Emily Carr University Continuing Studies Department

# Interaction Design

# **Program Curriculum Handbook**

Effective Date: December 20, 2017

#### **PROGRAM GOAL**

The goal of the Interaction Design program is to provide students with the skills required for entry-level employment within the interactive design and digital media sector.

Students develop skills including web design, coding and motion graphics, as they produce both web and mobile-based projects. Graduates exit the program with a professional portfolio and a wide range of in-demand skills.

The Interaction Design Program is ideal for students with a passion for interaction design and technology, eager to launch and grow their career. Successful students in this intensive program are those who take initiative in their own learning, manage their time well and have a strong work ethic.

### **PROGRAM LEARNING OUTCOMES**

- Develop interactive web sites with creative and technical proficiency
- Produce responsive web sites and interactive mobile applications using current design methodologies and tools
- Apply appropriate user interface (UI) and user experience (UX) design principles and terminology
- Demonstrate proficient usage of industry-standard programming languages, terminology, software and tools
- Design visual graphics, including raster, vector and motion graphics, for optimized application in interactive media
- Practice efficient research, analysis, critical thinking and problem-solving techniques
- Employ effective time management and organizational strategies to meet project deadlines
- Exemplify positive peer communications and team work in both remote and face-toface environments
- Produce a professional portfolio

#### **INSTRUCTIONAL ACTIVITIES + DESIGN**

Learning activities consist of hands-on computer-based design projects reflecting industry practice, lectures, interactive demonstrations, group assignments and independent study. High standards of design and professional conduct will be emphasized throughout this in class face-to-face program.

### **PROGRAM LENGTH**

The Interaction Design program is an intensive, full-time 6-month (24-week) program with intakes in April and September. The program consists of two 12-week terms.

### **ASSIGNMENTS + ASSESSMENTS**

Students are evaluated through the completion of applied assignments and projects. Students can expect at least 1 hour of homework outside of class for every 1 hours of class. All assignments must be completed to the evaluative standard set by the instructor to satisfy the learning outcomes of each course within the program. A minimum C+ is required to achieve a passing grade in each course and to receive a certificate

Professional conduct, collaboration and teamwork, time management, organization, communication, participation and attendance, will also affect the final grade. Attendance is compulsory and students must attend a minimum of 85% of classes in order to receive a passing grade.

### ADMISSIONS

Admission to the Interaction Design Program is a competitive selection based on:

- Grade 12 graduation, GED or equivalent
- Proficiency in the English Language\*
- Canadian citizenship or permanent resident of Canada
- Resume
- Portfolio Review and Interview The interview, resume and portfolio submission is a means to assess the likelihood of successful program completion.
- Students must be over the age of 18 and should have completed Grade 12 or equivalent education.

As a result of the interview, resume and portfolio review students may be offered a seat in the program, placed on a waitlist until a seat becomes available or may be asked to reapply for the next intake.

No previous experience in interaction design is required to apply.

\*As a guideline, we expect applicants to have an IELTS score of 4-5 for studio courses and 6.0 for lecture courses.

Applicants whose first language is not English, regardless of immigration or citizenship status, must submit one of the following English Language Proficiency tests.

- TOEFL iBT Emily Carr institution code: #0032
  - Internet-Based Test
  - minimum of 84 out of 120 total points including a minimum score in each of the four skills; Speaking 20/30, Reading 20/30, Writing 18/30, and Listening 20/30.
- IELTS Academic Module
  - International English Language Testing System
  - minimum band 6.5, with no component less than 6.0

#### **PROGRAM COMPLETION**

Upon successful completion of the required courses, student can apply for Certificate Completion and receive their *Interaction Design Certificate*.

