

QUALIFICATIONS BOARD SYLLABUS COMMITTEE

TERMS OF REFERENCE

1. PREAMBLE

The Qualifications Board (QB) is responsible for developing and approving the National Examination Syllabi. QB has delegated the task of maintaining and creating national syllabi to the Syllabus Committee, who establishes a national approach that can be used by regulators to develop their examinations and assess academic qualifications of applicants.

Examination syllabi are broadly representative of accredited programs offered in Canada. They are not intended, however, to duplicate any given program or establish mandatory subjects which must be mastered in each discipline. Although attempts have been made to harmonize syllabi with the Accreditation Board criteria, strict compliance has not been sought and syllabi are not intended as a replacement or equivalent for a Canadian engineering education degree.

The QB's intent in the application of syllabi is that they be used as a sampling technique to ensure that applicants have an appropriate breadth and depth of knowledge and mastery of common subjects as well as to confirm that they have reached the necessary academic level. Breadth in the education of a candidate may come from more than one discipline, and thus confirmatory examinations may be drawn from more than one discipline. Regulators have the authority and discretion of determining syllabi examinations for applicants.

2. OBJECTIVES

The Syllabus Committee enables the QB to maintain national examination syllabi that can be used as the basis for an academic assessment of individuals who have not graduated from an engineering program that has been either accredited or recognized as “substantially equivalent” by the Accreditation Board, or that is covered under one of the mutual recognition agreements entered into by Engineers Canada.

Specifically, the Syllabus Committee maintains examination syllabi in four key areas:

- **Basic studies:** examinations designed to ensure that applicants have an adequate foundation in mathematics, basic sciences, and engineering sciences.

- **Complementary studies:** examinations to ensure that professional engineers have an awareness of the broader context of engineering.
- **Discipline-specific:** examinations in each discipline are listed under two headings - compulsory and elective. These examinations are primarily engineering science and engineering design.
- **Cross-discipline:** a matrix provides advice to regulators on examining applicants with degrees not offered in Canada.

The Syllabus Committee also develops guidelines/model guides that provide advice to regulators on examination syllabi and other relevant topics.

3. STATUS AND AUTHORITY

The Syllabus Committee is a standing committee of the Canadian Engineering Qualifications Board of Engineers Canada and as such reports to the Qualifications Board, who has the authority to approve syllabi.

3.1 Functions and Responsibilities

The Syllabus Committee maintains and creates national examination syllabi as per the 2016 Syllabi Creation and Development Protocol (Annex 1).

4. MEMBERSHIP AND ORGANIZATION

The Syllabus Committee membership will consist of:

- a Chair – Qualifications Board member; and
- temporary members.

The Committee Chair is appointed by the Qualifications Board executive in consultation with the relevant Engineers Canada staff. Member terms are at the discretion of the Qualifications Board executive. There is no maximum period. The Committee Chair and the Engineers Canada staff member will be responsible for planning and organizing sub-committee meetings and agendas.

The Syllabus Committee may form dedicated task forces to address each syllabus which is reviewed. Task force participants are subject matter experts, often university professors, who are members in good standing with their regulators.