During the first term, the Department in consultation with the student's supervisor(s) establish an Internal Thesis Committee consisting of the supervisor(s), an internal examiner, as well as a department representative. At this time, an area of research is chosen. The internal examiner should have expertise close to the candidate's general research area. The requirements to be fulfilled include a minimum of 4 term-length graduate courses beyond the Master's degree, a two-part comprehensive examination, the seminar course ELEC 891 Seminar, satisfactory research progress and a thesis. One of the graduate courses must be taken from outside the Department. One of the graduate courses must be taken inside the Department. The supervisor(s) and the Department must approve all program of study.

All Ph.D. candidates will take a comprehensive examination administered in two parts by the candidate's thesis committee. Part I deals with the candidate's background in his/her chosen area of research. Part II consists of the candidate's thesis proposal. The Ph.D. Part I report must be submitted to the Department within 10 months of the start of the program, and the Ph.D. Part I Comprehensive Examination should be held no later than two months from the report submission date. An external/internal examiner (outside ECE Department, within Queen's University) is added to the Internal Thesis Committee to form the Ph.D. Supervisory Committee for Part II. The Ph.D. Part II report must be submitted to the Department within 22 months of the start of the program, and the Ph.D. Part II Comprehensive Examination should be held no later than two months from the report submission date. After the successful completion of Part II, thesis research progress is reported by the candidate and reviewed by the Ph.D. Supervisory Committee annually.