



# CURRICULUM CHANGES

## Biomedical Engineering – Co-op

### What's Different?

#### Courses Added to BME

For *new students* starting in Fall 2019 only

- 0.50 PHYS\*1010 Introductory Electricity and Magnetism

#### Courses Removed from BME

For *new students* starting in Fall 2019 only

- 0.50 BIOL\*1090 Introduction to Molecular and Cellular Biology

#### Changes to Course Content and Semester Offerings – Affects *everyone*

##### 0.50 PHYS\*1130 Physics with Applications

- Offering changed to fall semester only.
- Overlapping content with PHYS\*1010 removed and replaced with introductory statics content from ENGG\*1210 Engineering Mechanics I.
- PHYS\*1130 is now a prerequisite to ENGG\*1210 effective W20.
- Prerequisite for PHYS\*1130 changed to (4U Calculus and Vectors or equivalent), (4U Physics or equivalent).

##### 0.50 ENGG\*1210 Engineering Mechanics I

- Deeper treatment of dynamics content.
- Prerequisites, MATH\*1200 and PHYS\*1130 added effective W20.

##### 0.50 PHYS\*1010 Physics with Applications

- Overlapping content with PHYS\*1130 removed and replaced with introductory material from ENGG\*2450 Electric Circuits.

##### 0.50 ENGG\*2450 Electric Circuits

- Deeper treatment of remaining content.
- PHYS\*1130 removed as prerequisite to ENGG\*2450.

### I'M A BIOMEDICAL ENGINEERING STUDENT WHO STARTED IN FALL 2018 OR EARLIER

#### How do these changes actually affect me?

Returning Biomedical Engineering students who are missing one or more of the prerequisites to register for ENGG\*2400 in Fall 2019, should meet with a program counsellor to discuss course planning options. ENGG\*2400 is a prerequisite to ENGG\*2450 in the following winter semester. Students who are not able to take ENGG\*2400 in F19, may be on a path toward the “new” (revised content) version of ENGG\*2450, which becomes effective in W21.

The version of ENGG\*2450 that was offered in W19 will be the same in W20 to meet the calendar progression requirements of the 2018 cohort. The PHYS\*1010 prerequisite will be waived for this last offering of the “old” version of ENGG\*2450 provided PHYS\*1130 is completed. The ENGG\*2400 prerequisite will still be required.

The revised content version of ENGG\*2450 will become effective in W21, and the PHYS\*1010 prerequisite will be enforced at that time.



**ENGINEERING**

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## Changes at a Glance

2018 Cohort (and older) – Previous Curriculum	
FALL (SEMESTER 1)	WINTER (SEMESTER 2)
CHEM*1040 General Chemistry I CIS*1500 Introduction to Programming ENGG*1100 Engineering Design I MATH*1200 Calculus I One of: HIST*1250 Science and Technology in a Global Context or ENGG*1210 Engineering Mechanics I	CHEM*1050 General Chemistry II ENGG*1500 Engineering Analysis I MATH*1210 Calculus II PHYS*1130 Physics with Applications One of: HIST*1250 Science and Technology in a Global Context or ENGG*1210 Engineering Mechanics I
FALL (SEMESTER 3)	WINTER (SEMESTER 4)
BIOL*1090 Introduction to Molecular and Cellular Biology COOP*1100 Introduction to Co-operative Education ENGG*2160 Engineering Mechanics II ENGG*2400 Engineering Systems Analysis MATH*2270 Applied Differential Equations One of: ENGG*2100 Engineering and Design II STAT*2120 Probability and Statistics for Engineers One of: ENGG*2120 Material Science ENGG*2230 Fluid Mechanics	BIOL*1080 Biological Concepts of Health BIOM*2000 Concepts of Human Physiology ENGG*2450 Electric Circuits MATH*2130 Numerical Methods One of: ENGG*2100 Engineering and Design II STAT*2120 Probability and Statistics for Engineers One of: ENGG*2120 Material Science ENGG*2230 Fluid Mechanics
2019 Cohort – Revised Curriculum	
FALL (SEMESTER 1)	WINTER (SEMESTER 2)
CHEM*1040 General Chemistry I ENGG*1100 Engineering Design I <b>ENGG*1500 Engineering Analysis I</b> MATH*1200 Calculus I <b>PHYS*1130 Physics with Applications</b>	CHEM*1050 General Chemistry II <b>CIS*1500 Introduction to Programming</b> <b>ENGG*1210 Engineering Mechanics I</b> MATH*1210 Calculus II <b>PHYS*1010 Introductory Elec &amp; Mag</b>
FALL (SEMESTER 3)	WINTER (SEMESTER 4)
COOP*1100 Introduction to Co-operative Education <b>ENGG*2100 Engineering and Design II</b> <b>ENGG*2120 Material Science</b> ENGG*2160 Engineering Mechanics II ENGG*2400 Engineering Systems Analysis MATH*2270 Applied Differential Equations 0.50 restricted elective	BIOL*1080 Biological Concepts of Health BIOM*2000 Concepts of Human Physiology <b>ENGG*2230 Fluid Mechanics</b> ENGG*2450 Electric Circuits MATH*2130 Numerical Methods <b>STAT*2120 Probability and Statistics for Engineers</b>

Note: *HIST\*1250 is moved to SEM 5 – Fall (Co-op)*

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