Program Planning Guide

Program: Bachelor of Science/Bachelor of Education (B.Sc./B.Ed.)
Major (Arts and Science): Mathematics
Major (Education): Mathematics Education
Calendar Year: 2019/2020
Name: ___________________________________________
ID: ____________________________________________

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

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

High School Admission Requirements:
www.uleth.ca/ross/admissions/undergrad/high-school

Faculty of Education Admission Requirements:
www.uleth.ca/education/programs-degrees/
undergraduate-studies/admission

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

Faculty of Arts and Science Advising:
www.uleth.ca/artsci/advising
artsci.advising@uleth.ca
403-329-5106
M2102

Faculty of Education Advising:
www.uleth.ca/education/student-advising
edu.sps@uleth.ca
403-329-2254
TH421

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 or Faculty of Education for advising information.
B.Sc./B.Ed. (Mathematics/Mathematics Education)
Completion of at least 30 courses (90.0 credit hours) from disciplines offered by the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education with a grade point average of at least 2.00.
Completion of the equivalent of 20 courses (60.0 credit hours) in Education with a program grade point average of at least 2.50 in Education courses and the appropriate major.

Major Requirements (13 courses)
1. Computer Science 1620 - Fundamentals of Programming I
2. Mathematics 1410 - Elementary Linear Algebra
4. Mathematics 2570 - Calculus III
5. Mathematics 2580 - Calculus IV
6. Mathematics 3400 - Group and Ring Theory
7. Mathematics 3410 - Linear Algebra
8. Mathematics 3500 - Analysis I
9. Statistics 1770 - Introduction to Probability and Statistics
10. One of:
   - Mathematics 1560 - Calculus I
   - Mathematics 1565 - Accelerated Calculus I (recommended)
11. One of:
   - Mathematics 2560 - Calculus II
   - Mathematics 2565 - Accelerated Calculus II (recommended)
One additional course (3.0 credit hours) in Mathematics or Statistics at the 3000/4000 level, excluding Mathematics 3980, Mathematics 4980, Statistics 3980, and Statistics 4980 (Applied Studies) and Mathematics 3990, Mathematics 4990, Statistics 3990, and Statistics 4990 (Independent Study)
13. __________________

Other Courses (minimum 17 courses)
Courses offered by the Faculty of Arts and Science, Faculty of Fine Arts, or School of Liberal Education only (no courses labelled ABHL, ADSC, CDEV, CRED, EDUC, HLSC, MGT, NURS, PUBH, or TREC unless cross-listed with a course from one of the above faculties)
1. ______________
2. ______________
3. ______________
4. ______________
5. ______________
6. ______________
7. ______________
8. ______________
9. ______________
10. ______________
11. ______________
12. ______________
13. ______________
14. ______________
15. ______________
16. ______________
17. ______________

Education Requirements (20-course equivalent)
1. Education 2500 - Practicum I - Orientation to Teaching
2. Professional Semester I (15.0 credit hours)
3. Professional Semester II (15.0 credit hours)
4. Professional Semester III (15.0 credit hours)

Education Foundation: ____________________
Three Education Electives:
1. ______________
2. ______________
3. ______________

Notes
1 One course (3.0 credit hours) in Mathematics at the 3000/4000 level, excluding Mathematics 3980, Mathematics 4980, Statistics 3980, and Statistics 4980 (Applied Studies) and Mathematics 3990, Mathematics 4990, Statistics 3990, and Statistics 4990 (Independent Study), may replace Statistics 2780 in the list of required courses.
Completion of the Liberal Education List Requirement (Lib Ed Requirement).

Only four courses (12.0 credit hours) in total may be counted from any one discipline toward the Lib Ed Requirement. Disciplines are identified by separate course subject codes. Out-of-faculty courses (i.e. labelled ABHL, ADCS, CDEV, CRED, HLSC, MGT, NURS, PUBH, and TREC) will not meet this requirement.

See the 2019/2020 Calendar, p. 83, for more information.

LIST I: Fine Arts and Humanities Courses
1. ____________________________
2. ____________________________
3. ____________________________
4. ____________________________

LIST II: Social Science Courses
1. ____________________________
2. ____________________________
3. ____________________________
4. ____________________________

LIST III: Science Courses
1. ____________________________
2. ____________________________
3. ____________________________
4. ____________________________

Not more than 10 courses (30.0 credit hours) may be completed at the 1000 level (or lower) [0500 - 1999] for credit towards the degree, excluding Activity courses (labelled PHAC and MUSE) and courses numbered in the range of 0520 to 0530.

