

DIPLOMA IN ENGINEERING PHYSICS

At a Glance

Faculty

www.kpu.ca/science (<http://www.kpu.ca/science/>)

Area of Study:

www.kpu.ca/science/engineering (<http://www.kpu.ca/science/engineering/>)

Academic Level:

Undergraduate

Credential Granted:

Diploma

Start Date:

Fall (September)

Spring (January)

Summer (May)

Intake Type:

- Open

Minimum Credits Required:

62

Curriculum Effective Date:

01-Sep-2025

Engineering is the application of science, mathematics, technology, experience, and the engineering design process to solve problems for the benefit of society and the environment. Physics is the science of matter, motion and energy. The Diploma in Engineering Physics program provides a curriculum that covers aspects of both engineering and physics.

The Diploma in Engineering Physics complements the existing Certificate in Engineering by providing a place at KPU for students wishing to study engineering on a part-time basis, or needing course upgrading. Students who complete the Diploma in Engineering Physics program will be able to continue at KPU to complete the third and fourth years of the Bachelor of Science, Physics for Modern Technology program, or transfer into the second-year of an engineering degree program at institutions such as UBC, UVIC or SFU.

Requirements

Admission Requirements

Students pursuing a Diploma in Engineering Physics must be admitted to the Faculty of Science (<https://calendar.kpu.ca/programs-az/science/admission-requirements/>).

Curricular Requirements

Code	Title	Credits
APSC 1124	Introduction to Engineering	1
APSC 1151	Introduction to Engineering Graphics	3
APSC 1299	Introduction to Microcontrollers	3
CHEM 1110	The Structure of Matter	4
CPSC 1103	Principles of Program Structure and Design I	3
ENGL 1100	Introduction to University Writing	3
MATH 1120	Differential Calculus	3
MATH 1220	Integral Calculus	3
PHYS 1120	Physics for Physical and Applied Sciences I	4
PHYS 1220	Physics for Physical and Applied Sciences II	4
One of:		4
CHEM 1154	Chemistry for Engineering	
CHEM 1210	Chemical Energetics and Dynamics	
One of:		3
MATH 1152	Matrix Algebra for Engineers	
MATH 2232	Linear Algebra	
One of:		6
MATH 2321	Multivariate Calculus (Calculus III)	
MATH 3322	Vector Calculus (Calculus IV)	
Or		
MATH 2721	Complex Numbers and Linear Algebra	
MATH 2821	Multivariate and Vector Calculus	
One of:		3
PHYS 1141	Engineering Mechanics	
PHYS 1170	Mechanics I	
Four of, with at least one from List A and one from List B		12
List A		
PHYS 2100	Experimental Physics	
PHYS 2600	Electronics	
PHYS 2610	Sensors and Actuators	
List B		
PHYS 2010	Modern Physics	
PHYS 2030	Classical Mechanics	
PHYS 2040	Thermal Physics	
PHYS 2420	Electricity and Magnetism	
Elective	3 credits from a course outside the Faculty of Science at the 1100 level or higher	3
Total Credits		62

Credential Awarded

Upon successful completion of this program, students are eligible to receive a **Diploma in Engineering Physics**.