| BMM 175 | CNC Machining I | 3 |
| BMM 210 | Lean Manufacturing Principles | 3 |
| BMM 220 | Materials & Processes in Manufacturing | 3 |
| BMM 222 | Technical Drawings & Specifications | 3 |
| BMM 240 | CAM I | 3 |
| BMM 241 | CAM II | 3 |
| BMM 275 | CNC Machining II | 3 |

Total Credits: 26

Goodwin University is a nonprofit institution of higher education and is accredited by the New England Commission of Higher Education (NECHE), formerly known as the New England Association of Schools and Colleges (NEASC).

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For more information, contact: 860-727-6936 www.goodwin.edu/snap

Placement evaluation guidelines apply for this program. Lifetime access to Career Services including job-search assistance; resume-writing, and mock-interviewing is available to graduates.