# **CAREERS + FURTHER EDUCATION**

Interaction Design Certificate recipients can apply their education to a variety of roles within the interaction and digital media sector. Depending on the level of work achieved and previous education and experience, students can pursue a range of entry-level opportunities including:

- web developers
- web designers
- new media project managers
- mobile application developers
- interactive designers
- user interface (UI) designers
- user experience (UX) designers

# **COURSE DESCRIPTIONS**

Term 1	
CEIE 110 Design Fundamentals	This course provides an introduction to visual communication principles and design processes. Students will be introduced to various methods, tools and materials and are encouraged to experiment with concept development, self-expression and risk. This course covers such basic principles as line, shape, composition, hierarchy, colour theory and typography. Students will explore how these visual fundamentals translate into digital environments.
CEIE 115 User Centered Design	Students will explore topics and processes of interaction design through the lens of human physiology and behavior. Projects will be developed to allow students to strengthen collaborative and design skills while integrating people's needs into the design process. Students will learn how to respond contextually to human needs relating these insights to uses and concepts relating to interactive devices, systems, and services. Through a process-driven, participatory methodology, students will learn how to engage people-centered necessities at the early stages of the design process, to apply observation techniques to the understanding of human interactions, and to develop iterative conceptual models and prototypes through testing and assessment strategies in order to develop meaningful human interactions.
CEIE 230 Design Research and Management	This curriculum investigates the practical, business side of design: getting organized and staying on-track through timeline projections, cost estimates and workflow management in order to ensure success and profitability. From working in a small to

	mid-size design studio, to more independent roles, students will gain important skills in both understanding the context and needs of designers and the field broadly, and strategies for developing administrative processes that support these practices.
CEIE 120 Programming for Interactivity	Programming for Interactivity will take the student through the process of conceiving, designing, and coding interactive computer programs from scratch. The focus will be on giving the student a fun introduction to programming while preparing them for future learning, and upon providing tangible opportunities to practice design theories discussed earlier in the term. The students will focus on programming in JavaScript (a scripting language designed for creating and running dynamic websites but able to do much more) jQuery, and jQuery plugins. We will focus on the creation of user interface elements through code, and the subsequent interaction with those elements.
CEIE 130 Designing for the Web	Using the Adobe Suite as the dominant tools, this course will introduce students to asset design, file management and optimization, and the intricacies of font, colour, and interfaces when composing for graphic communication online. Several best practices and trends in current web design will be explored via exercises and assignments.
CEIE 170 Interaction Design Studio I	This course applies knowledge and skills gained in the first-half of Term 1 in both creative and technical courses. Students will focus on developing conceptual ideas ready for production in regards to designing web and mobile assets for a (fictional) client - a person/company/organization. Students are required to research the client, and must provide rationale for the design based on the client's situation and surrounding market forces. Work produced in the studio will focus on developing content for their portfolio.
CEIE 140 Motion Graphics	Throughout this course students will be exposed to the discipline of motion graphics on the web. The focus of this course will be the creation of animated and dynamic interactive media for web and multimedia applications. Students will be taught a variety of techniques that enable the creation of effective motion graphics projects. These completed projects will support the message needed to be delivered, and are appropriate for the corresponding medium. Students will also learn how to animate objects, create symbols and assemble motion graphics projects for delivery to a variety of media, including desktops and all of today's available devices. In this brief course, particular emphasis will given to motion graphics as they pertain to interface design.
CEIE 150 Web Development I	Web Development I will introduce you to the world of web development, including an introduction to coding using HTML & CSS. We will focus on getting used to the syntax of web based languages, writing code to W3 standards, and exploring responsive interfaces, all while gaining an understanding of best practices in interface design. Some simple Javascript and Jquery will also be introduced.

