University of Lethbridge

Faculty of Arts & Science

Program Planning Guide

Department: Mathematics and Computer Science

Calendar Year: 2013/2014

Name:_____

ID: _____

Major in Computer Science:
www.uleth.ca/artsci/math-computer-science

Faculty of Arts and Science Student Program Services:
www.uleth.ca/artsci/advising
artsci.advising@uleth.ca
(403) 329-5106
SU060

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

Academic Calendar:
www.uleth.ca/ross/academic-calendar

Co-operative Education:
www.uleth.ca/artsci/coop

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.

Post-Diploma Bachelor of Science

Computer Science

Name: _____ **ID:** _____

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.

Major Requirements (12 courses)

_____ Computer Science 1820 - Discrete Structures
_____ Computer Science 2720 - Practical Software Development
_____ Computer Science 3615 - Computer Architecture
_____ Computer Science 3620 - Data Structures and Algorithms
_____ Computer Science 3740 - Programming Languages
_____ Mathematics 2000 - Mathematical Concepts

[1]Six additional 3000/4000-level Computer Science courses, at least one of which must be a regularly offered 4000-level course (excluding Computer Science 4850 - Topics in Computer Science, Computer Science 4980 - Applied Studies, and Computer Science 4990 - Independent Study).

1. _____ 4. _____
2. _____ 5. _____
3. _____ 6. _____

General Liberal Education Requirement (8 courses)

Only four courses (12.0 credit hours) in total may be counted from all courses offered by a single department. See the 2013/2014 Calendar, p. 88, for more information.

LIST I: Fine Arts and Humanities Courses

1. _____ 3. _____
2. _____ 4. _____

LIST II: Social Science Courses

1. _____ 3. _____
2. _____ 4. _____

Note: *At least one of these eight courses must be at the 2000 level or higher*

General requirements:

_____ Not more than 10 courses may be taken at the 0100/1000 level for credit toward the degree. Activity courses are exempted from this limit. Language courses are offered in the 0100-1990 range. Only the first course in the range counts toward this limit in the language subjects of French, German, Greek, Japanese, Latin and Spanish. Only one of Economics 1010 and Economics 1012 will be counted toward this limit. Only one of Biology 1010 and Biology 1020 will be counted toward this limit. Only one of Geography 1000 and Geography 1200 will be counted toward this limit (see **Part 4, Section 3.c, Exceeding Course Limits, p. 73**).

_____ Not more than two Independent Study courses may be taken for credit toward the degree (see **Part 4, Section 3.c, Exceeding Course Limits, p. 73**).

Notes

[1]*One of the six additional 3000/4000-level 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

Students may find that their diploma courses may overlap in content some course offerings in the Computer Science program. However, the offerings of the Department of Mathematics and Computer Science 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.

The curriculum for the post-diploma B.Sc. in Computer Science is designed to offer complementary training in Computer Science to students with previous technical training. In approving the college diploma, the Department is implicitly acknowledging that students have completed the equivalent of Computer Science 1620, Computer Science 2610, and Computer Science 2620 as part of their diploma program.

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 3615
Computer Science 2720	Computer Science 3620
Computer Science 3000 level	Computer Science 3000 level
GLER course	Mathematics 2000
GLER course	GLER course
Year 2, Fall	***Year 2, Spring***
Computer Science 3740 [1]	Computer Science 4000 level
Computer Science 3000/4000 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: *The required Mathematics cognate 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 2013/2014 University of Lethbridge Calendar, Part 4 - Academic Regulations (p. 88) 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).

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