



## UTP Stage II Science Program Planning Guide (Computer Science)

Type of Course	Course Code	Term	Credit Hour Value	Letter Grade Earned
Required by ICM	ILS or AES		0	
Written English Requirement for Faculty of Science (W course)	Choose 1 of: ENGL 1400 Or ARTS 1110 Or POLS 1502		3	
Required (min C)	COMP 1010 or 1012		3	
Required Majors (min C+) / Honours (min B)	COMP 1020		3	
Required (min C+ for Majors & Honours)	MATH 1300		3	
Required (min C+ for Majors & Honours)	MATH 1500		3	
Required (min C for Majors & Honours)	MATH 1700		3	
Required (min C)	STAT 1000		3	
Required Elective from Faculty of Arts ( <i>see page 2</i> )			3	
Elective				
Elective				
<b>Total</b>			<b>30 credit hours</b>	

- ICM unique credit hours already completed (do not include repeated courses): \_\_\_\_\_
- 30 cr hrs. to be completed by: Month \_\_\_\_\_ / Year \_\_\_\_\_
- Current cumulative GPA: \_\_\_\_\_
- Admission GPA required: Minimum 2.0 GPA on best 30 cr hrs. (must include unique cr hrs. and cannot include repeated courses)
- Expected intake at UM: Month \_\_\_\_\_ / Year \_\_\_\_\_

### UM Program Information:

- Available Intakes: Fall, Winter & Summer
- UM Admission requirements: <https://umanitoba.ca/explore/undergraduate-admissions/apply>
- UM Faculty of Science Website: <https://sci.umanitoba.ca/>
  - Departments & Programs: <https://sci.umanitoba.ca/students/undergraduate-students/programs/>
- UM Academic Calendar: <https://catalog.umanitoba.ca/undergraduate-studies/science/computer-science/#programlisttext>
- UM first year planning guide: <https://umanitoba.ca/current-students/first-year/planning>
- UM Faculty of Science Advisor contact: <https://sci.umanitoba.ca/academicadvising/>
- Review CHEM1100/1110 changes implemented in Fall 2021 here: <https://sci.umanitoba.ca/chemistry/course-and-program-changes-starting-fall-2021>

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.



## UTP Stage II Science Program Planning Guide (Computer Science)

Unsure which courses to take? Check out the **ICM Course Descriptions** file under Documents on your ICM Student Portal.

### Faculty of Science Courses:

- ASTR 1830 – Life in the Universe
- BIOL 1000<sup>1</sup> – Biology: Foundations of Life
- BIOL 1020 – Biology 1: Principles and Themes
- BIOL 1030 – Biology 2: Biological Diversity, Function, and Interactions.
- CHEM 1100<sup>2</sup> – Introductory Chemistry 1
- CHEM 1110<sup>2</sup> – Introductory Chemistry 2
- COMP 1010 – Introductory to Computer Science 1
- COMP 1012 – Computer Programming for Scientists and Engineers
- COMP 1500 – Computing: Ideas and Innovation
- MATH 1300 – Vector Geometry and Linear Algebra
- MATH 1500 – Introduction to Calculus
- STAT 1000 – Basic Statistical Analysis 1
- MBIO 1010 - Microbiology I
- MBIO 1220- Essentials of Microbiology
- MATH 1700 – Calculus 2
- PHYS 1020 – General Physics 1
- PHYS 1050 – Physics 1: Mechanics

#### \*Note:

1. 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 who complete both BIOL1000 and BIOL1020 are able to count both courses towards their 30 credit hours required to complete ICM. However, when students enter UM faculty, only BIOL1020 will be held for credit as students are not able to hold credit for both BIOL 1000 and BIOL 1020 at UM.

2. Review CHEM1100/1110 changes implement in Fall 2021 here: <https://sci.umanitoba.ca/chemistry/course-and-program-changes-starting-fall-2021>

### Electives from Faculty of Arts:

- 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 PSYC1200)

### Electives from other faculties:

- 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 1200 - Food: Facts and Fallacies
- HNSC 1210 – Nutrition for Health and Changing Lifestyles
- HRIR 2440 - Human Resource Management
- INTB 2200 – International Business
- KPER 1200 – Physical Activity, Health and Wellness

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.