

# 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
TMAT 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 Electronic Systems 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*		9

\*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 Mechanics	3 hrs.
MAIN 101	Industrial Electricity & Systems	3
MAIN 104	Air Conditioning & Refrigeration	3
MAIN 221	Heating Systems	3
TMAT 103	Technical Mathematics	4

### WELDING – 6 credit hours

The Welding Certificate of Completion prepares individuals with basic skills in Welding and related processes. This certificate may be used as a path to further study in Welding, Maintenance or Manufacturing Technology.

WELD 110	Maintenance Welding	3 hrs
WELD 116	Shielded Metal Arc Welding I	3

### MACHINE OPERATIONS – 18 credit hours

The Machine Operation Certificate of Completion will prepare individuals for occupations in machining and related positions such as CNC operator, machine operator, and apprentice. Students may apply this certificate for further study in Manufacturing, CAD, or Maintenance Technology.

MTT 101	Machine Tool I	4 hrs.
MTT 201	Machine Tool II	3
MFTG 120	CNC Manufacturing	4
TMAT 103	Technical Mathematics	4
TECH 114	Introduction to Technical Graphics	3

### MANUFACTURING ESSENTIALS – 16 cr. hrs.

The Manufacturing Essentials Certificate prepares individuals for entry-level employment in a variety of industrial settings. Students will be prepared for positions such as machine operator, assembler and production operator. Students may apply this certificate towards further study in manufacturing, CAD or maintenance technology.

TMAT course		4 hrs.
MFTG 110	Manufacturing Processes	3
MTT 101	Machine Tool I	4
TECH 114	Intro to Technical Graphics	3
Electives (Includes a GENS & BUSN course)		2

### 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 hrs
MAIN 102	Mechanical Systems	3
MAIN 202	Fluid Power Systems	3
TMAT 103	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
GENS 100	College Success	1
TMAT or College Level MATH		4

