

Department	Campus	Course Number	Title	Course Enrolment (est.)	Position Type	Number of Positions (est.)	Size of Appointment (# of hours)	Dates of Appointment	Tutorial/Lab Schedule (if known)	Qualifications	Duties	Posting Date	Closing Date	Emergency Posting?	Salary	Application Procedure
Department of Electrical and Computer Engineering	St. George	APS105H1S	Computer Fundamentals	396	Teaching Assistant	10	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expert knowledge of C programming language and computer systems and problem solving using computers; the representation of information, programming techniques, programming style, basic loop structures, functions, arrays, strings, pointer-based data structures and searching and sorting algorithms.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	CSC190H1S	Computer Algorithms and Data Structures	277	Teaching Assistant	4	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in C programming language, linked lists, stacks, queues, trees, heaps, hashing, pointers (including function pointers) and arrays, data types and bit operations, and dynamic memory management.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE101H1S	Seminar Course: Introduction to Electrical and Computer Engineering	210	Teaching Assistant	1	10	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Fundamental knowledge of Electrical and Computer Engineering	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 10 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE110H1S	Electrical Fundamentals	606	Teaching Assistant	15	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Proficient knowledge in the physics of electricity and magnetism and circuit analysis.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE159H1S	Fundamentals of Electric Circuits	277	Teaching Assistant	5	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expert knowledge of DC linear circuit elements and analysis, transient response of linear circuits, AC power circuits	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017

Department of Electrical and Computer Engineering	St. George	ECE216H1S	Signals and Systems	372	Teaching Assistant	8	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in Fundamental discrete- and continuous-time signals, definition and properties of systems, linearity and time invariance, convolution, impulse response, differential and difference equations, Fourier analysis, sampling and aliasing, applications in communications.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE221H1S	Electric and Magnetic Fields	364	Teaching Assistant	6	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in electric and magnetic fundamental laws - see course outline	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE231H1S	Introductory Electronics	364	Teaching Assistant	6	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in electronic circuits using operational amplifiers, diodes, bipolar junction transistors and field-effect transistors.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE243H1S	Computer Organization	364	Teaching Assistant	16	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expert knowledge of the design of central processing unit, hardwired and microprogrammed control. Input-output and the use of interrupts. Arithmetic circuits. Assembly language programming. Main memory organization. Peripherals and interfacing. Microprocessors. System design considerations. The laboratory will consist of experiments involving logic systems and microprocessors. Design activity constitutes a major portion of laboratory work.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE259H1S	Electromagnetism	162	Teaching Assistant	4	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in the following: fundamental laws of electromagnetics including Coulomb's law, Gauss' law, Poisson's and Laplace's equations, the Biot-Savart's law, Ampere's law, Faraday's law, and Maxwell's equations; Vector calculus as applied to determine the relationship between the electric and magnetic fields and their sources (charges and currents); polarization in dielectric materials and magnetization in magnetic materials; circuit elements such as the resistor, capacitor and inductor.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017

Department of Electrical and Computer Engineering	St. George	ECE297H1S	Communication and Design	359	Teaching Assistant	15	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in electrical and computer engineering design processes illustrated by the design and implementation of software systems. Proficiency in C programming is mandatory for this course.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE302H1S	Probability and Applications	51	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Strong math and probability background is required.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE311H1S	Dynamic Systems and Control	124	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Applicants should have expert knowledge in linear control theory, state space theory, signals and systems and complex analysis. Also refer to the Course description for other required knowledge.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE316H1S	Communication Systems	117	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Applicants must have in depth knowledge of key concepts in digital and analog communication theory, signals and systems. Operational knowledge of signal generators, oscilloscopes, spectrum analyzers is required.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE318H1S	Fundamentals of Optics	95	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expert knowledge of Geometric Optics: Spherical surfaces, lenses and mirrors, optical imaging systems, matrix method, and aberrations: Polarization: Polarizer and polarizations, anisotropic materials, dichroism, birefringence, index ellipsoid, waveplates, optical activity, Faraday effect; Interference: superposition of waves, longitudinal and transverse coherence, Young's double-slit experiment, Michelson and Fabry-Perot interferometer, thinfilms. Must know Diffraction and Fourier Optics: diffraction theory, single and double slits, diffraction gratings, spatial filtering, basic optical signal processing.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017