1. ____________________________
2. ____________________________
3. ____________________________
4. ____________________________
5. ____________________________
6. ____________________________
7. ____________________________
8. ____________________________
9. ____________________________
10. _____________ (max.)

Completion of at least 10 courses (30.0 credit hours) from disciplines offered by the Faculty of Arts and Science, Faculty of Fine Arts, or the School of Liberal Education at the 3000/4000 level, excluding Activity courses (labelled PHAC and MUSE). Out-of-faculty courses (i.e. labelled ABHL, ADCS, CDEV, CRED, EDUC, HLSC, MGT, NURS, PUBH, and TREC) will not meet this requirement.

1. ____________________________
2. ____________________________
3. ____________________________
4. ____________________________
5. ____________________________
6. ____________________________
7. ____________________________
8. ____________________________
9. ____________________________
10. _____________ (min.)

Education Minor (If Applicable):
See the 2019/2020 Calendar, p. 146, for eligible minors.

1. ____________________________
2. ____________________________
3. ____________________________
4. ____________________________
5. ____________________________
6. ____________________________ Education (methods requirement)

Education Specialization (If Applicable):
See the 2019/2020 Calendar, p. 150, for details.

1. ____________________________
2. ____________________________
3. ____________________________
4. ____________________________

Please refer to page 4 of this guide for Faculty of Education admission requirements.
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 five 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.

### 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. As some courses may not fit specific program requirements, students should consult their Faculty advising office. 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 17 courses from any one discipline).

### Faculty of Education Admission

Admission to the Faculty of Education requires successful completion of the following:

- ____ 14 graded term courses (42.0 credit hours).
- ____ Minimum cumulative grade point average of 2.50 on all U of L and transferable courses taken within the terms containing the last 14 courses (42.0 credit hours). All courses must be graded.
- ____ Minimum of five courses (15.0 credit hours) in the major.
- ____ Minimum cumulative grade point average of 2.50 on all graded courses comprising the major, including all transferable courses.
- ____ Credit in Education 2500 - Practicum I - Orientation to Teaching (or equivalent) including a favourable recommendation from the instructor.

Students are advised to contact Student Program Services in the Faculty of Education (TH421; tel. 403-329-2254) for guidelines regarding the requirements stated above. For specific information on admission requirements, please refer to the Combined Degrees section of the Academic Calendar:

www.uleth.ca/ross/academic-calendar/cal_doc.pdf

Students of Indigenous descent, and students with a significant shift in academic performance, are advised to refer to the current Calendar for the Faculty of Education’s Special Case Admission policy.

Application and Document deadlines:

www.uleth.ca/ross/admissions/undergrad/deadlines

### Combined Degrees Program:

Students begin this program in the Faculty of Arts and Science where they progress toward completion of Arts and Science degree requirements, and prepare to meet the admission requirements for the Faculty of Education. Please note that completion of admission requirements does not guarantee admission to the Faculty of Education.

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### Year 1, Fall
- Mathematics 1410
- Mathematics 1565 or Mathematics 1560
- Lib Ed Requirement course
- Lib Ed Requirement course
- Lib Ed Requirement course

### Year 1, Spring
- Mathematics 2000
- Mathematics 2565 or Mathematics 2560
- Lib Ed Requirement course
- Lib Ed Requirement course
- Lib Ed Requirement course

### Year 2, Fall
- Computer Science 1620
- Education 2500
- Mathematics 2570
- Statistics 1770
- Lib Ed Requirement course

### Year 2, Spring
- Mathematics 2580
- Statistics 2780
- Lib Ed Requirement course
- Elective
- Elective

### Year 3, Fall
- Professional Semester I

### Year 3, Spring
- Mathematics 3410
- Mathematics or Statistics 3000/4000 level
- Elective 3000/4000 level
- Elective
- Elective

### Year 4, Fall
- Mathematics 3400
- Mathematics 3500
- Elective 3000/4000 level
- Elective 3000/4000 level
- Elective 3000/4000 level

### Year 4, Spring
- Professional Semester II

### Year 5, Fall
- Professional Semester III

### Year 5, Spring
- Education Foundation course
- Education elective
- Education elective
- Elective 3000/4000 level

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1 Term of offering may vary.

2 Education 2500 must be completed (with a Pass Recommend) before admission. It may also be taken in the spring or summer term immediately prior to the fall intake.

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 elective courses within the major and plan accordingly.