CNC Service Technician
Diploma

Program Information

The Computer Numeric Controlled (CNC) Service Technician program is a 64-credit diploma that includes technical and general education components. This diploma provides the skills for working in the manufacturing sector or as a field service technician. Full-time students can obtain a diploma in two years. Financial assistance is available for those who qualify.

CNC Service Technicians play a vital role in maintaining and servicing industrial equipment. Technicians inspect, calibrate, maintain, and repair equipment.

Designed by manufacturing industry leaders, the program provides a comprehensive, hands-on, career-oriented curriculum. Students will obtain a solid education in machine repair, industry fundamentals, and electronic fundamentals.

Program Learning Outcomes

By completing this program, students will achieve the following learning outcomes.

- Demonstrate and practice maintenance skills consistent with industry expectations.
- Exhibit safety principles and practices in a manufacturing environment.
- Develop critical and creative thinking processes required to effectively and efficiently diagnose and repair technical problems.
- Develop and demonstrate knowledge, skills, and attitudes essential to an individual company’s expectations.
- Demonstrate efficient interpersonal skills with customers, machine operators, and co-workers.

Course Prerequisites

Some courses may require appropriate test score or completion of basic math, basic English and/or reading courses with a “C” or better.

Graduation Requirements

All Anoka Technical College students seeking an Associate in Applied Science (AAS), diploma, or certificate must meet the cumulative grade point average (GPA) of 2.0 or higher.

Transfer Opportunities

To see how credits from this program may transfer into other Anoka Technical College programs or into a program at another college, visit:

- Minnesota Transfer
- Anoka Technical College transfer student

Industry Information

Positions in this field may be either on-site or field service personnel involving highly technical repair and maintenance of Computer Numeric Controlled (CNC) machine and robotic automation equipment. Automation in manufacturing perpetuates an increased need for highly skilled technicians. Equipment serviced is encompassed by many sectors of manufacturing and may require background checks and proof of citizenship for entry into facilities including International Traffic in Arms Regulations (ITAR) as well as non-disclosure agreements and intellectual property protections. Field service may also involve varying amounts of travel to and from client sites.

Wages/Outlook/Advancement

Wage information is available from the Minnesota Department of Employment and Economic Development

Program Sequence

First Semester ................................................................. 17
☐ ETEC 1102 Mechatronic 1 DC ...................................... 3
☐ ETEC 1113 Mechatronic 2 AC ...................................... 3
☐ ETEC 1141 Circuit Analysis ......................................... 4
☐ ETEC 1250 Dital I .................................................... 3
☐ MAIN 1100 Pneumatic & Hydraulics .......................... 4

Second Semester ............................................................ 15
☐ ETEC 1170 Programmable Logic Controllers ............. 2
☐ ETEC 1202 Solid State Electronic Devices .................. 5
☐ MACH 1261 CNC Programming 1 ............................ 3
☐ MACH 1105 Basic Machining .................................... 3
☐ MACH 1221 Grinding .............................................. 2

Third Semester ............................................................... 15
☐ MACH 1251 CNC Machining .................................... 3
☐ MAIN 2310 Peripheral Machine Systems ...................... 2
☐ MAIN 2320 Electric Motors and Sensors ...................... 3
☐ MAIN 2330 Power Transmission ................................. 4
☐ MAIN 2340 Controls ............................................... 3

Fourth Semester ............................................................ 17
☐ MAIN 2400 Service/Machine Troubleshooting .............. 5
☐ MAIN 2410 Preventative Maintenance ......................... 2
☐ MAIN 2420 Electrical Troubleshooting ....................... 3
☐ MAIN 2430 Accuracies ........................................... 3
☐ ENGL 2105 Business and Technical Writing ............... 4

Faculty Contact

Jesse Oldenburg ........................................ 763-576-4065
For information on how to apply, to schedule a tour, or for service during summer hours, contact Enrollment Services at 763-576-7710 or EnrollmentServices@anokatech.edu