COMPUTATION ARTS AND COMPUTER SCIENCE

Faculty
Undergraduate Program Director
GREGORY BUTLER, PhD University of Sydney; Professor

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

Objectives
The Faculty 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 Faculty of Engineering and Computer Science, it is offered under the aegis of the Bachelor of/Baccalaureate in Computer Science, Computer Applications Option. 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 Computer Applications Option may be taken with a Major in Computation Arts. It 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
Computation Arts Option
The program consists of 45 credits in Computer Science and 45 credits in Fine Arts, as described below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Computer Science Core (see §71.70.2)</td>
<td>33.00</td>
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<tr>
<td>COMP 345 Advanced Program Design with C++</td>
<td>4.00</td>
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<tr>
<td>COMP 371 Computer Graphics</td>
<td>4.00</td>
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<tr>
<td>ENCS 282 Technical Writing and Communication</td>
<td>3.00</td>
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<tr>
<td>ENGR 411 Special Technical Report</td>
<td>1.00</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>90.00</strong></td>
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Admission Requirements
The Computation Arts Major is limited to students who are enrolled in or simultaneously applying for the Computer Science Applications Option and who are qualified for the Fine Arts component. Applicants must fulfill the admission requirements for the Computer Science Option in Computer Applications (see §71.10.2) and be accepted into the Computer Applications Option. 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 to the Program Office, Visual Arts Building, Room 244, on or before March 1. Further information may be obtained by contacting the Department of Design and Computation Arts.