

# 2026-2027 Academic Year

ECE 4<sup>th</sup> Year Course Registration

# ECE Advisors

ECE UG Assistants (WLH-416)

- Sherri Fuller ([slf3@queensu.ca](mailto:slf3@queensu.ca))

EE Undergraduate Chair:

- Prof. Yan-Fei Liu ([eeugradchair@queensu.ca](mailto:eeugradchair@queensu.ca))

CE Undergraduate Chair:

- Prof. Thomas Dean ([ceugradchair@queensu.ca](mailto:ceugradchair@queensu.ca))

# Academic Calendar and Registration Dates

- **June 22** The 2026–2027 Academic Calendar is published.
- **June 23** The timetable is published.
- **Mid-July** Course pre-load: students will be preloaded into *core* courses, provided prerequisites are met.
- **July 13** The Shopping Cart opens, and enrollment appointment times are issued.

You will not be able to enroll in courses until your Enrollment Appointment begins. However, you can log in to SOLUS and start adding courses to your Shopping Cart to plan your schedule. Your Enrollment Appointment is your designated time to enroll in courses. [Registration Guide](#)

- **July 20** Course selection and self-enrollment begin (check your enrollment appointment date and time on SOLUS). This is the time to add optional core courses and electives.

## Useful Links:

[Registration Guide](#)

[SOLUS Help](#)

# Get to know your CURRICULUM

- [Academic Calendar](#)
  - Academic Plans and course information
  - Smith Engineering Policies and Regulations
  - Sessional Dates
- [SOLUS](#) – information about teaching instructors, class location, course schedule;
- [Department of Electrical and Computer Engineering](#)
  - ECE Degree Planning Spreadsheets,
  - Pre-requisite Charts
- [Smith Engineering](#)
  - [FORMS](#) and Student Services resources: academic considerations, accommodations, supplemental exam etc.

# Curriculum Updates

## Computer Engineering

- changes to the program graduation requirements;
- revised selection of technical electives (see the details on your Academic Plan)
  - Removed from the list of technical electives: CMPE 251, CMPE 327, CMPE 422, and SOFT 423
  - Added to the list of technical electives: CMPE 227, CMPE 328, CMPE 330, CMPE 471, CMPE 472

## Electrical Engineering

- MREN 348 Into to Robotics (W2027) counts toward a 4<sup>th</sup> year elective
- revised selection of technical electives (see the details on your Academic Plan)
  - ELEC 443 **Linear Control Systems** became a 3<sup>rd</sup> year course **ELEC 343** (F2026)

# 4th Year CORE

## REGULAR Stream

- ELEC 490/8 Capstone Project Course (Fall-Winter), 7 credits

## INNOVATION Stream:

ELEC 490/8 – Capstone project course (Fall-Winter), 7 credits

COMM 405 New Business Development - Fall

## Notes:

- All fourth-year ECE students who have completed the necessary prerequisite courses will be automatically preloaded into the ELEC 490/498 design project course, depending on their program
- Students can self-register in ELEC490/8, or contact your UG Assistant for help in case of a missing prerequisite
- ELEC 490/8 group building activities and project assignments begin in September

# Computer Engineering Graduation Requirements

- Satisfy the minimum Accreditation Units (AU) set by ECE in each CEAB category
- Have at least 5 four-hundred level elective courses
- Have at least 3 courses from the Electives List that are offered by the Department of Electrical and Computer Engineering
- Counting required core courses and elective courses in all four years, result in a total of no fewer than 157.5 (160.5 for ECEi) credits for the complete program