Department of Electrical and Computer Engineering	St. George	ECE330H1S	Quantum and Semiconductor Physics	26	Teaching Assistant	1	30	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	In-depth knowledge required of the following: wave and quantum mechanics, the Schrodinger equation, quantum wells and density of states. Quantum statistics, solid-state bonding and crystal structure. Electron waves, dispersion relation inside periodic media, Fermi level and energy bands. Physical understanding of semiconductors at equilibrium, intrinsic and extrinsic semiconductors and excess carriers.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE334H1S	Digital Electronics	113	Teaching Assistant	3	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in digital design techniques for integrated circuits with emphasis on logic gates design at the transistor level	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE342H1S	Computer Hardware	104	Teaching Assistant	3	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in arithmetic circuits, cubical representation of logic functions, digital system design, timing analysis, design of asynchronous circuits, testing of logic circuits.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE344H1S	Operating Systems	131	Teaching Assistant	3	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Applicants must be well versed in operating system structures, concurrency, synchronization, deadlock, CPU scheduling, memory management and file systems.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE345H1S	Algorithms and Data Structures	43	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in design and analysis of algorithms and data structures.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE350H1S	Semiconductor Electronic Devices	27	Teaching Assistant	2	30	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in the area of semiconductors, semiconductors in equilibrium, transport of carriers, p-n diodes, metal-semiconductor contacts, bipolar junction transistors, metal-oxide-semiconductor (MOS) capacitors, and MOS field effect transistors.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017

Department of Electrical and Computer Engineering	St. George	ECE353H1S	Systems Software	81	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Advanced knowledge of operating system structure, processes, threads, synchronization, CPU scheduling, memory management, file systems, input/output, multiple processor systems, virtualization, protection, and security.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017	\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE354H1S	Electronic Circuits	49	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Advanced knowledge of analog and digital electronic circuits, singlestage amplifiers, current mirrors, cascode amplifiers and differential pairs; amplifier frequency response, feedback and stability and Digital CMOS logic circuits.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017	\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE356H1S	Linear Systems and Control	53	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in dynamic systems and their control, differential equation models of physical systems using transfer functions and state space models; linearization, initial and input response; Stability theory, Principle of feedback, Internal Model Principle, Frequency response, Nyquist stability. Loop shaping theory. Must know computer aided design using MATLAB and Simulink.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017	\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE357H1S	Electromagnetic Fields	32	Teaching Assistant	1	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Firm knowledge of transmission line theory: voltage and current waves, characteristic impedance, reflections from the load and source, transients on the line, Smith's chart, impedance matching. Fundamentals of electromagnetic theory: Maxwell's equations, Helmholtz's theorem, time retarded scalar and vector potentials, gauges, boundary conditions, electric and magnetic fields wave equations and their solutions in lossless and lossy medium. Plane wave propagation, reflection and transmission at boundaries. Constitutive relations and dispersion. Radiating dipole and waveguides.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017	\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017

Department of Electrical and Computer Engineering	St. George	ECE358H1S	Foundations of Computing	56	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Applicants must be well versed in the fundamentals of algorithm design and computational complexity, including: analysis of algorithms, graph algorithms, greedy algorithms, divide-and-conquer, dynamic programming, network flow, approximation algorithms, the theory of NP-completeness, and various NP-complete problems.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE361H1S	Computer Networks I	190	Teaching Assistant	3	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Excellent programming skills in Java and C++	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE363H1S	Communication Systems	48	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Strong knowledge of analog and digital communication systems. Analog and digital signals. Probability and random processes. Energy and power spectral densities; bandwidth. Distortionless analog communication; amplitude, frequency and phase modulation systems; frequency division multiplexing. Sampling, quantization and pulse code modulation (PCM). Baseband digital communication; intersymbol interference (ISI); Nyquist's ISI criterion; eye diagrams. Passband digital communications; amplitude-, phase- and frequency-shift keying; signal constellations. Performance analysis of analog modulation schemes in the presence of noise. Performance analysis of PCM in noise.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE411H1S	Real-Time Computer Control	42	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	In depth knowledge of digital control analysis and design by state-space methods; scheduling of control tasks using fixed-priority protocols; control design using MATLAB and Simulink, and computer control of the inverted pendulum using a PC with real-time software.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE412H1S	Analog Signal Processing Circuits	24	Teaching Assistant	1	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in analog signal processing in both continuous-time and discrete-time; analog signal specifications; the design of analog filters including transfer function approximation using Matlab and implementation using active-RC, transconductance-C, and switched capacitor circuits: phase locked loops.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017

