# COMPUTATION ARTS AND COMPUTER SCIENCE

Section 71.80

### **Faculty**

Undergraduate Program Director
NEMATOLLAAH SHIRI-VARNAAMKHAASTI, PhD Concordia University; Associate Professor

#### Location

Sir George Williams Campus
Engineering, Computer Science and Visual Arts Complex, Room: EV 003.139
514-848-2424, ext. 3000

## **Objectives**

The Gina Cody School of Engineering and Computer Science and the Faculty of Fine Arts have created a program of study which combines a comprehensive education in computer science and a complementary set of courses of equivalent value in the fine arts. This program resides in both Faculties. In the Gina Cody School of Engineering and Computer Science, it is offered under the aegis of the Bachelor of/Baccalaureate in Computer Science (BCompSc). According to their preferences and aspirations, students may apply either for a Bachelor of/Baccalaureate in Computer Science program, or a Bachelor of/Baccalaureate in Fine Arts program. The Fine Arts offering is described in §81.90. The Computer Science program is described below.

#### Curriculum

The BCompSc Joint Major in Computation Arts and Computer Science consists of 45 credits in Computer Science complemented by 45 credits of study in Fine Arts. It provides a foundation for the integration of the arts and computer science as hybrid digital media arts and multimedia productions.

The Computation Arts core focuses on three areas of digital media: image works, sound exploration, and 3D modelling/animation. Through the integration of theory and practice, the programs aim at developing interdisciplinary cultural and technological practices, for independent arts initiatives, industry, and client-based productions.

The core courses are open-ended and flexible to accommodate change that will run parallel to technological advancements in industry and give students a strong base in multimedia research. Design Art, Electroacoustics, Film Animation, and the Studio Electronic Arts provide the Fine Arts electives, which further supports the cross-disciplinary nature of the program directives. This program will give graduates the conceptual abilities and technical skills they need to practise as hybrid cultural workers in the rapidly expanding field of multimedia. Students will have many more options to fine-tune a multimedia program according to their individual needs and expectations. Courses have been restructured into three credits to facilitate computer lab access, and flexibility in course sequencing and offerings, as well as to accommodate completion of the program within a co-op structure. Students of Computation Arts must bear the costs of annual laboratory fees.

## Structure of the Program

#### Joint Major in Computation Arts and Computer Science

The program consists of 45 credits in Computer Science and 45 credits in Fine Arts, as described below:

		Credits
	Computer Science Core (see §71.70.2)	33.00
	Computation Arts Core (see §81.90.2)	45.00
COMP 345	Advanced Program Design with C++	4.00
COMP 371	Computer Graphics	4.00
<b>ENCS 282</b>	Technical Writing and Communication	3.00
ENGR 411	Special Technical Report	1.00
		90.00

#### Admission Requirements

The Joint Major in Computation Arts and Computer Science is limited to students who are enrolled in or simultaneously applying for the BCompSc and who are qualified for the Fine Arts component. Applicants must fulfill the admission requirements for the BCompSc (see §71.10.2) and be accepted into the BCompSc.

In addition to the normal admission procedure of Concordia University, there is a distinct admission procedure for applicants to the Major in Computation Arts. All applicants must submit a portfolio following the instructions outlined on the Design and Computation Arts website at concordia.ca/finearts/design.