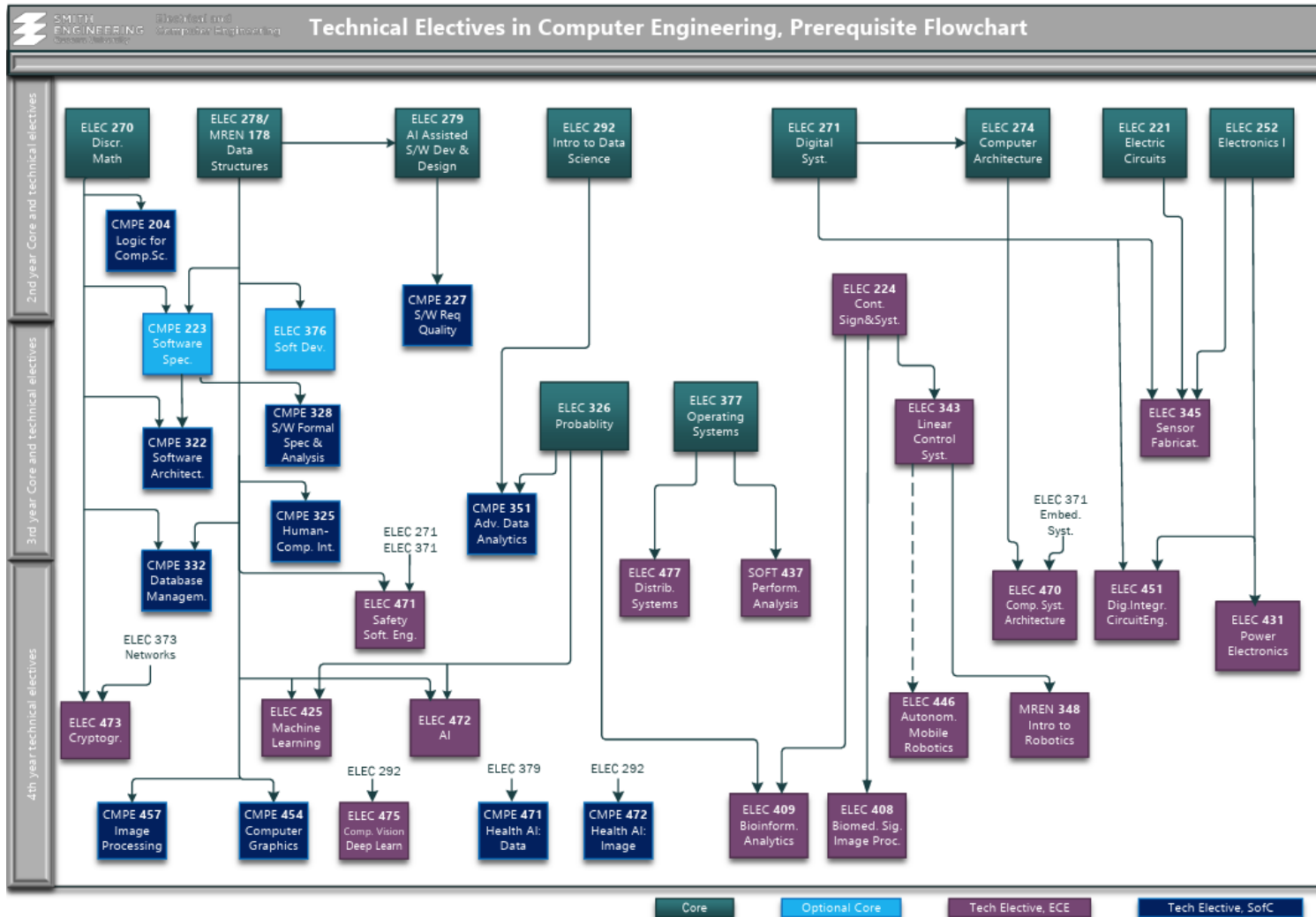
# CE: Technical Electives offered by ECE in 2026-2027

Fall 2026		Winter 2027	
ELEC 343	Linear Control Systems	ELEC 224	Cont.-Time Signals & Systems
ELEC 376	S/W Development Methodology	ELEC 372	Numerical Methods and Optimization
ELEC 425	Machine Learning and Deep Learning	ELEC 408	Biomedical Signal and Image Processing
ELEC 431	Power Electronics	ELEC 451	Digital Integrated Circuit Engineering
ELEC 446	Autonomous Mobile Robotics	ELEC 470	Computer System Architecture
ELEC 471	Safety Critical Software Engineering	ELEC 472	AI
ELEC 473	Cryptography and Network Security	ELEC 477	Distributed Systems
ELEC 475	Computer Vision with Deep Learning	MREN 348	Intro to Robotics
SOFT 437	Performance Analysis		

# CE: Technical Electives offered by the Queen's Computing

Fall 2026		Winter 2027	
CMPE 204	Logic for Computing Science	CMPE 204	Logic for Computing Science
CMPE 223	Software Specifications (Opt. Core)	CMPE 223	Software Specifications (Opt. Core)
CMPE 227	S/W Requirements & Quality Assurance	CMPE 322	Software Architecture
CMPE 328	Formal Specific. & Analysis in S/W Eng	CMPE 325	Human-Computer Interaction
CMPE 330	Health AI: Image-Guided Interventions	CMPE 332	Database Management Systems
CMPE 457	Image Processing & Comp. Vision	CMPE 351	Advanced Data Analytics
		CMPE 454	Comp. Graphics
		CMPE 472	Health AI: 2D and 3D Image Analysis

# Tech Electives in Computer Engineering – prerequisite flowchart



When selecting technical electives, students have the flexibility to tailor their program based on their interests. You can have a stronger concentration in a sub-discipline of computer engineering following a particular stream, or mix and match between streams.