Department of Electrical and Computer Engineering	St. George	ECE413H1S	Energy Systems and Distributed Generation	40	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Prospective TAs must have knowledge of three-phase systems; steady-state transmission line model; symmetrical three-phase faults; power system stability; symmetrical components; unsymmetrical faults and fault current calculation; distribution network; equivalent steady-state model of voltage-sourced converter; distributed energy resources (DR); distributed energy storage; interface between DR and power system	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE419H1S	Distributed Systems	130	Teaching Assistant	3	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Design issues in distributed systems: heterogeneity, security, transparency, concurrency, fault-tolerance; networking principles; request-reply protocol; remote procedure calls; distributed objects; middleware architectures; CORBA; security and authentication protocols; distributed file systems; name services; global states in distributed systems; coordination and agreement; transactions and concurrency control; distributed transactions; replication.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE422H1S	Radio and Microwave Wireless Systems	130	Teaching Assistant	4	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in the analysis and design of systems employing radio waves, covering both the underlying electromagnetics and the overall system performance aspects such as signal-to-noise ratios; Transmission/reception phenomena; Propagation phenomena; receiver design aspects include: receiver figures of merit, noise in cascaded systems, noise figure, and noise temperature. Must understand system examples such as fixed wireless access; mobile and personal communication systems; wireless cellular concepts; satellite communications; radar; radiometric receivers; GPS.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017

Department of Electrical and Computer Engineering	St. George	ECE462H1S	Multimedia Systems	31	Teaching Assistant	1	30	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in sampling and discrete-time signals in one or more dimensions - see Course description for reference	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE463H1S	Electric Drives	37	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in electro-mechanical mechanisms for force and torque production in rotating machines. DC machine theory and DC machine dynamics, synchronous machines and their dynamics, stepper motors. Introduction to space vectors and vector control of AC machines: steady state and variable speed operation of the induction machine via V/f control.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE464H1S	Wireless Communication	27	Teaching Assistant	2	30	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in radio medium, radio communication systems; Link budget: cable losses, propagation loss, antenna gains; Basic concepts of propagation: path loss, multi-path propagation and fading. Raleigh and Rician fading models, Doppler shift, delay spread, coherence time and coherence bandwidth of the channel; Analog modulation schemes and their bandwidths. Digital modulation schemes and their bandwidths and bit rates: BPSK, QPSK, MSK, GMSK. Basic concepts of speech coding. Error correction coding, interleaving, and multiple access frame structure; the physical layer description of the AMPS, IS-54, and GSM cellular systems. The cellular concept: frequency re-use, re-use cluster concept. Channel allocation. Cellular system architecture for AMPS, IS-54, and GSM. Hand-offs and transmitter power control. Cellular traffic, call blocking, concept of Erlangs. Basic ideas in spread spectrum modulation, spreading codes, bit error probability. Orthogonal and non-orthogonal CDMA Basic	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017

Department of Electrical and Computer Engineering	St. George	ECE466H1S	Computer Networks II	67	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in traffic modeling; network calculus; traffic classification; traffic regulation; shaping, filtering, policing, leaky bucket; queueing systems; scheduling; quality of service; DiffServ and IntServ/RSVP; multi-protocol label switching; call admission control / congestion control; switching; pricing; optical networks.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE469H1S	Optical Communications and Networks	39	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in optical communication systems and networks at the system and functional level; applications of telecommunication networks (short to long haul) to computing networks (chip-to-chip, on chip communications, optical backplanes). Thorough understanding of basic principles of optical transmission and associated components used for transmission of light and optical networks; system design tools for optical links; multi-service system requirements; optical network design tools (routing and wavelength assignment), network management and survivability.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE470H1S	Robot Modelling and Control	62	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in robot manipulators, kinematic modeling, forward and inverse kinematics, velocity kinematics, path planning, point-to-point trajectory planning, dynamic modeling, Euler-Lagrange equations, inverse dynamics, joint control, computed torque control, passivity-based control, feedback linearization.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE472H1S	Engineering Economic Analysis and Entrepreneurship	218	Teaching Assistant	3	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Advanced knowledge of economic evaluation and justification of engineering projects and investments - financial industry economic experience is highly desirable	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017

