



Canadian Forestry Accreditation Board
Bureau canadien d'agrément en foresterie

Elements of Accreditation Assessment

Curriculum Criteria

The following criteria for curriculum content are designed to ensure that graduates have received a strong grounding in forest science and can perform at a professional entry level in general forestry practice and, where specialization has taken place in the undergraduate program, over a specific range of forestry activities. Emphasis is on core forest sciences with appropriate foundation in basic, social and quantitative sciences complemented by a variety of other studies to provide graduates with a range of technical and social skills.

An evaluation of program goals and objectives, courses, course content, staffing and facilities will be carried out through a site visit of a team of peers who will be provided with a comprehensive statement prepared by the school according to directives detailed by the accreditation process.

The CFAB will consider these criteria in the reaching of an accreditation decision and will give positive consideration to well-considered innovation in forestry education. The subject matter embodied in the criteria described below may be covered in different ways by each of the forestry schools. What may be a separate course in one school may be parts of courses in other schools.

To satisfy accreditation requirements, a forestry program must ensure that students receive the following curriculum components the elements of which are elaborated in the CFAB's *Academic Standards for the accreditation of baccalaureate forestry programs in Canada* (hereinafter referred to as "the Academic Standards"). Each forestry program must ensure that essential coverage of each component element has been addressed and presented to the student as part of the learning opportunity. Evidence must be available to indicate that all graduates will have educationally equivalent experiences and will have met, or exceeded, performance expectations.

FOUNDATIONAL STUDIES

The foundational studies component of the curriculum is considered to include the biological, physical and social sciences and the humanities essential for support of the studies of the Academic Standards.

There is no minimum level of exposure required for this component but exposure must be sufficient to impart an understanding of the biological, physical and social relationships specific to forestry and to ensure that students are able to undertake the work of the Academic Standards.

CORE FORESTRY STUDIES

A minimum of four full-time terms (or equivalent) (See also Subsection 3.3.4.) is required in which students experience an appropriately balanced presentation of forest resource growth, development, management and utilization, as well the critical areas of leadership skills, information acquisition and analysis, communications and professionalism and ethics. The educational experience must ensure that emphasis is placed on a graduate's ability to perform the competencies set out in the Academic Standards.

A program curriculum must devote adequate attention and time to each component of the Academic Standards to permit graduates to competently and capably undertake the range of activities expected of an entry-level professional forester by the profession and society, including creative and integrative applications that require the identification and solution of practical forestry problems.

COMPLEMENTARY STUDIES

The complementary studies component of a curriculum is comprised of those academic studies offered by the subject program which are over and above core and foundational requirements. They may occur individually as electives or in structured curriculum groupings, generally identified as options, minors and majors.

Considerable latitude is allowed the school and the student in the choice of suitable courses for this component. Notwithstanding, complementary studies are to be used to provide an integrated, comprehensive academic experience which enables students to enhance and advance their forestry career interests. The component is intended to enable graduates to function at the highest levels of competence and effectiveness in the undertaking of professional activities demanded by the profession and society.

There is no minimum level of exposure required for this component but exposure must have been sufficient to enable the student to fully complete the graduation requirements of the subject degree program.

Additional curriculum requirements

- To be considered for accreditation, a Baccalaureate forestry program must lead to a science-based degree of a minimum of eight (8) full-time terms ¹ (or equivalent) in duration. One academic term is taken to consist of a minimum of twelve (12) weeks of instruction, over and above periods allotted to examinations. Eight terms is considered to be the equivalent of four (4) academic years.
- To be considered for accreditation, a Masters program must demonstrate that the combination of undergraduate experience and the graduate course work completed by students in that program provide at least the same level of outcomes expected from graduates of an accredited Baccalaureate program.
- Appropriate practical experience, in the field and the laboratory, must be an integral component of any forestry program.

