

COMPUTER AIDED DESIGN & DRAFTING: INDUSTRIAL (CADI)

This is a list of the Computer Aided Design & Drafting: Industrial (CADI) courses available at KPU.

Enrolment in some sections of these courses is restricted to students in particular programs. See the Course Planner - kpu.ca/registration/timetables - for current information about individual courses.

For information about transfer of credit amongst institutions in B.C. and to see how individual courses transfer, go to the BC Transfer Guide bctransferguide.ca

CADI 1200 **3 Credits** **Industrial Applications**

Students will identify industrial processes and codes and standards. They will describe industrial design development, identify information from external resources, and describe types of drawings. Students will prepare a flow chart and a general arrangement, and identify materials handling equipment and components. They will identify piping equipment and components, and participate in industrial field trips.

Prerequisites: 16 credits from courses in CADD at the 1100 level

CADI 1210 **4 Credits** **Conveyor Systems**

Students will identify types of materials handling equipment, collect design criteria, identify design principles and identify types of conveyors. They will draw and detail a belt conveyor, draw and detail platemwork and prepare chute details. Students will employ computer technology skills using cad software, select sustainable materials and fabrication/construction processes in materials handling and practice project management to evaluate project development.

Prerequisites: 16 credits from courses in CADD at the 1100 level

CADI 1220 **4 Credits** **Process Piping**

Students will identify industries that use process piping, prepare piping and instrumentation diagrams, lay out a general arrangement and prepare details of process equipment. They will develop pipe routing, output piping orthographics, output piping isometrics and use 3D piping software. Students will employ computer technology skills to retrieve and manage files, select sustainable materials and fabrication/construction processes for liquids and gases and practice project management procedures for project planning and implementation.

Prerequisites: 16 credits from courses in CADD at the 1100 level

CADI 1250 **4 Credits** **Introduction to Industrial 3-Dimensional Modeling Software**

Students will identify 3-dimensional (3D) software for industrial and mechanical applications. They will use 3D parametric modeling software to make effective sketches, model parts and generate 2- dimensional (2D) drawings. Students will create assembly files, presentation drawings and assembly drawings. They will use process piping software to place components into a piping model, create orthographic piping working drawings, and to automatically generate piping isometric drawings with a bill of materials. Students will use piping and instrumentation diagram (P&ID) software to create piping schematics.

Prerequisites: 16 credits from courses in CADD at the 1100 level

CADI 1900 **4 Credits** **Special Topics - Industrial**

Students will engage in an intensive study of a special topic in Industrial design and drafting and/or related technology as selected by the instructor. They will receive instruction in and perform research in the topic. They will analyze and demonstrate the theory and application of the selected topic.

Prerequisites: 16 credits from courses in CADD at the 1100 level or higher