CURRICULUM CHANGES

Engineering Systems and Computing – Co-op

What's Different?

Courses Added to ESC

For <u>new students</u> starting in Fall 2019 only

- 0.50 CIS*1300 Programming – *(new prerequisite to CIS*2500)*

Courses Removed from ESC

For *<u>new students</u>* starting in Fall 2019 only

- 0.50 CIS*1500 Introduction to Programming

Changes to Course Content and Semester Offerings – Affects *<u>everyone</u>*

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 AN ENGINEERING SYSTEMS AND COMPUTING STUDENT WHO STARTED IN FALL 2018 OR EARLIER

How do these changes actually affect me?

Returning Engineering Systems and Computing students are not significantly affected by the changes to PHYS*1130 and PHYS*1010 because both courses were already required in the ESC program (unlike other BENG programs). However, the shifting content, semester offerings and revisions to prerequisites will make it necessary for returning ESC students to have completed PHYS*1010 in advance of ENGG*2400 in F20 and the first offering of 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.

*Of more significance, is the new prerequisite of CIS*1300 for CIS*2500. Engineering Systems & Computing students who did not complete CIS*2500 in W19 should meet with a program counsellor to discuss registration options to CIS*2500 in W20.*

UNIVERSITY of GUELPH

ENGINEERING

Book an Appointment at:
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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	CIS*2500 Intermediate Programming ENGG*1500 Engineering Analysis I MATH*1210 Calculus II PHYS*1010 Introductory Electricity and Magnetism 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)**
CIS*2430 Object Oriented Programming CIS*2520 Data Structures COOP*1100 Introduction to Co-operative Education ENGG*2400 Engineering Systems Analysis ENGG*2410 Digital Systems Design Using Descriptive Languages MATH*2270 Applied Differential Equations One of: ENGG*2120 Material Science ENGG*2230 Fluid Mechanics	ENGG*2100 Engineering and Design II ENGG*2450 Electric Circuits MATH*2130 Numerical Methods STAT*2120 Probability and Statistics for Engineers 0.50 restricted elective 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 CIS*1300 Programming ENGG*1100 Engineering Design I MATH*1200 Calculus I PHYS*1130 Physics with Applications	CIS*2500 Intermediate Programming ENGG*1210 Engineering Mechanics I ENGG*1500 Engineering Analysis I MATH*1210 Calculus II PHYS*1010 Introductory Electricity and Magnetism
FALL (SEMESTER 3)	**WINTER (SEMESTER 4)**
CIS*2430 Object Oriented Programming CIS*2520 Data Structures COOP*1100 Introduction to Co-operative Education ENGG*2230 Fluid Mechanics ENGG*2400 Engineering Systems Analysis ENGG*2410 Digital Systems Design Using Descriptive Languages MATH*2270 Applied Differential Equations	ENGG*2100 Engineering and Design II ENGG*2120 Material Science ENGG*2450 Electric Circuits MATH*2130 Numerical Methods STAT*2120 Probability and Statistics for Engineers 0.50 restricted elective

Note: *HIST*1250 is moved to SEM 7 – Winter (Co-op)*

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