## Program Planning Guide

Department: Mathematics and Computer Science
Calendar Year: 2015/2016
Name: $\qquad$
ID: $\qquad$

## Major in Computer Science:

www.uleth.ca/artsci/math-computer-science

## Academic Calendar:

www.uleth.ca/ross/academic-calendar

## High School Prerequisites by Course:

www.uleth.ca/ross/hs_prereqs/course
Current and Past Program Planning Guides:
www.uleth.ca/ross/ppgs

Faculty of Arts and Science Student Program Services:
www.uleth.ca/artsci/advising artsci.advising@uleth.ca
(403) 329-5106

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## Co-operative Education:

www.uleth.ca/artsci/coop

## Approved Diploma Programs:

www.uleth.ca/postdiploma

This is a planning guide and not a graduation check or guarantee of course offerings. You should have a program check done in your final year of studies. Students are responsible for the accuracy of their own programs. The guide should be used in conjunction with the University of Lethbridge Calendar, which is the final authority on all questions regarding program requirements and academic regulations. Contact an Academic Advisor in the Faculty of Arts and Science for advising information.

## Name:

ID : $\qquad$

## Post-Diploma B.Sc. Computer Science

Completion of at least 20 courses ( 60.0 credit hours) with a grade point average of at least 2.00.

## Required courses ( 20 courses):

$\qquad$ 1. Computer Science 1820 -Discrete Structures
2. Computer Science 2720 - Practical Software Development
3. Computer Science 3615 - Computer Architecture
4. Computer Science 3620 - Data Structures and Algorithms
5. Computer Science 3740 - Programming Languages
6. Mathematics 2000 - Mathematical Concepts
${ }^{1}$ Four additional courses ( 12.0 credit hours) in Computer Science at the 3000/4000 level
7. $\qquad$
9. $\qquad$
8. $\qquad$
10. $\qquad$

Two courses ( 6.0 credit hours) in Computer Science at the 4000 level, excluding Computer Science 4850 (Topics), Computer Science 4980 (Applied Studies), and Computer Science 4990 (Independent Study).
11. $\qquad$ 12. $\qquad$
Four courses ( 12.0 credit hours) from List I: Fine Arts and Humanities
$\qquad$
13.
15. $\qquad$
14. $\qquad$ 16. $\qquad$
Four courses ( 12.0 credit hours) from List II: Social Sciences
$\qquad$ 19. $\qquad$
18. $\qquad$ 20. $\qquad$

## Notes

${ }^{1}$ One of the additional 3000-level Computer Science courses may be replaced by a course from the following list:
Physics 3900 - Intermediate Experimental Physics (Series) (Digital Electronics) Any 3000/4000-level Mathematics course
To determine if a given course has a Fine Arts and Humanities designation or a Social Science designation, see List I: Fine Arts and Humanities Courses and List II: Social Science Courses (see the 2015/2016 University of Lethbridge Calendar, Part 4 - Academic Regulations, Section 10.b., p. 83).
No more than two Independent Study courses ( 3990 or 4990; 6.0 credit hours) may be counted towards the program.
Students may find that their diploma courses may overlap in content with some course offerings in the Computer Science program. However, the Department's offerings will often differ in focus and emphasis from diploma course offerings that bear superficially similar course descriptions. Students who have reservations about apparent duplication of offerings of Computer Science electives studied in their diploma programs are encouraged to pursue other elective offerings from the Department.
Students will be expected to have a working knowledge of the programming languages used by the Department in the delivery of Computer Science 1620 and Computer Science 2620. A student without this background will be expected to remedy any programming language deficiencies.

## Sample Sequencing Plan

Shown below is a sample sequence of courses for your degree. If you follow this plan, you should be able to graduate in two years, provided you complete five courses per semester. This is just one example of how you could complete your major and degree requirements; you may find that a different sequence works as well as this one.

| Year 1, Fall | Year 1, Spring |
| :--- | :--- |
| Computer Science 1820 | Computer Science 36151 |
| Computer Science 2720 | Computer Science 3620 |
| Computer Science 3000/4000 level | Computer Science 3000/4000 level |
| GLER course | Mathematics 2000 |
| GLER course | GLER course |
| Year 2, FalI | Year 2, Spring |
| Computer Science 3740 | Computer Science 4000 level |
| Computer Science 4000 level | Computer Science 3000/4000 level |
| Computer Science 3000/4000 level | GLER course |
| GLER course | GLER course |
| GLER course | GLER course |

${ }^{1}$ Semester of offering may vary.
Note: Mathematics 2000 should be taken as early as possible (in Year One, if course scheduling permits), to derive maximum benefit from the course for the remainder of the program.

## Terms Used

GLER course: A course that could count toward the General Liberal Education Requirement. You may use courses in your major towards this 12 -course requirement. See the 2015/2016 University of Lethbridge Calendar, Part 4 - Academic Regulations (p. 83) for complete information.

Elective: A course that you may choose freely from all those available and applicable to your program. Use courses inside or outside your major, bearing in mind any restrictions that may apply (e.g., a maximum of 24 courses from any one discipline).

artsci.advising@uleth.ca
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University of Lethbridge
Registrar's Office and Student Services
4401 University Drive
Lethbridge, Alberta T1K 3M4