Department of Electrical and Computer Engineering	St. George	ECE516H1S	Intelligent Image Processing	86	Teaching Assistant	2	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	In depth knowledge of the field of Personal Cybernetics, including "Wearable Computing", "Personal Technologies", "Human Computer Interaction (HCI)," "Mobile Multimedia," "Augmented Reality," "Mediated Reality," "CyborgLogging," and the merging of communications devices such as portable telephones with computational and imaging devices. The focus will be on fundamental aspects and new inventions for humancomputer interaction. Must have knowledge of mediated reality, Personal Safety Devices, lifelong personal video capture, the Eye Tap principle, collinearity criterion, comparametric equations, photoquantigraphic imaging, lightvector spaces, anti-homomorphic imaging, application of personal imaging to the visual arts, and algebraic projective geometry.	Duties may include conducting tutorials and laboratory demonstrations and marking laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE521H1S	Inference Algorithms and Machine Learning	130	Teaching Assistant	4	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise is required in Squared error and the Gaussian probability distribution, Maximum likelihood estimation, Logistic regression, neural networks, radial basis function networks. Must also know Occam's razor, validation, bagging, Bayesian techniques. Auto-encoders, principal components analysis, clustering, the EM algorithm; matrix factorization, Markov models, hidden Markov models, the forward-backward algorithm, the Viterbi algorithm. Must know Factor graphs, Bayesian networks, variable elimination, the sum-product algorithm, the max-product algorithm; Estimating graphical models; Applications to image classification, image processing, object tracking, speech recognition, telecommunications and genomics.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE532H1S	Digital Systems Design	57	Teaching Assistant	3	30	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in advanced digital systems design concepts including project planning, design flows, embedded processors, hardware/software interfacing and interactions, software drivers, embedded operating systems, memory interfaces, system-level timing analysis, clocking and clock domains. There is a significant design project in this course which is undertaken and implemented on an FPGA development board.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017

Department of Electrical and Computer Engineering	St. George	ECE533H1S	Power Electronics: Switch-Mode Power Supplies	36	Teaching Assistant	1	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in the analysis, design and implementation of highefficiency switched-mode power supplies (SMPS) used in modern electronic equipment. Knowledge of isolated and nonisolated SMPS topologies; steady-state analysis; component datasheets; small-signal modeling and control of non-ideal converters; compensator design; thermal and magnetic circuits; power semiconductor devices; protection and practical implementation issues. The course includes an experimental design project, where teams design, solder and test a closed-loop dc-dc converter.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.22 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	ECE568H1S	Computer Security	146	Teaching Assistant	3	60	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html	Expertise in principles of computer systems security including understanding how attackers operate; how to identify security vulnerabilities and how they can be exploited; techniques to create secure systems and defend against such attacks. Knowledge of industry standards for conducting security audits to establish levels of security will be introduced. Knowledge of basic cryptographic techniques as well as hardware used to accelerate cryptographic operations in ATM's and webservers.	Duties may include conducting tutorials /laboratory demonstrations and marking tutorial/laboratory work, problem sets, tests and examinations.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017
Department of Electrical and Computer Engineering	St. George	STAT286H1S	Probability & Statistics	280	TA	4	60 (approx.)	Jan. 4, 2018 to April 30, 2018	https://portal.engineering.utoronto.ca/sites/timetable/winter.html#STA	Must have excellent English communication skills, a solid background in engineering mathematics including probability theory and statistics as outlined in the STAT286 course calendar description.	Duties may include conducting tutorials, creating solutions to problem set questions, marking problem sets, tests and examinations, assisting in the development of course material that makes use of educational technology in the new CEIE building.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017

