

# ICM International Year One (UTP Stage II)

## Pre-Engineering Program Planning Guide

ICM will provide, upon request, information through a communication support or accessible format.

The University of Manitoba Engineering program requires that students enter their faculty with a strong background in Pre-Calculus Mathematics, Chemistry and Physics. If you enter ICM without a strong background in these 3 areas, you can transfer to the Engineering program after at least 1 semester of study but must meet the requirements below to prove that you are prepared enough to be successful in the Engineering program.

### Engineering Stream Admission Program Checklist

Grade 12	Chemistry	Physics	Math
<60%	CHM 100 Required	PHY 100 Required	MTH 099/103 Required
60%-70%	CHM 100 Recommended	PHY 100 Recommended	MTH 099/103 Recommended
+ 70%	CHEM 1100	PHYS 1050	MATH 1500/1210

- ☐ CHEM 1100: \_\_\_\_\_ Grade: \_\_\_\_\_
- ☐ PHYS 1050: \_\_\_\_\_ Grade: \_\_\_\_\_
- ☐ MATH 1500: \_\_\_\_\_ Grade: \_\_\_\_\_

### Foundation Program (UTP Stage I) Course:

Do you need it?	Subject area	Course	Min. Grade 12 result required	Actual grade
	Chemistry	CHM 100	60%	
	Physics	PHY 100	60%	
	Math	MTH 099/103	60%	

*\*Contingent on math placement test result.*

In addition to the courses, you may need to upgrade above, try to choose courses from the UTP II Engineering program list provided. Note that the courses with code ENG are not usually available for registration to non-Engineering stream students.

We strongly advise that any student who would like to transfer to Engineering meet with a student advisor to discuss their course plan.

**Please remember to refer to the ICM International Year One (UTP Stage II) Engineering Program Planning Guide for more information.**

# ICM International Year One (UTP Stage II)

## Pre-Engineering Program Planning Guide

ICM will provide, upon request, information through a communication support or accessible format.

Type of Course	Course Code	Pre-Requisite	Credit Hour Value	Letter Grade Earned
Required by ICM	ILS	Depends on English results provided for entry to program	0	
Required for Engineering	CHEM 1100	CHM100 (C) or Chem40S <b>and</b> MTH103 (C) or Math40S	3	
Required for Engineering	COMP 1012	MTH103 (C) or Math40S <b>and</b> MATH1500 co-requisite	3	
Required for Engineering	ENG 1430	MTH103 (C) or Math40S <b>and</b> PHY100 (C) or Phy40S <b>and</b> CHM 100 (C) or Chem40S	3	
Required for Engineering	ENG 1440	MTH103 (C) or Math40S <b>and</b> PHY100 (C) or Phys40S <b>and</b> CHM100 (C) or Chem40S	3	
Required for Engineering	ENG 1450	MTH103 (C) or Math40S <b>and</b> PHY100 (C) or Phys40S <b>and</b> CHM100 (C) or Chem40S	3	
Required for Engineering	ENG 1460	MTH103 (C) or Math40S <b>and</b> PHY100 (C) or Phys40S <b>and</b> CHM100 (C) or Chem40S	3	
Required for Engineering	ENGL 1400 or POLS 1502	ILS 100 or AES 100	3	
Required for Engineering	MATH 1210	MTH103 (C) or Math40S	3	
Required for Engineering	MATH 1500	MTH103 (C) or Math40S	3	
Required for Engineering	MATH 1700	MATH 1500 (C)	3	
Required for Engineering	PHYS 1050	MTH103 (C) or Math40S and PHY100 (C) or Phys40S + MATH 1500 co-requisite	3	
Required for Engineering	Complimentary Studies Elective*		3	

### Complementary Studies Elective Courses\*

#### Recommended by the Engineering Faculty

- PHIL 1290 – Critical Thinking

#### Other elective choices

- ANTH 1220 – Cultural Anthropology
- ECON 1010 – Introduction to Microeconomic Principles
- ECON 1020 - Introduction to Macroeconomic Principles
- GMGT 1010 – Business & Society
- SGMT 2200 – Global Management
- MKT 2210 – Fundamentals of Marketing
- HRIR 2440- Human Resource Management
- POLS 1502 – Introduction to Political Studies
- IDM 1010 – Communication for Career Management
- IDM 1020 – Data Software for Business
- SCM 1000 – Introduction to Project Management

IDM 1010 or IDM1020 & SCM1000 are 1.5 credit hour courses and any 2 must be taken at same time.