- For programs at some universities, some of the mathematics, basic and quantitative science and complementary science and study elements may be covered through prior education. This circumstance must be addressed in the admission policies of these institutions.
- Policies for admitting students with advanced standing, including transfers from other institutions, must ensure that the applicable Academic Standards as well as the supporting foundational studies requirements for curriculum content are satisfied.

Notes to Curriculum Criteria

During the period of transition to the new academic standards, i.e., from those dated August 28, 1998 (French version dated March 31, 2000) to those dated November 24, 2008, programs accredited under the CFAB Academic Standards of August, 1998 remain valid for the duration of the accreditation period determined by the Board or until a new review of a program is required in keeping with the provisions of this Policy Statement and the Board's overall accreditation determination for the program.

As of the date of the coming into effect of this Policy Statement, l'Ordre des ingénieurs forestiers du Québec had not accepted the new version of the CFAB Academic Standards. Likewise, it had not accepted paragraphs 3.3.1, 3.3.2 and 3.3.3 of this Policy Statement. In consequence, the next accreditation review of Université Laval's Forest Environment and Forest Resources Management Program (scheduled for 2009), as well as that of any other forestry program offered by a Quebec university for which accreditation is sought during the period of the fourth round of reviews (2009 to 2015), will be conducted using the March 31, 2000 (French) version of the CFAB Academic Standards

Program Outcomes Criteria

It is essential that graduates from forestry programs possess a variety of skills and competencies that will enable them to carry out the wide variety of activities that are expected to be undertaken by a professional forester. Forestry programs must be able to demonstrate that their graduates have:

- An understanding of the science of forest ecosystem structure, dynamics and processes;
- An ability to identify, formulate and solve forest problems;
- An ability to communicate orally and in writing with a variety of audiences including foresters, other professionals, Aborigines, politicians, groups with special interests and knowledge concerning forestry and the general public;
- An ability to understand the relationships among the natural resources and possess the skills and knowledge to integrate a variety of uses and values in land and resource management plans;
- An understanding of professional and ethical responsibilities, including membership in professional associations;
- A broad global perspective of forestry issues and challenges;
- A recognition of the need for and the ability to engage in life-long learning;

- A recognition of the need to participate actively in the overall community in which the graduate is a part;
- A general knowledge of contemporary issues affecting forestry;
- An ability to work well with others;
- An ability to work as a team member;
- An ability to lead and supervise effectively; and,
- An ability to work in the forest.

Program Environment Criteria

Emphasis is placed on qualitative evaluation of the program and the overall environment in which the program is presented.

- Central importance is attached to the quality of the educational experience as reflected by the quality of the students, faculty, support staff, administration, laboratories, field studies, library, computing facilities and other support facilities.
- The character of the educational experience is influenced strongly by the forestry competence and perspective of the faculty members. The number of faculty members dedicated to the program must be large enough to cover, by experience and interest, all of the curricular areas of the program.
- Even though a faculty may include full-time and part-time members, there must be a sufficient number of full-time faculty members to assure adequate levels of student-faculty interaction, student curricular counselling and faculty participation in the development, control and administration of the curriculum.
- Teaching loads should allow time for adequate participation in research and professional development activities by faculty members. Under no circumstances should a program be critically dependent on one individual.
- The forestry faculty must assume the responsibility of assuring that students receive proper curricular and career counselling.
- At least one of the senior administrators governing the program seeking accreditation (e.g., Dean, Associate Dean, program chair) is expected to have a background which allows effective leadership in forestry education and to have achieved a high standing in the Canadian forestry community.
- Faculty members are expected to have a high level of competence and to be dedicated to excellence in forestry education.
- The competence of faculty members will be judged by such factors as the level of academic education of its members, the diversity of their backgrounds, their teaching, their ability to communicate effectively, their level of scholarship as shown by scientific and professional publications, their membership in professional, scientific and learned societies, and their personal interest in the students' curricular and extra-curricular activities.

- The Forestry Faculty Council (or equivalent body) must have effective control of the forestry program.
- Responsibility for initiating changes in the curriculum of the forestry program may be placed in a curriculum committee at the Departmental or Faculty level.