

YEAR 1	Major (3 year and 4** year)			
1a. Principal	6a. major	11a. major	16a**. major	
1b. Principal	6b. major	11b. major	16b**. major	
2a. Principal	7a. major	12a. major	17a**. major	
2b. Principal	7b. major	12b. major	17b**. major	
3a. elective	8a. elective	13a. elective	18a**. elective	
3b. elective	8b. elective	13b. elective	18b**. elective	
4a. elective	9a. elective	14a. elective	19a**. elective	
4b. elective	9b. elective	14b. elective	19b**. elective	
5a. Cat A or B	10a. elective	15a. elective	20a**. elective	
5b. Cat A or B	10b. elective	15b. elective	20b**. elective	

Module and Graduation Planning

First Year	5.0 courses numbered 1000-1999, including 1.0 from Category A or B	
	No principle courses less than 60%	
Module Courses	6.0 courses specified by Department.	
	60% cumulative average in major module.	
Essay	2.0 E, F, G courses including 1.0 from 2000 level or above (essay courses must be done at Western)	
Breadth	1.0 Category A (Social Science, Interdisciplinary and Multidisciplinary, Various)	
	1.0 Category B (Arts & Humanities and Languages)	
	1.0 Category C (Science)	
Courses	No more than 7.0 Year 1 courses, 13.0 minimum senior level	
BSc degree	4 year: 11.0 Science/BMSc courses (14.0 maximum in one subject area)* 3 year: 8.0 Science/BMSc courses (9.0 maximum in one subject area)*	
Averages	60% cumulative average in any additional Module taken	
	60% cumulative average on 20.0 courses successfully completed	

Common Course Policy: Occurs if you are in completing two modules with common courses. You are allowed to double count 1.0 credits toward both modules. Any remaining common courses are completed by distributing between the two modules as evenly as possible.

*Subject Areas: Actuarial Science; Astronomy; Biology; Chemistry; Computer Science; Earth Sciences; Environmental Sciences; Physics; Statistical Sciences - are all separate subject areas. Courses in Applied Mathematics, Calculus and Mathematics belong to the same subject area – the subject area of mathematics.

Major In Scientific Computing and Numerical Methods

6.0 Module Courses

Year 1: 5.0 Courses (2.0 Principal Courses)

- 0.5 course from: Calculus 1000A/B, 1500A/B
- 0.5 course from: Calculus 1501A/B or Calculus 1301A/B
- 1.0 course: Computer Science 1025A/B or 1026A/B and Computer Science 1027A/B
- **3.0 elective courses** (Must do 1.0 of Category A or B requirement)

Points to Consider:

- Calculus and Computer Science, with no mark less than a 60%, are the 2.0 principal courses.
- Applied Math 1413 may be substituted for 1.0 Calculus course requirement.
- Math 1600A/B or Applied Math 1411A/B with a minimum mark of 60% is normally taken in year 1. If not taken in year 1, it must be taken in first term in year 2.

Year 2: 5.0 Courses

- 0.5 course: Applied Math 2814F/G
- **0.5 course** from: Calculus 2302A/B or 2502A/B
- 0.5 course from: Calculus 2303A/B or 2503A/B
- 0.5 course: Applied Math 2402A
- 3.0 elective courses

Year 3: 5.0 Courses

- 1.0 course: Computer Science 2210A/B, 2211A/B
- 1.0 course from: EITHER Stats 2141A/B and 0.5 course at the 2100 level or above in Applied Math, Math, or Stats and Actuarial Science OR Stats 2857A/B and Stats 2858A/B.
- 3.0 elective courses

Year 4: 5.0 Courses

- 0.5 course: Applied Math 3911F/G
- 0.5 course from: Applied Math 3413A/B or 3815A/B
- 1.0 course from: Applied Math 4613A/B**, 4615F/G*, 4617A/B*
- 3.0 elective courses

Points to Consider:

- * May be offered only in odd-numbered academic years.
- ** May be offered only in even-numbered academic years.



Notes:

(You may have taken a former course that isn't listed, because it isn't offered anymore, but still meets the requirements of the degree – refer to the online academic calendar for the complete list of substitutions. The courses listed are based on the current course offerings.)