CEIE 160 Portfolio Development I	In this course students will create a self-promotional website or interactive asset as a format for presenting themselves. Students will research their market and prepare and present a written design brief to act as the foundation for their design solutions. Final materials should be designed to be appropriate for their diverse platforms and still maintain consistency of brand image. This project allows students to integrate knowledge gained from the first term and to structure the final portfolio that will be developed throughout term two.
Term 2	
CEIE 270 Mobile Web Development	This course is designed to introduce students to the concept of the mobile web as it relates to smartphones, embedded devices, and the 'internet of things'. Students will learn responsive web design techniques, be exposed to several high-level tools for prototyping differing web-based experiences, and undergo several exercises in understanding the process of a 'mobile first' methodology.
CEIE 210 Mobile Application Design	This course will show students how to design for mobile devices including, but not limited to iOS and secondly Android OS. Using a diverse set of tools, students will learn how to design and build applications with GUI components. Issues regarding user interaction and current design methodologies are introduced for mobile devices.
CEIE 220 Mobile Application Production	This course will show students how to take an application to production, utilizing Adobe PhoneGap, javascript/jQuery, and backend technologies as necessary. Students will be shown how to test code on devices, to setup beta testing distribution, and how to upload production builds to the iOS App Store and Google Play store.
CEIE 240 Interaction Design Studio II	This course will build on Design Studio I, but move into a different direction. These sessions will exist as a cooperative environment for all of you. Projects that are assigned for other classes can be presented for critique before turning them over to your professors, and questions and concerns about content or assignments that have left you confused or unsure of how to proceed can be brought before the class to discuss. We'll also have our own assignments - particularly ones that enhance your design and execution skills in general and useful ways.
CEIE 250 Web Development II	This advanced course builds on the HTML & CSS skills gained in Web Design I by introducing students to the most popular content management system: WordPress. Students will start by learning the interface and metaphors of the program before moving to designing child themes and integrating blogs, image galleries, social media APIs and plugins into their sites. They will learn basic PHP and database concepts, as well as some of the more common ways to secure WordPress from attack. The troubleshooting of problems will also be examined. By the end of the course, students will have the tools to create a CMS based, dynamic website that is functional, beautiful, accessible, reliable and extensible.

CEIE 260 Portfolio Development II	The culmination of the Interaction Design Essentials Program, this course focuses on developing a professional, web-based portfolio of work that will support students in looking for entry- level work. Students will be introduced to business writing skills
	as well as presentation and communication skills that will help propel them toward a successful entry into industry.

#### **TRANSCRIPT OF ACHIEVEMENT**

All assessments are reported to the Continuing Studies Student Records Department where an official Transcript of Achievement is organized to show the final grade for each Certificate course.

# ASSESSMENT GRADING MATRIX

Grading S	cale			
Letter Grade	Grade Points	Percentage	Equivalent Descriptions of Achievement	Expanded Definitions of Achievement
A+	4.33	95-100	Distinguished	For coursework of distinction, demonstrating a Distinguished, Outstanding or an Excellent level
A	4.00	90-94	Outstanding	of understanding of the subject matter, concepts, and techniques achieved in satisfying
A-	3.67	85-89	Excellent	the learning objectives of a course.
B+	3.33	80-84	Commendable	For coursework demonstrating a Commendable, Very Good, or Good level of understanding of the
В	3.00	75-79	Very Good	subject matter, concepts, and techniques achieved in satisfying the learning objectives of a
В-	2.67	70-74	Good	course.
C+	2.33	65-69	Competent	Coursework demonstrates a competent, satisfactory or passing level of understanding of
С	2.00	60-64	Satisfactory	the subject matter, concepts, and techniques achieved in satisfying the learning objectives of a course.
C-	1.67	55-59	Pass	
D	1.00	50-54	Marginal Pass	Coursework demonstrates a marginal or barely adequate level of understanding and ability for satisfying the learning objectives of a course.
F	0.00	0-49	Fail	

Grade notat	ions		
AEG		Aegrotat Standing	
P/F		.Pass/Fail	Grades of 'Pass' (P), 'Fail '(F) or 'Credit' (CR) may be assigned to select courses that identify P/F/CR as the grading method approved at Senate. Grades of P/F/CR are GPA neutral and will not impact grade point average positively or negatively.
CR		 Credit granted	
1		Incomplete Grade	Incomplete grades may be granted by the instructor, for cases where the student has been unable to complete the course work because of extenuating circumstances beyond their own control. Such circumstances may be medical or of a personal nature and the student may be required to provide documentary evidence.
W		Withdrawal from a course	Grades of 'W' will be assigned where a student officially de-registers from a course in advance of the withdrawal deadline each semester. Grades of W bear no academic penalty and will not be calculated as part of a student's GPA, but will appear on a student's academic transcript.