INDUSTRIAL TECHNOLOGY: MAINTENANCE AND AUTOMATION

INDUSTRIAL TECHNOLOGY: MAINTENANCE AND AUTOMATION A.A.S.

Program Code: E.MFG.AAS.IMA

Associate in Applied Science (A.A.S.)

Graduation requirement — 60 semester hours

The Industrial Technology program prepares students for careers in manufacturing. Students learn science, math, technology, and communications in real-life settings.

Program Notes*

- Prior to enrolling in MFT 151, students must complete a minimum of 12 hours of curriculum and MFT 131 or approval of the department chair or program director.

- General education electives include mathematics and at least one elective from the following categories: communications, social/behavioral sciences, humanities/fine arts, physical/life sciences.

- Students considering transferring to earn a bachelor's degree are advised to take ENG 101 and MAT 124. Discuss this with your academic success advisor before selecting a math or English course.

- ENG 102 has a prerequisite of ENG 101.

- MFX substitutions are accepted for MFT 110 and MFT 113.
  - MFT 110 = MFX 170 + MFX 171 + MFX 172 + MFX 173
  - MFT 113 = MFX 130 + MFX 131 + MFX 150 + MFX 151

- WLX substitutions are accepted for WLD 111.
  - WLD 111 = WLX 112 + WLX 113 + WLX 114 + WLX 115

Suggested Full-time Sequence

FALL	SPRING	SUMMER
1st Semester	*2nd Semester*	*3rd Semester*
MFT 130	MFT 137	MFT 151
MFT 131	CAD 113	
CAD 114	ENG 101	
MAT 131	*or* ENG 111	
WLD 111	Gen Ed elec	

FALL	SPRING
4th Semester	*5th Semester*
MFT 110	MFT 113
ENG 102 *or* COM 103	MFT 139
or COM 200	ELT 150
Technical elective	Technical elective
Technical elective	Technical elective
	Gen Ed elec

Required Program Courses (34 hours)   Cr. Hrs.

MFT 110	Mechanical Assemblies	3
MFT 113	Introduction to Hydraulics and Pneumatics	3
MFT 130	Basic Machine Processes	3
MFT 137	Introduction to CNC Programming	4
MFT 139	Quality Assurance	3
MFT 131	Introduction to Manufacturing and Industrial Safety	3
MFT 151*	Manufacturing Work Experience I	2
CAD 113	Computer-Aided Machine Design I	4
CAD 114	Introduction to AutoCAD (Computer-Aided Drafting)	2
ELT 150	Introduction to Electricity and Electronics	3
WLD 111	Introduction to Welding	4

Technical Electives (10 hours)

Select options to meet minimum 60-hour degree requirement.

CTC 110	Beginning Computers	3
ELT 131	Residential Wiring	3
ELT 134	Motors, Controls, and Drives	3
ELT 171	Analog Control Devices	3
ELT 179	Industrial Control Devices	3
ELT 231	Programmable Controllers	3
ELT 292	Process Control	3
MFT 117	Pumps, Compressors, and Vacuum Systems	3

Required General Education Courses (16 hours)

ENG 101 or ENG 111	Composition I / Workplace Writing	3
ENG 102 or COM 103 or COM 200	Composition II / Introduction to Public Speaking / Leadership and Small Group Communication	3
MAT 131 or MAT 124	Applied Mathematics / College Algebra	4
General Education electives*		6

Total Semester Credit Hours	*60*