# **Skills Certificates**

(Certificates of Completion)



# DRAFTING -17 credit hours

The Drafting Skills certificate of completion prepares individuals for entry-level positions as drafters, CAD technicians, detailers and related occupations. This certificate may be applied towards further study in CAD or Manufacturing Technology.

CSCI	101	Intro to Computer Info Science	4 hrs.
CAD	101	Introduction to AutoCAD	3
CAD	110	CAD Software Applications	3
TECH	114	Introduction to Technical Graphics	3
<b>TMAT</b>	103	Technical Mathematics	4

### ELECTRICAL MAINTENANCE - 10 credit hours

The Electrical Maintenance Certificate of Completion prepares individuals with basic skills in electrical fundamentals, circuits, wiring, industrial applications and the National Electrical Code. This certificate may be applied in further study in electronics or electrical maintenance.

MAIN 101	Industrial Electricity & Systems	3 hrs.
MAIN 201	Electrical Wiring and Maintenance	3
TMAT 103	Technical Mathematics	4

# ELECTRONICS -19 credit hours

The Electronics Skills certificate of completion prepares individuals with basic skills in electronics, troubleshooting and circuit construction. This certificate may be applied for further study in the Computer Maintenance or Electronic Systems Technology programs.

ELTC 102 DC Electronics	3 hrs.
ELTC 103 AC Electronics	3
MATH 109 College Algebra for Math & Science	4
Or	
TMAT 103 Technical Mathematics	4
Technical Electives*	

<sup>\*</sup>Technical electives as approved by advisor or technology division. Electives are recommended from the following areas: ELTC, REEC, NETW, MAIN.

#### FACILITIES MAINTENANCE – 16 credit hours

The Facilities Maintenance Certificate of Completion prepares individuals with fundamental skills used in the support and maintenance of physical facilities. Skills learned include basic wiring, simple construction methods, air conditioning and heating systems, pumps and plumbing. This certificate may be applied in further study towards the Maintenance Technology program.

CNST 103 Building Mechanical & Electrical	
Systems	3 hrs.
MAIN 101 Industrial Electricity & Systems	3
MAIN 104 Air Conditioning & Refrigeration	3
MAIN 221 Heating Systems	3
TMAT 103 Technical Mathematics	4

# MACHINE OPERATIONS - 16 credit hours

By enrolling in the Machine Operations skills certificate program, you develop graphic communication and machining skills. When you complete this program, you can seek employment as a technician and machine operator. You can apply all of these courses into the Manufacturing Technology AAS degree or the Machine Tool Technology certificate.

MATH 109	College Algebra for Math & Science	4 hrs
Or		
TMAT 103	Technical Math I	4
TECH 114	Introduction to Technical Graphics	3
ENGR 110	Engineering Graphics	3
MTT 101	Machining Skills I	3
MTT 201	Machining Skills II	3

# MECHANICAL MAINTENANCE - 16 cr. hrs.

The Mechanical Maintenance Certificate of Completion prepares individuals with basic skills needed for industrial maintenance and related occupations. This certificate may be applied for further study in maintenance, or manufacturing technology.

MAIN	101	Industrial Electricity & Systems	3 hi	rs
MAIN	102	Mechanical Systems	3	
MAIN	202	Fluid Power Systems	3	
		Technical Mathematics	4	
WELD	110	Maintenance Welding	3	

# COMPUTER SUPPORT SPECIALIST — 16 credit hours

The Computer Support Specialist certificate of completion prepares individuals with basic skills required to install, maintain and support PCs in the workplace. This certificate may be applied toward further study in electronics, networking or computer technology.

CSCI	101	Intro to Computer Info Science	4 hrs
NETW	150	Workstation Operating Systems	3
NETW	151	PC Hardware Maintenance & Repair	3
BUSN	145	Workforce Preparation	1
<b>GENS</b>	100	College Success	1
TMAT o	or Co	llege Level MATH	4

# WELDING - 16 credit hours

By enrolling in the Welding Technology skills certificate program, you learn the processes and techniques in industrial welding. You learn about materials, tools, equipment, weld design, code application, and weld inspection. When you complete this program, you can seek employment as a welding technician or welding operator. You can apply all of these courses into the Welding Technology certificate.

MATH	109	College Algebra for Math & Science	4 hrs
Or			
TMAT	103	Technical Math I	4
TECH	114	Introduction to Technical Graphics	3
WELD	110	Introduction to Welding Processes	3
WELD	116	Shielded Metal Arc Welding (SMAW) I	3
WELD	218	Gas Metal Arc Welding (GMAW)	3