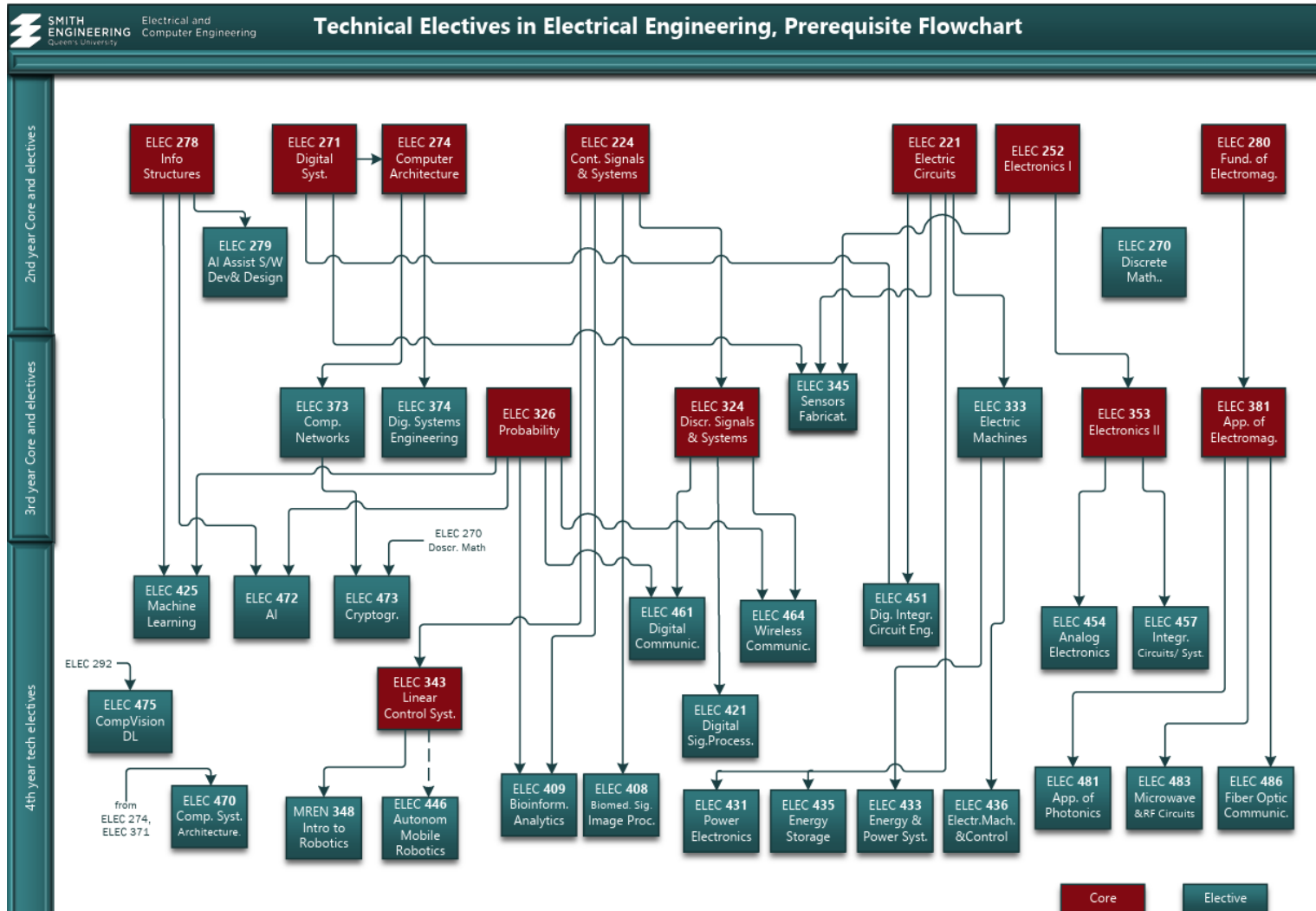
# Electrical Engineering Graduation Requirements

- Satisfy the minimum Accreditation Units (AU) set by ECE in each CEAB category
- Have at least **5 courses** from Electives **List A**
- Have at least **5 four-hundred** level **elective** courses
- Counting required core courses and elective courses in all four years, result in a total of no fewer than **157.5** (**160.5** for **ECEi**) credits for the complete program

