Department of Electrical and Computer Engineering
Graduate Course Listings for Fall 2026 and Winter 2027 (Updated Nov 23, 2026)

COURSE	DESCRIPTION	TERM	INSTRUCTOR
ECE 6CL4	Control Systems Design	Fall 2026	T. Kirubarajan
ECE 6DK4	Computer Communication Networks	Fall 2026	D. Zhao
ECE 6DM4	Computer Architecture	Fall 2026	S. Chen
ECE 6EK4	Microelectronics	Fall 2026	J. Deen
ECE 6FJ4	Devices and Antennas for Wireless Systems	Fall 2026	N. Nikolova
ECE 6SP4	High Performance Programming	Fall 2026	K. Cheshmi
ECE 6TL4	Digital Signal Processing	Fall 2026	R. Tharmarasa
ECE 6BB3	Cellular Bioelectricity	Winter 2027	K. Singh
ECE 6DS4	Embedded Systems	Winter 2027	M. Hassan
ECE 6PM4	Electrical Power Systems	Winter 2027	B. Nahid-Mobarakeh
ECE 6TN4	Image Processing	Winter 2027	S. Athar
ECE 711	Silicon Photonics	Fall 2026	J. Deen
*ECE 712 / BIOMED 712**	Matrix Computations in Signal Processing	Fall 2026	J. Reilly
*ECE 720 / MECHENG 720**	Power Converter Systems	Fall 2026	M. Narimani
ECE 723	Information Theory and Coding	Fall 2026	J. Chen
ECE 729	Resource Management and Performance Analysis in Wireless Communication Networks	Fall 2026	D. Zhao
ECE 738/CSE 742	Introduction to Optical Microscopy	Winter 2027	K. Singh
*ECE 740 / ENGPHYS 740**	Semiconductor Device Theory and Modeling	Fall 2026	Y. Haddara
ECE 748	Special Topics in Microelectronics	Fall 2026	M. Elamien
ECE 752	Compiler Design for High Performance	Fall 2026	K. Cheshmi
ECE 753	Modern Antennas in Wireless Telecommunications	Fall 2026	N. Nikolova
ECE 764	Battery Testing, Modeling, and Pack Design	Fall 2026	P. Kollmeyer
*ECE 771 / CSE 791**	Algorithms for Parameter and State Estimation	Fall 2026	T. Kirubarajan
*ECE 780 / BIOMED 702**	Medical Imaging Systems II	Fall 2026	M. Noseworthy
ECE 790	Foundational Communication Skills for Graduate Research in Electrical and Computer Engineering	Fall 2026	T. Davidson
*ECE 798 / MECHENG 798**	Biomedical Signal Modeling and Processing	Fall 2026	A. Jeremic
*ECE 710 / CSE 710 / MECHENG716**	Engineering Optimization	Winter 2027	T. Davidson
*ECE 724 / MECHENG 721**	Modeling, Control and Design of Electrified Vehicles	Winter 2027	J. Bauman
ECE 730	Control of Adjustable Speed Drives	Winter 2027	B. Nahid-Mobarakeh
ECE 746	Analysis and Design of RF ICs for Communications	Winter 2027	C. Chen
ECE 759	Special Topics in Microwaves and Photonics	Winter 2027	T. Ngatched
ECE 767	Multitarget Tracking and Multisensor Information Fusion	Winter 2027	R. Tharmarasa
ECE 778	Intro to Nanotechnology	Winter 2028	M. Howlader
ECE 790	Foundational Communication Skills for Graduate Research in Electrical and Computer Engineering	Winter 2027	T. Davidson
ECE 792	Advanced Communication Skills for Graduate Research in Electrical and Computer Engineering	Winter 2027	T. Davidson
*ECE 796 / BIOMED 796 / CSE 796**	Models of the Neuron	Winter 2027	I. Bruce

**cross-listed courses*

All courses are subject to enrollment minimums and instructor availability, please refer to Mosaic for the most up-to-date information

Please contact Antoinette Welsby, Graduate Administrator at ece_grad@mcmaster.ca for any questions