APPLIED ENGINEERING TECHNOLOGY - MACHINING & AUTOMATION

DIPLOMA

This diploma will provide students with a valuable skill set designed to meet the needs of the advanced manufacturing industry. Students may choose the Machining and Automation emphasis. Through coursework, the student will develop fundamental knowledge of manufacturing processes, safety, quality, machine tool technology, and automation technology.

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 Diploma 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: Diploma (DIP) 51 Credits Credits

Location: ♦ Albert Lea

Program Starts: Fall

Course Plan: Four Semesters

Estimated Tuition 51 cr x $195.00 = *$9,945.00*
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 (45 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	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
CMAE1550	DC Circuits	3.00
CMAE1552	AC Circuits	3.00
CMAE1554	Digital Electronics	3.00
CMAE1556	Analog Circuits	3.00
CMAE1558	Motor Control	3.00

MnTC General Education Courses (6 Credits)

GSCM1500	Written Technical Communications	2.00
MATH1110	College Algebra	3.00

RIVERLAND Campuses
Albert Lea | 2200 Riverland Dr. | Albert Lea, MN 56007 | 507-379-3300
Austin Campus | 1900 8th Avenue NW | Austin, MN 55912 | 507-433-0600
Owatonna Campus | 965 Alexander Drive SW | Owatonna, MN 55060 | 507-455-5880