



UNIVERSITY
OF MANITOBA



Your Pathway to Engineering

Summer 2019

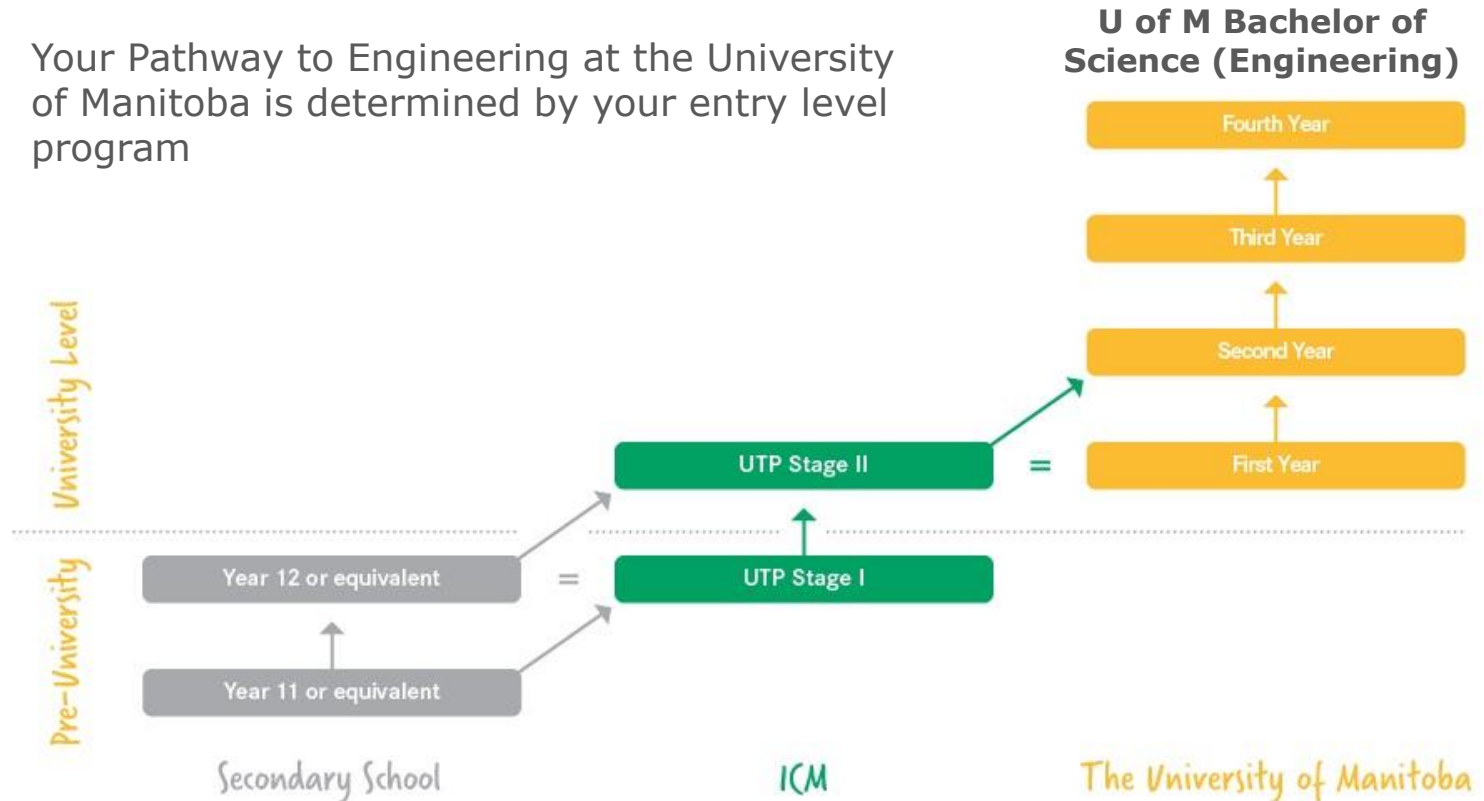


UNIVERSITY
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Your ICM Pathway to Engineering

Your Pathway to Engineering at the University of Manitoba is determined by your entry level program



Entry into UTP Stage II is dependent upon successful completion of UTP Stage I or satisfactory completion of Year 12 or equivalent.

Entry into second year of your university degree is dependent upon successful completion of UTP Stage II with the specified Grade Point Average (GPA).

