

MACHINE TECHNOLOGIST

CERTIFICATE

This certificate will provide students with knowledge of manufacturing processes and plant operations, along with an advanced skill set in machine tool technology. Students will engage in topics of technical mathematics, introductory computer skills, print interpretation, manufacturing processes, quality control, maintenance, and safety. Also included in coursework, students will engage in topics of machine tool print reading, machine tool technology theory and lab principles, machining math, introduction to computer numerical control, and geometric dimensioning and tolerancing.

The nationwide Manufacturing Skills Standards Council (MSSC) System, based upon industry-defined and federally-endorsed national standards, offers both entry-level and incumbent workers the opportunity to demonstrate that they have acquired the skills increasingly needed in the high-growth, technology-intensive jobs of the 21st century. The MSSC System awards certificates to individuals who pass any of its four Production modules: Safety; Quality Practices & Measurement; Manufacturing Processes & Production; and Maintenance Awareness and a full Certified Production Technician (CPT) Certification to those who pass all four. Students completing this Certificate will have gained the knowledge required to pass the MSSC full-certified Production Technician Certification.

Accuplacer Requirements

All courses require a reading cut score of 52

CMAE 1502 Technical Math requires arithmetic cut score of 45

Award: Certificate (CERT) 30 Credits Credits

Location: ♦ Albert Lea

Program Starts: Fall

Course Plan: Two Semesters

Estimated Tuition 30 cr x \$197.00 = **\$5,910.00**

Books: contact program advisor

Other Costs: contact program advisor

Faculty & Advisors

♦ Bob Bender / 507-379-3343

♦ Gary Peterson / 507-379-3358

♦ Richard Finley / 507-379-3363

Required Core Courses (30 Credits)

CMAE1502	Technical Mathematics	3.00
CMAE1506	Introduction to Computers	2.00
CMAE1510	Print Reading	2.00
CMAE1514	Manufacturing Skill Standards Council (MSSC) Safety	2.00
CMAE1518	Manufacturing Processes	2.00
CMAE1522	Manufacturing Skill Standards Council (MSSC) Quality	2.00
CMAE1526	Maintenance Awareness	2.00
CMAE1530	360 Degree Machining Math	2.00
CMAE1532	Machine Tool Print Reading	2.00
CMAE1534	Machine Tool Technology Theory	2.00
CMAE1536	Machine Tool Technology Lab I	2.00
CMAE1538	Machine Tool Technology Lab II	2.00
CMAE1540	Introduction to CNC	3.00
CMAE1542	Geometric Dimensioning and Tolerancing	2.00