

Planned Major at U of M: _____

Are you unsure of which major you want to pursue?

For program information, go to: <http://www.sci.umanitoba.ca/undergraduate-students/degrees-and-programs/>

**Note: A separate Planning Guide is available for students who plan to study Computer Science.

Type of Course	Course Code	Term	Credit Hour Value	Letter Grade Earned
Required by ICM	ILS100 or AES 100 or ESW100 + ESR100		0	
Written English Requirement	*ENGL 1400 <i>or</i> ARTS 1110		3	
Electives				
Electives				
Electives				
Electives				
Electives				
Electives				
Electives				
Electives				
Electives				
Total			30 credit hours passed	

ICM unique credit hours (crhrs) already completed:
(do not include repeated courses)

30 crhrs to be completed by:

Month _____ / Year _____

Current cumulative GPA:

Admission GPA required:

Minimum 2.0 GPA on best 30 crhrs (must include unique crhrs and cannot include repeated courses)

Expected intake at U of M:

Month _____ / Year _____

Notes:

Different Science departments at the U of M have different requirements, so there is no set way to complete the UTP II Science pathway. If you know the area you wish to major in, use the U of M Calendar to research your course choices or discuss with an ICM or a U of M student advisor.

http://umanitoba.ca/u1/first_year/degree_programs.html

You can also review the Science Program Planning Sheets at

<http://www.sci.umanitoba.ca/undergraduate-students/program-planning-sheets/>

It is the student's responsibility to check the University of Manitoba Applicant Information Bulletin for the relevant Faculty to obtain official information. In the event of a discrepancy between the Planning Sheets and the information in the University of Manitoba General Calendar, the General Calendar will prevail.

Students who are required to complete subject upgrade classes in physics, chemistry or mathematics may be blocked from taking one or more of the subjects below until they have satisfied the pre-requisite requirements. For example, those required to take UTP I Math cannot register in UTP II Math, Chemistry, Biology or Physics courses.

FACULTY OF SCIENCE COURSES: Requirements depend on choice of specific program

MATH 1300 – Vector Geometry and Linear Algebra **and/or MATH 1500** – Introduction to Calculus **and/or STAT 1000** – Basic Statistical Analysis 1 (each U of M Science Major or Honours program requires one or more of these Math courses)

BIOL 1000* – Biology: Foundations of Life (Cannot use credit for both BIOL 1000 and 1020)

**Note: BIOL 1000 can be not be used in biological programs but it can be used as an elective in non-biological programs. It can be used as a pre-requisite for BIOL1020 in place of Grade 12 biology. CAUTION: Students who have high school biology and plan to take BIOL1020 and BIOL1030 SHOULD NOT TAKE THIS COURSE WITHOUT SPEAKING TO THE STUDENT ADVISOR. Students cannot hold credit for both BIOL 1000 and BIOL 1020. You can take both courses, but you can only use 3 of the 6 crhrs towards a U of M degree.*

BIOL 1020 – Biology 1: Principles and Themes (Cannot use credit for both BIOL 1000 and 1020)

BIOL 1030 – Biology 2: Biological Diversity, Function and Interactions

(must complete BIOL 1020 first with minimum grade of 'C')

MBIO 1220- Essentials of Microbiology (Note: MBIO 1220 is intended for students planning to enter the College of Nursing or other health care or related programs. MBIO 1220 cannot be used to satisfy the requirements of the Microbiology Honours or Major degree programs. MBIO 1220 can be used as an elective course in any Science program)

CHEM 1300 – University 1 Chemistry: Structure and Modelling in Chemistry

CHEM 1310 – University 1 Chemistry: An Introduction to Physical Chemistry

(must complete CHEM 1300 first with minimum grade of 'C')

COMP 1010 – Introductory to Computer Science 1 (Note: students must take MATH 1500 before, or at the same time as COMP 1012. This course is recommended for Computer Science major)

COMP 1012 – Computer Programming for Scientists and Engineers (Note: students must take MATH 1500 before, or at the same time as COMP 1012. This course is required for engineering major)

MATH 1700 – Calculus 2 (must complete MATH 1500 first with minimum grade of 'C')

PHYS 1050 – Physics 1: Mechanics (Note: students must take MATH 1500 prior to, or at the same time as PHYS 1050)

ELECTIVES FROM FACULTY OF ARTS FOR CREDIT IN SCIENCE:

ANTH 1220 – Cultural Anthropology

ARTS 1110 – Introduction to University

ECON 1010 – Introduction to Microeconomic Principles

ECON 1020 – Introduction to Macroeconomic Principles

ENGL 1400 – Thematic Approaches to the Study of Literature

PHIL 1290 – Critical Thinking

POLS 1502 – Introduction to Political Studies

PSYC 1199 and **PSYC 1200** – Introduction to Psychology ***6 credit hours** (Students must register in BOTH courses in consecutive semesters and will only receive credit for the course after completing 1200.)

ELECTIVES FROM OTHER FACULTIES FOR POTENTIAL CREDIT IN SCIENCE:

ABIZ 1000 – Introduction to Agribusiness Management

ABIZ 1010 – Economics of World Food Issues and Policies

ENVR 1000 – Environmental Science 1 - Concepts

GEOG 1280 – Introduction to Human Geography

GEOG 1290-Introduction to Physical Geography.

HNSC 1210 – Nutrition for Health and Changing Lifestyles.

KPER 1200 – Physical Activity, Health and Wellness

HRIR 2440-Human Resource Management

INTB 2200 – International Business

MKT 2210 – Fundamentals of Marketing

Note: UTP II Engineering courses can also be used as electives, but are not listed here. In order to take UTP II Engineering courses like ENG 1430, ENG 1440, ENG 1450, ENG 1460 and MATH 1210 you must be a student in the UTP II Engineering program.

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