University of Lethbridge



Faculty of Arts & Science

Program Planning Guide

Departments: Geography, and Physics and Astronomy

Calendar Year: 2014/2015

Name:_____

ID: _____

Remote Sensing

Major in Remote Sensing:

www.uleth.ca/artsci/remote-sensing

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 SU060

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 for advising information.

Bachelor of Science - Remote Sensing

Name:_____

B.Sc. Remote Sensing

Completion of at least 40 courses (120.0 credit hours) with a grade point average of at least 2.00.

Major Requirements (21 courses)

___ Physics 4650 - Physics of Remote Sensing

Physics 1000 - Introduction to Physics I
Physics 1050 - Introduction to Biophysics
Engineering 2060 - Engineering Mechanics

Geography 4710 - Remote Sensing Field Techniques
Geography 4751 - Project in Spatial Modelling
Geography 4753 - Seminar in Remote Sensing

Other Courses (minimum 19 courses)

ID:__

	Computer Science 1620 - Fundamentals of Programming I	1	11
	Geography 1000 - Introduction to Physical Geography	0	10
-	_ Geography 2030 - Geomorphology	2	12
	_ Geography 2300 - Weather and Climate	3	13.
	_ Geography 2700 - Geographical Data and Analysis	3	13
	Geography 2735 - Introduction to Geographical Information Science	4.	14.
-	Geography 3720 - Remote Sensing		
	Geography 4725 - Advanced Remote Sensing	5	15
	_ Mathematics 1410 - Elementary Linear Algebra		
	Mathematics 1560 - Calculus I	6	16
	Mathematics 2560 - Calculus II	_	17
	Mathematics 2570 - Calculus III	1	17
	Mathematics 2580 - Calculus IV	8	18.
	Physics 2000 - Introduction to Physics II	0	10
	Physics 2120 - Introduction to Physics III	9	19
	Physics 2130 - Waves, Optics and Sound		
	Physics 2925 - Introduction to Experimental Physics	10	
	Physics 3650 - Optics		

Notes

One of:

One of:

See also:

- Bachelor of Science Geography
- Bachelor of Science Physics

Bachelor of Science - Remote Sensing

Completion of the General Liberal Education Requirement (GLER). Only four courses (12.0 credit hours) in total may be counted from all courses offered by a single department. See the 2014/2015 Calendar, p. 88, for more information. LIST I: Fine Arts and Humanities Courses 1. 3. 4. 2. LIST II: Social Science Courses 1. degree. 2. and HIST are separate disciplines). LIST III: Science Courses 1. 2 than 12.0 credit hours).

Not more than 12 courses (36.0 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).

1	7
2	8
3	9
4	10
5	11
6	12(max.)

Completion of at least 15 courses (45.0 credit hours) from disciplines offered by the Faculty of Arts and Science or the Faculty of Fine Arts at the 3000/4000 level, excluding Activity courses (labelled PHAC and MUSE).

1	9	
2	10	
3	11	
4	12	
5	13	
6	14	
7	15	(min.)
8		

Not more than five Independent Study courses (15.0 credit hours) may be completed for credit towards the degree.

Not more than five Disciplinary Credit Applied Studies courses (15.0 credit hours) may be completed for credit towards the degree. Students may, in addition, complete Applied Studies 2000, 2001, 2010, and 2011.

Not more than 24 courses (72.0 credit hours) may be completed from any one discipline for credit towards the

Note: Disciplines are identified by a specific course label (e.g. KNES, ASTR,

- Not more than six credit hours in Activity courses (i.e. courses labelled PHAC and MUSE) may be completed for credit towards the degree, except for Kinesiology majors (not more than 15.0 credit hours) and Music majors (not more
- Not more than four courses (12.0 credit hours) from disciplines offered outside the Faculty of Arts and Science or the Faculty of Fine Arts may be completed for credit towards the degree (i.e. labelled ADCS, CDEV, CRED, EDUC, HLSC, MGT, NURS, and PUBH). Courses cross-listed between the Faculty of Arts and Science and another Faculty do not count towards this limit.
- **Residence requirement:**

Degree: at least 20 courses (60.0 credit hours) must be completed at the University of Lethbridge, including the last 10 courses (30.0 credit hours) completed for credit towards the degree.

Major: at least half of the courses required in the major must be completed at the University of Lethbridge.

Minor (Optional):

See the 2014/2015 Calendar, p. 143, for eligible minors.

1	4
2	5
3	6

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 four 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

Geography 1000 Mathematics 1410 Mathematics 1560 Physics 1000 or Physics 1050 GLER course

Year 2, Fall

Geography 2030 Mathematics 2570 Physics 2120 GLER course GLER course

Year 3, Fall

Geography 3720 GLER course GLER course Elective 3000/4000 level Elective

Year 4, Fall

Geography 4725 Physics 4650¹ Elective 3000/4000 level Elective 3000/4000 level Elective 3000/4000 level

¹ Semester of offering may vary.

Year 1, Spring Computer Science 1620

Geography 2735 Mathematics 2560 Physics 2000 GLER course

Year 2, Spring

Geography 2300 Geography 2700 Mathematics 2580 Physics 2130 GLER course

Year 3, Spring

Physics 2925 Physics 3650¹ GLER course Elective 3000/4000 level Elective 3000/4000 level

Year 4, Spring

One of: Geography 4710¹, 4751¹, or 4753¹ Elective 3000/4000 level Elective 3000/4000 level Elective 3000/4000 level Elective 3000/4000 level

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 2014/2015 University of Lethbridge Calendar, Part 4 - Academic Regulations (p. 88) for complete information.

The Faculty of Arts and Science offers Liberal Education 1000 and 2000, specifically designed to introduce first-year students to the wide scope of human knowledge and teach essential university success skills, critical thinking, and integrative thinking (see the 2014/2015 University of Lethbridge Calendar, Part 14 - Courses, p. 315). LBED 1000 and 2000 may be used toward satisfying the GLER.

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).