Your Pathway to Engineering: Entry Level Program

Name of Program	Type of program	Program details
UTP Stage I	Pre-University level	This program is designed for students who require additional courses before starting a full university degree equivalent program (UTP Stage II). You will be required to study eight courses over two terms (four courses per term).
UTP Stage II	University level	This program is equivalent to first year of selected University of Manitoba degree programs. You will be required to complete 10 courses (equal to 30 credit hours) with the specified GPA to progress to second year at the University of Manitoba. These programs will normally be completed in three academic terms. If you do not meet the required GPA to transfers to the University of Manitoba, you can continue to study at ICM to improve your GPA.
Mixed program UTPI	Academic English and UTP I (pre-university level)	The first term of this program requires you to study 15 hours of English per week and a maximum of two academic courses. In the second and third terms you will study the remaining UTP Stage I academic courses.
Mixed program UTPII	Academic English and UTP II (university level)	The first term of this program requires you to study 15 hours of English per week and a maximum of two academic courses. In the second and third terms you will study the remaining UTP Stage II academic courses.
The University of Manitoba English language program	Academic English	If you do not meet ICM's minimum English language entry criterion, you may need to attend the University of Manitoba English language program. ICM staff will discuss such arrangements with you as required.

Your Pathway to Engineering

- **All students** must complete **24 credit hours of required courses** by the end of April to be eligible to apply to the Faculty of Engineering.
- **All students** must complete **30 credit hours** by the end of August to be admitted to the Faculty of Engineering.
- While at ICM, **all Engineering students** must obtain a grade of “B” or higher in at least two subjects each term.
- **Engineering is a highly competitive faculty. Students should consider a “Plan B” in case they are not admitted to the faculty.**
- Come speak with a Student Advisor if you have any questions.

Your Pathway to Engineering

Required courses

ILS 100 or AES 100 or ESR 100 & ESW 100

Engineering credit courses

The 12 classes listed on the next slide are REQUIRED for students at the Year 1 level of U of M Engineering.

To complete both the ICM program and requirements to apply, students should complete a **minimum of ten** of the classes on the list. However, you can choose any ten because all 12 are required to earn a degree in the U of M Faculty of Engineering. You may also plan to complete all 12 requirements at ICM.

Your Pathway to Engineering

Core required credit courses (11)

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

COMP 1012 – Computer Programming for Scientists & Engineers (*Students must take MATH 1500 prior to, or at the same time as, COMP 1012*)

ENG 1430 – Design in Engineering

ENG 1440 – Introduction to Statics

ENG 1450 – Introduction to Electrical and Computer Engineering

ENG 1460 – Introduction to Thermal Sciences

ENGL 1400 – Thematic Approaches to the Study of Literature

MATH 1210 – Techniques of Classical and Linear Algebra

MATH 1500 – Introduction to Calculus

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

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

Complementary studies elective course listed on the following slide

Your Pathway to Engineering

Complementary Studies Elective Course (1)

Here are some examples of the Complementary Studies Electives currently available at ICM:

ANTH 1220 – Cultural Anthropology

ECON 1010 – Introduction to Microeconomic Principles

ECON 1020 – Introduction to Macroeconomic Principles

INTB 2200 – International Business ¹

HRIR 2440 – Human Resource Management ¹

MKT 2210 – Fundamentals of Marketing ¹

PHIL 1290 – Critical Thinking ^{1 2}

POLS 1502 – Introduction to Political Studies

¹ *These complementary electives cannot be studied until ILS and ENGL1400 are completed (C grade or higher).*

² *PHIL 1290 - Critical Thinking. This is the recommended complementary studies elective. However, for this requirement, students may select any ONE course from the Faculty of Arts or the Asper School of Business at the 1000 level or above, with the exception of ARTS 1110 (Introduction to University) which may not be held for credit within the Faculty of Engineering.*

Course selection for UTP II (Direct) Students

In the first term, students in the UTP II Engineering (Direct) program must take: ILS 100 + MATH 1500 + 3 other UTP II courses

Choose 3 of the following core courses:

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

COMP 1012 – Computer Programming for Scientists & Engineers

MATH 1210 – Techniques of Classical and Linear Algebra

PHYS 1050 – Physics 1: Mechanics

ENG 1430 – Design in Engineering

ONE complementary studies elective course (*see previous slide*)

Note: Even though students will be able to see other available course options when they register on the portal, it is important to **choose only classes from the above list to get credit in Engineering**. More courses will be available in your second and third term with ICM.

Course selection for UTP II (Mixed) students

In the first term, students in the UTP II Engineering (Mixed) program must take: AES100 Academic English + 2 UTP II courses

Choose 2 of the following core courses:

MATH 1500 – Introduction to Calculus

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

PHYS 1050 – Physics 1: Mechanics

Note: Even though students will be able to see other available course options when they register on the portal, it is important to choose **only classes from the above list to get credit in Engineering**

Check out the UTP II Engineering Program Planning Guide on the ICM Website for more information about planning your course:

<https://www.icmanitoba.ca/pre-arrival-and-registration-information>

THANK YOU



Email: advisor@learning.icmanitoba.ca
Please remember to send your questions from your ICM portal email address, not your personal email account and indicate your ICM student ID.