Department of Electrical and Computer Engineering	St. George	ECE1365HS	High Frequency Integrated Circuits	~60	Teaching Assistant	1	30	Jan. 4, 2018 to April 30, 2018	https://www.ece.utoronto.ca/graduates/courses/	Excellent understanding of the ECE1365S course material; in depth expertise in using the following CAD tools: Cadence Analog Artist Spectre RF, Composer, Virtuoso Harmonic Balance and periodic state state simulation techniques inductor, transformer and multiport EM design and modelling using Asitic and EMX SiGe BiCMOS and nanoscale RF SOI/FDSOI CMOS technology process flow, device modelling, layout and RLC parasitic layout extraction using StarRC. Excellent knowledge of STMicroelectronics and GlobalFoundries design kits and tools; VNA, NFA, spectrum analyzer testing at DC-300 GHz and on-wafer probing of devices and circuits	Development of assignments and exercises and marking of assignments and exercises and course paper	September 27, 2017	October 27, 2017	\$43.65 per hour + 4% vacation pay x 60 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of graduate course TA vacancies are tentative, pending final course determinations and enrolment and Assoc. Chair, Graduate Studies approval.
Department of Electrical and Computer Engineering	St. George	ECE1395HS	Power Semiconductor Devices and Applications	9	Teaching Assistant	1	30	Jan. 4, 2018 to April 30, 2018	https://www.ece.utoronto.ca/graduates/courses/	The applicant must have in-depth knowledge on power semiconductor device designs. Proficiency in using TCAD tools on process and device simulation to analyze power devices is required.	The TA is required to help students to solve technical issues related to the use of the TCAD tools. The TA will also be required to set up office hours to answer technical questions related to the design and optimization of power devices. Responding to students via email will also be necessary.	September 27, 2017	October 27, 2017	\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of graduate course TA vacancies are tentative, pending final course determinations and enrolment and Assoc. Chair, Graduate Studies approval.
Department of Electrical and Computer Engineering	St. George	ECE1478HS	Lasers and Detectors	~23	Teaching Assistant	1	30	Jan. 4, 2018 to April 30, 2018	https://www.ece.utoronto.ca/graduates/courses/	The candidate should be proficient with the topics covered in the course - Basic electromagnetics; Semiclassical light-atom interactions (classical field, 2 level atoms); Laser basics; Semiconductor lasers; Optical detection and noise. Preferably, the candidate has taken ECE525/ECE1478 (Lasers and Detectors) and ECE527 (Photonic Devices) as instructed	Grading of biweekly problem sets (5 in total) and partial grading of the final exam. Answer questions from students and provide assistance as needed.	September 27, 2017	October 27, 2017	\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of

Department of Electrical and Computer Engineering	St. George	ECE1505HS	Convex Optimization	31	Teaching Assistant	1	30	September 4, 2018 to April 30, 2019	https://www.ece.utoronto.ca/graduates/courses/	Solid background in optimization theory, algorithms and related subjects such as numerical linear algebra. It is preferred that applicants have successfully completed this course or its equivalent.	Grading problem sets and midterm exam	September 27, 2017	October 27, 2017	\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of graduate course TA vacancies are tentative, pending final course determinations and enrolment and Assoc. Chair, Graduate Studies approval.
Department of Electrical and Computer Engineering	St. George	ECE1755HS	Parallel Computer Architecture and Programming	~25	Teaching Assistant	1	30	September 4, 2018 to April 30, 2019	https://www.ece.utoronto.ca/graduates/courses/	Taken ECE 552 or equivalent (Computer Architecture); Knowledge of parallel architecture; Experience with parallel programming (pthreads, MPI, etc);	The TA will assist the instructor with preparation of homework solutions, grading of homework, end of the term laboratory and project/exam.	September 27, 2017	October 27, 2017	\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of graduate course TA vacancies are tentative, pending final course determinations and enrolment and Assoc. Chair, Graduate Studies approval.
Department of Electrical and Computer Engineering	St. George	ECE1770HS	Trends in Middleware Systems – Large-scale Data Management	~30	Teaching Assistant	1	30	September 4, 2018 to April 30, 2019	https://www.ece.utoronto.ca/graduates/courses/	Proficient in middleware concepts, internet-scale distributed systems concepts, recent trends in middleware, and socket programming	Assist in home work grading, project grading, organizing student teams, serve as point of contact for student teams, manage mailing list and online portal, and manage course web resources	September 27, 2017	October 27, 2017	\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of graduate course TA vacancies are tentative, pending final course determinations and enrolment and Assoc. Chair, Graduate Studies approval.

