DIPLOMA IN COMPUTER AIDED DESIGN AND DRAFTING, SPECIALIZATION IN ARCHITECTURAL AND STRUCTURAL

At a Glance

Faculty

www.kpu.ca/science (http://www.kpu.ca/science/)

Area of Study:

www.kpu.ca/science/cadd (http://www.kpu.ca/science/cadd/)

Academic Level:

Undergraduate

Credential Granted:

Diploma

Start Date:

Fall (September)

Intake Type:

- Limited

Minimum Credits Required:

62

Curriculum Effective Date:

01-Sep-2021

Description

The Computer Aided Design & Drafting (CADD) program is designed to develop and enhance practical skills; increasing students' knowledge for a successful CADD career. Throughout the program students will design and draft various projects that are produced in digital and physical models. Students will obtain extensive experience utilizing AutoCAD and BIM softwares.

While all students apply for the Diploma, students have an optional exit point after one or two semesters of coursework gaining a Citation or Certificate.

Details on program and course dates are available on Kwantlen Course Timetables. Additional information is available at: kpu.ca/science/cadd (http://www.kpu.ca/science/cadd/)

Options

Diploma in Computer Aided Design and Drafting

The Diploma enables students to acquire advanced technical writing skills, Math skills and Physics skills, and to acquire technical skills in document control, web portfolio and CADD customization, sustainable design project management, and networking. These CADD courses are offered in the evening to facilitate certificate and advanced certificate graduates who are working in their industry.

Diploma in Computer Aided Design and Drafting with Co-operative Education

The Diploma in CADD with Co-operative Education allows students the option of pursuing a credential enhanced with a semester of work placement. Students interested in this credential must apply to and follow the terms and conditions indicated in the General Co-operative Education Requirements (https://calendar.kpu.ca/academic-regulations/co-operative-education/). Students complete the Co-operative Education component of this credential prior to the completion of 2000-level course components in the Diploma. Students interested in this option are advised to meet with an Academic Advisor and the CADD Program Chair.

Early Exit Options

Certificate in Computer Aided Design and Drafting

The Certificate prepares students for an entry level position as a CADD Drafting technician in the chosen Specialty. Using the most advanced CADD (Computer Aided Design & Drafting) software and 3 dimensional (3D) software, students will learn to produce drawings from concept sketches, design information, codes and specifications as per industry standards for production by builders and manufacturers.

Citation in Computer Aided Design and Drafting

The Citation incorporates the CADD Core which prepares students for the Specialty semester.

Career Opportunities

CADD/Drafting graduates may pursue a career in a variety of employment situations in architectural, engineering, manufacturing or municipal offices, or in a production /construction setting.

After a few years in CADD/Drafting many of our graduates move on to positions in sales, customer service, production management, estimating, CADD and network management and contract services (self-employment). Responsibilities can include design team management, project management of small projects, and production scheduling.

Requirements

Admission Requirements

In addition to the Faculty's Undergraduate Admission Requirement, which consists of KPU's Undergraduate English Proficiency Requirement (https://calendar.kpu.ca/admissions/english-proficiency-requirements/), the following program admission requirements apply:

- Satisfy the Math requirement at Level E1 of the Mathematics Alternatives Table (https://calendar.kpu.ca/course-information/mathematics-alternatives-table/)
- Complete the online CADD information session or an interview with a CADD department representative.

Advanced Standing

KPU Engineering Certificate graduates admitted to the CADD program may be eligible to receive advanced standing, in lieu of 16 credits of courses in CADD at the 1100 level.

Curricular Requirements

Course	Title	Credits
Term 1		
CADD 1100	Drafting Fundamentals	4
CADD 1150	Computer Aided Drafting & Design (CADD) Software	4
CADD 1161	Office Procedures	4
CADD 1110	Summative Project	4
	Credits	**16**
Term 2		
CADA 1201	Architectural Principles	4
CADA 1250	Introduction to Building Information Modeling (BIM) Software for Architectural	4
CADS 1200	Introduction to Structural Drafting and Concrete	4
CADS 1251	Introduction to Building Information Modeling (BIM) for Structural	4
	Credits	**16**
Term 3		
CADA 2110	Single Family Residential	4
CADD 2160	Professional Practice for Design and Drafting	4
CADS 2120	Structural Steel	4
Select one of the following:		3
CMNS 1140	Introduction to Professional Communication	
ENGL 1100	Introduction to University Writing	
	Credits	**15**
Term 4		
CADA 2210	Commercial Buildings	4
CADS 2100	Site Work	4
CADD 2220	Sustainable Design	4
Select 3 credits from a course in MATH at the 1100 level or higher		3
	Credits	**15**
	Total Credits	**62**

Credential Awarded

Upon successful completion of this program, students are eligible to receive a **Diploma in Computer Aided Design and Drafting, Specialization in Architectural and Structural.**

Co-op Requirements
Co-operative Education

The Computer Aided Design and Drafting diploma is offered with a Co-operative Education option. Co-operative Education gives a student the opportunity to apply the skills gained during academic study in paid, practical work experience semesters. Students can complete one work semester while completing their diploma. Work terms generally occur full-time in separate 4 month work semesters. Work semesters alternate with academic study.

Students wishing to enter and participate in the Co-op Option must meet the following requirements:

Entrance Requirements

- Currently admitted to the Diploma in Computer Aided Design and Drafting program.
- Good Academic Standing
- Currently in first-year courses of the Computer Aided Design and Drafting program.

Work Term and Program Continuance Requirements

Procedures for enrollment in Co-operative Education work terms are outlined in the COOP course descriptions. Conditions for continuance in the program are:

- Successful completion of COOP 1101 prior to completion of second-year courses of the Computer Aided Design and Drafting program
- Minimum Program GPA of 2.5
- Instructor Permission

Co-op Course Requirements

The Co-operative Education designation requires successful completion of the following courses:

Code	Title	Credits
COOP 1101	Introduction to Professional and Career Readiness	1
COOP 1150	Co-op Work Semester 1	9
Total Credits		**10**

Note: COOP courses must be completed in ascending numerical order. COOP courses may be used only to satisfy the Co-op designation and cannot be used to satisfy other curricular requirements of the program.

Additional Requirements

In addition to the requirements stated above, all Co-op students must satisfy the General Co-operative Education Requirements (https://calendar.kpu.ca/academic-regulations/co-operative-education/).

Credential Awarded

Upon successful completion of this program with Co-operative Education, students are eligible to receive a **Diploma in Computer Aided Design and Drafting, Specialization in Architectural and Structural, Co-operative Education Option.**