# EE: Technical Electives offered in 2026-2027

Fall 2026		Winter 2027	
ELEC 343	Linear Control Systems	ELEC 333	Electric Machines
ELEC 425	Machine Learning and Deep Learning	ELEC 373	Computer Networks
ELEC 431	Power Electronics	ELEC 374	Digital Systems Engineering
ELEC 436	Electric Machines and Control	ELEC 408	Biomedical Signal & Image Proc
ELEC 446	Autonomous Mobile Robotics	ELEC 421	Digital Signal Processing
ELEC 457	Analog Integrated Circuits & Systems	ELEC 433	Energy and Power Systems
ELEC 473	Cryptography and Network Security	ELEC 435	Energy Storage Technology
ELEC 475	Computer Vision with Deep Learning	ELEC 451	Digital Integrated Circuit Engineering
		ELEC 470	Computer System Architecture
		ELEC 472	AI
		MREN 348	Intro to Robotics

# Technical Electives in Electrical Engineering – prerequisite flowchart



When selecting technical electives, students have the flexibility to tailor their program based on their interests. You can have a stronger concentration in a sub-discipline of electrical engineering following a particular stream, or mix and match between streams.

# STREAMS – Flexibility

ECE with **streams** instead of options

- Suggested streams give a coherent set of courses in a particular area, e.g., AI;
- Streams provide primary and secondary course suggestions; primary courses are essential for a given concentration;
- Streams allow you to mix and match as you wish and provide larger number of courses to choose from.

## **CE Streams**

[Streams of Specialization for Elective Courses in Computer Engineering](#)

- Computer Hardware
- Computer Systems
- Software Engineering
- Mechatronics
- Artificial Intelligence

## **EE Streams**

[Streams of Specialization for Elective Courses in Electrical Engineering](#)

- Biomedical Engineering
- Communications and Signal Processing
- Photonics, Nanotechnology and Integrated Circuits
- Mechatronics
- Power Electronics and Systems
- Robotics and Control

# Complementary Studies Program Requirement

## Complementary Studies – Regular Stream

- Must have a total of **9 credits** (108 units) of CS:
  - **1 course (or 3 credits)** must be from **List A** (Humanities and Social Sciences)
  - The remaining **2 courses (or 6 credits)** can be from **List A** or **List B**

# Innovation Stream: COMM & Complementary Studies

2 <sup>nd</sup> Year	COMM 201 – Introduction to Business for Entrepreneurs   F
3 <sup>rd</sup> Year	COMM 301 – Funding New Ventures   F  COMM 302 – Launching New Ventures   W  List "A" Complementary Studies Course   F/W/S
4 <sup>th</sup> Year	COMM 405 – New Business Development   F

# Prerequisites

- Prerequisites: capture material necessary to do the course
- Prerequisites only waived in exceptional circumstances. Process:
  - **the instructor of the course for which the waiver is required must approve the waiver in writing (sign the form or provide the approval over the email)**
  - Student then submits the approved prerequisite waiver request or signed form to the Undergraduate Program Assistant for the ECE Undergrad Chair consideration

Prerequisite Charts: [EE](#) and [CE](#)

FORMS: <https://smithengineering.queensu.ca/current-students/academics/forms-online.html>

# Course Planning

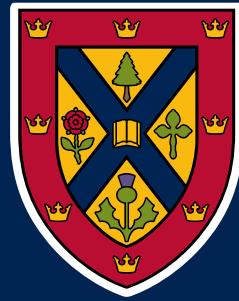
- Use your degree planning spreadsheet to verify that all program requirements will be met
- Follow Calendar & all preregistration instructions
  - ❑ Confirm core courses are completed or scheduled to be completed
  - ❑ Select electives (technical and complementary studies)
  - ❑ Check course prerequisites and **exclusions**
  - ❑ Submit substitution requests for courses outside ECE that are not listed as official technical electives (CISC, MECH, MTHE, graduate courses)
  - ❑ AVOID **Negative Service Indicators** (SOLUS account, unpaid tuition). [Log on to SOLUS](#) to view your financial account to see if you have any outstanding debts. The University Registrar's Office can be reached at [solus@queensu.ca](mailto:solus@queensu.ca) about registration or payment.
- Respect deadlines to avoid difficulties (Add/Drop courses)

# Internship or QUIP

- As an Engineering and Applied Science student, you are eligible to receive 3.5 academic credits for participating in the internship program.
- Your diploma will read: Bachelor of Applied Science, Major in Computer Engineering or Electrical Engineering with Professional Internship.
- Students are required to complete a work term report or seminar for evaluation at the end of their internship, as well as successful employer performance evaluations after four, eight and twelve months.
- Note, ELEC and CMPE programs accept **APSC 303 as a technical elective, 3.5 CR**. Credit may only be granted to students who have successfully fulfilled the necessary requirements to receive the Professional Internship designation.

# Degree Planning Spreadsheet – helps to stay on track with your studies

- [Electrical Engineering](#)
- [Computer Engineering](#)



Queen's  
UNIVERSITY