

University of
Lethbridge



Program Planning Guide

Department: Mathematics and Computer Science

Calendar Year: 2019/2020

Name: _____

ID: _____

Post-Diploma Bachelor of Science Computer Science

Major in Computer Science:

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

Academic Calendar:

www.uleth.ca/ross/academic-calendar

Current and Past Program Planning Guides:

www.uleth.ca/ross/ppgs

Co-operative Education:

www.uleth.ca/artsci/coop

Faculty of Arts and Science Advising:

www.uleth.ca/artsci/advising
artsci.advising@uleth.ca
403-329-5106
M2102

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 : _____

Post-Diploma B.Sc. Computer Science

Completion of at least 20 courses (60.0 credit hours) from disciplines offered by the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education (i.e. no courses labelled ABHL, ADCS, CDEV, CRED, EDUC, HLSC, MGT, NURS, PUBH, or TREC) with a grade point average of at least 2.00.

Required core (12 courses):

- _____ 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

¹Four additional courses (12.0 credit hours) in Computer Science at the 3000/4000 level

- 7. _____ 9. _____
- 8. _____ 10. _____

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. _____ 12. _____

Electives (eight courses):

Four courses (12.0 credit hours) from List I: Fine Arts and Humanities

- 13. _____ 15. _____
- 14. _____ 16. _____

Four courses (12.0 credit hours) from List II: Social Sciences

- 17. _____ 19. _____
- 18. _____ 20. _____

Notes

¹One 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*

Courses labeled as “electives” may be used towards a minor if a minor is chosen.

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 2019/2020 University of Lethbridge Calendar, **School of Liberal Education, Liberal Education List Requirement, 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 term. 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 3620
Computer Science 2720 ¹	Computer Science 3000/4000 level
Computer Science 3000/4000 level	Mathematics 2000
Lib Ed Requirement course	Lib Ed Requirement course
Lib Ed Requirement course	Lib Ed Requirement course
Year 2, Fall	Year 2, Spring
Computer Science 3615	Computer Science 3740
Computer Science 4000 level	Computer Science 4000 level
Computer Science 3000/4000 level	Computer Science 3000/4000 level
Lib Ed Requirement course	Lib Ed Requirement course
Lib Ed Requirement course	Lib Ed Requirement course

¹ Computer Science 2720 may be completed in Year 2, Spring

Note: Courses in **bold** in Years 1 and 2 of the sample sequence are prerequisite(s) for required courses and should be completed early in your program. Students are advised to review the prerequisites for electives courses within the major and plan accordingly.

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

Lib Ed Requirement course: A course that could count toward the Liberal Education List Requirement. You may use courses in your major towards this 12-course requirement. See the 2019/2020 University of Lethbridge Calendar, School of Liberal Education 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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