Department of Electrical and Computer Engineering	St. George	ECE1373HS	Digital Design for Systems-on-Chip	17	Teaching Assistant	1	30	September 4, 2018 to April 30, 2019	https://www.ece.utoronto.ca/graduates/courses/	Knowledge about high-level synthesis (HLS) for digital hardware. Experience with HLS tools, especially Altera or Xilinx. Hardware design and embedded software for FPGAs.	Supervise and advise student project groups. Grade final project demos and reports.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please
Department of Electrical and Computer Engineering	St. George	ECE1392HS	Integrated Circuits for Digital Communications	15	Teaching Assistant	1	30	September 4, 2018 to April 30, 2019	https://www.ece.utoronto.ca/graduates/courses/	A PhD student who has taken ECE1392 is strongly preferred. Priority will be given to applicants who are active in the research related to this course which is digital communication systems with emphasis on wireless signaling.	TA duties will include marking assignments, final project, and final exam.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please
Department of Electrical and Computer Engineering	St. George	ECE1521HS	Statistical Communication Theory	17	Teaching Assistant	1	30	September 4, 2018 to April 30, 2019	https://www.ece.utoronto.ca/graduates/courses/	Prefer a PhD student with experience in detection and estimation theory. Having taken ECE1521S a plus.	Overseeing tutorials and office hours and doing grading.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of
Department of Electrical and Computer Engineering	St. George	ECE1541HS	Communication Networks I	26	Teaching Assistant	1	30	September 4, 2018 to April 30, 2019	https://www.ece.utoronto.ca/graduates/courses/	The applicant should have very strong mathematical skills, especially in probability and stochastic processes. Should have strong background in computer networks. Should have taken ECE1541 and received a high mark. Preference will be given to students registered in the PhD program.	Marking theoretical assignments, programming assignments, midterm, final, project, help with the design of the exams, to be available to run tutorials	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of graduate course TA vacancies are tentative, pending final course determinations and enrolment and Assoc. Chair, Graduate Studies approval.
Department of Electrical and Computer Engineering	St. George	ECE1543HS	Mobile Communication Systems	16	Teaching Assistant	1	30	September 4, 2018 to April 30, 2019	https://www.ece.utoronto.ca/graduates/courses/	Expertise in the design of mobile communication systems, such as cellular radio, packet radio networks, and indoor wireless networks.	Marking assignments/tests, other duties as per discussion with instructor.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of

Department of Electrical and Computer Engineering	St. George	ECE1551HS	Mobile Broadband Radio Access	27	Teaching Assistant	1	30	September 4, 2018 to April 30, 2019	https://www.ece.utoronto.ca/graduates/courses/	Needs to have a solid understanding of wireless communications, cellular networks and communication systems, with the emphasis on OFDM/OFDMA. Additionally, candidate needs to have strong analytical and programming skills (Matlab is a must). Knowledge of RF propagation, link budgets and 3GPP standards (HSPA, LTE) are desirable, but not necessary. A strong preference will be given to PhD candidates.	Duties include grading, holding office hours, doing problem sets	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of graduate course TA vacancies are tentative, pending final course determinations and enrolment and Assoc. Chair, Graduate Studies approval.
Department of Electrical and Computer Engineering	St. George	ECE1653HS	Hybrid Systems and Control Applications	15	Teaching Assistant	1	30	September 4, 2018 to April 30, 2019	https://www.ece.utoronto.ca/graduates/courses/	PhD student in systems control; background in particularly hybrid systems, reach control; strong mathematical abilities	Help formulate homework problems and grade homeworks; tutorial sessions	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of
Department of Electrical and Computer Engineering	St. George	ECE1718HS	Special Topics in Computer Hardware Design: Advanced Computer Architecture	15	Teaching Assistant	1	30	September 4, 2018 to April 30, 2019	https://www.ece.utoronto.ca/graduates/courses/	C++/C programming. Verilog Synthesis to Custom Logic	Grade assignments. Develop/Update Assignments.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of
Department of Electrical and Computer Engineering	St. George	ECE1733HS	Topics in Switching Theory	39	Teaching Assistant	1	30	September 4, 2018 to April 30, 2019	https://www.ece.utoronto.ca/graduates/courses/	Skills required for this position include programming knowledge (students will submit three programming assignments written in a language of their choice), and knowledge of the switching-theory topics that are listed above.	Marking assignments; tests and exam; other duties as required.	September 27, 2017	October 27, 2017		\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of

Department of Electrical and Computer Engineering	St. George	ECE1781HS	Dependable Software Systems	18	Teaching Assistant	1	30	4, 2018 to April 30, 2018	https://www.ece.utoronto.ca/graduates/courses/	Must have taken ECE1781 or ECE1724. PhD student is preferred. Students who doing research in the area of software systems are preferred.	Marking of project reports.	September 27, 2017	October 27, 2017	\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some announcements of graduate course TA vacancies are tentative, pending final course determinations and enrolment and Assoc. Chair, Graduate Studies approval.
Department of Electrical and Computer Engineering	St. George	ECE1782HS	Graphics Processor Programming	65	Teaching Assistant	1	30	4, 2018 to April 30, 2018	https://www.ece.utoronto.ca/graduates/courses/	Expertise in CUDA and OpenCL programming.	Grade assignments; Develop/Update Assignments.	September 27, 2017	October 27, 2017	\$43.65 per hour + 4% vacation pay x 30 hours	Complete the Electrical and Computer Engineering on-line TA application, including Course Preferences and add teaching resume - instructions and link are posted on the ECE TA web page - https://www.ece.utoronto.ca/undergraduates/ta/ by October 27, 2017. Please note that some