

# 2017-18 ADDENDUM

## CAD Technician

### Technology and Health

E0426

#### Skills Certificate

Provides students with the most current two-dimensional (2D) and three-dimensional (3D) computer aided design (CAD) skills required in the manufacturing, design, and engineering disciplines. These skills also provide a platform for students to learn, understand, and build other related skills such as drafting, mechanical design, part inspection and computer-aided machining (CAM) software, which requires input from a CAD system, and is required to operate computer numerical control (CNC) machine tools.

### Required Courses

MFG 110	Introduction to CAD	4
MFG 120	CAD for Manufacturing	4
MFG 210	Advanced CAD	3
Total Units		11

or description. Students will complete substantial projects to develop a portfolio to aid in their career prospects. This certificate may aid in the student's search for an entry level position as a surveying technician, computer aided drafting (CAD) technician, or field technician.

### Required Courses

ENGR 1	Introduction to Engineering	2
SURV 1A	Surveying	3
SURV 1B	Surveying	3
ENGR 18	Introduction to Engineering Graphics	3
ENGR 24	Engineering Graphics	4
Total Units		15

## CNC Technician

### Technology and Health

E0431

#### Skills Certificate

Theory and application of computer numerical control (CNC) machining practices using mills and lathes typical in a wide range of industries. Designed to adapt and upgrade machining skills to industry standards and encourage the development of supplemental skills in computer aided design (CAD) and computer aided manufacture (CAM), metrology and problem-solving to better address the current needs and expectations of industry. Includes project models that closely approximate industry-representative applications with an emphasis on best practices, efficiency, and an understanding of the way machined parts relate to other related components in the manufacturing environment.

### Required Courses

MFG 130	Manufacturing Processes and Materials	3
MFG 250	Introduction to CNC Programming	3
MFG 260	Intermediate CNC	3
Total Units		9

## Surveying Technology

### Natural Sciences Division

E0432

#### Skills Certificate

The Surveying Technology Certificate provides students with introductory skills that lead to a career in Surveying Technology. There is a focus of the program is on the examination and documenting of an area's boundaries and features for the purposes of constructing a map, plan,