BCIT BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

Credentialing of Programs

Procedure No.:	5401-PR1
Version:	2
Policy Reference:	5401
Category:	Education
Department Responsible	Education Council
Current Approval Date:	2024 April 3

Objectives

This procedure forms part of Policy 5401, Program Development and Credentials. It provides criteria and articulates credential standards for each credential type offered by BCIT and conferred upon graduands.

Table of Contents

Who This Procedure Applies To

This procedure applies to BCIT employees involved in the development, change, and approval of BCIT programs and credentials.

1. Credential Types and Criteria

BCIT recognizes students' graduation from a program by awarding certificates, diplomas, and degrees. The table below represents the criteria for each specific credential type.

Refer to the Credential Standards section of this procedure for specific credential standard details.

Credential Type	Credits (minimum)	Entrance Requirements (minimum)[1]	Equivalent Duration (terms)[2]	Rigour/level of study[3]	Final Internal Approval[4]
Industry Partnership Certificate	15	Policy 5003 Admissions	variable	variable	VP Academic
Associate Certificate	15	Policy 5003 Admissions	One	First year post-secondary	Education Council and Board of Governors
Certificate	30	High School or equivalent	Two	First year post-secondary	Education Council and Board of Governors
Diploma	75	High School or equivalent	Four	First and second year post-secondary or higher	Education Council and Board of Governors
Advanced Certificate	24	Diploma or degree or equivalent	One or more	Third year post-secondary or higher	Education Council and Board of Governors
Advanced Diploma	45	Diploma or degree or equivalent	Two or more	Third year post-secondary or higher	Education Council and Board of Governors
Bachelor's Degree	Diploma equivalent + 60 upper level credits	High school Degree completion programs require diploma or degree or equivalent.	Eight Degree completion programs are four terms.	First through fourth year post-secondary. Degree completion programs are at third and fourth year post-secondary.	Education Council and Board of Governors
Post-baccalaureate Certificate	15	Bachelor's degree	One or more	Undergraduate level	Education Council and Board of Governors
Post-baccalaureate Diploma	30	Bachelor's degree	Two or more	Undergraduate level	Education Council and Board of Governors
Graduate Certificate	15	Bachelor's degree	One or more	Graduate level	Education Council and Board of Governors
Master's Degree	30	Bachelor's degree	Two or more	Graduate level	Education Council and Board of Governors

Notes:

1- *Entrance requirements provide guidance on the ability of students entering a program. The formal admission criteria for all BCIT programs are defined in Policy 5003, Admissions and Recognition of Prior Learning.*

2- *A term is typically equivalent to 15-20 weeks of full-time study. Programs can set the delivery schedule and format that is best suited for the program.*

3- *Refer to credential standards later in this procedure for more detail and guidance on the expected rigour of BCIT credentials.*

4- *Final approval for bachelor's and master's degrees is by the Minister responsible for advanced education.*

Credentials Offered in Partnership

BCIT may enter into domestic or international partnerships for the delivery of programs.

Refer to Policy 5801 Educational Affiliations for the development of new partnerships. Refer to Procedure 5401-PR2 for the development/approval process for credentials offered in partnership.

Other Offerings

Apprenticeships

BCIT offers technical training for various apprenticeships that are developed and regulated by SkilledTradesBC.

Statements of Completion or Attendance

Statements of completion or attendance are awarded for the completion of a course or group of courses that do not lead to a further level of certification, and will be limited to 12 credits (or as approved by the VP Academic Office). A statement of completion is used when the course or group of courses have a formal evaluation procedure in place, in accordance with Policy 5103, Student Evaluation. A statement of attendance is used when there is no formal evaluation to measure student achievement.

2. Credential Standards

These credential standards incorporate the degree level standards in alignment with the Council of Ministers of Education, Canada (CMEC) and defined by the DQAB (http://www2.gov.bc.ca/gov/content/education-training/post-secondary-education/institution-resources-administration/degree-authorization/assessment-criteria-process).

Diploma

By the completion of a BCIT diploma program, graduates are expected to attain the following standards.

1. Depth and Breadth of Knowledge

(a) Develop a sound knowledge-base of subjects foundational and relevant to the field, which is integrated and current, and which includes the defining features, boundaries, concepts, and terminology of the field.

(b) Have general knowledge of the range of specialties in the area of practice and an awareness of recent developments and research at the forefront of the area.

(c) Develop the ability to connect knowledge of other disciplines to their field in a coherent and productive way.

2. Knowledge of Methodologies and Research

(a) Have general knowledge of approaches to research in the field, including an introduction to relevant research literature.

(b) Apply knowledge, solve problems, undertake analysis, synthesis, and evaluation related to the general area of practice.

3. Application of Knowledge

(a) Develop solutions to a variety of common problems within the confines of existing basic understandings in the area.

(b) Apply standard and some specialized skills and practices in a variety of technical or professional contexts.

(c) Apply new knowledge and adapt to new technology and business practices.

(d) Handle routine operational problems within the area of practice.

(e) Organize, plan, and implement within the confines of practice.

(f) Undertake work requiring problem-solving, analysis, synthesis, and evaluation within established or contemporary general practices, limited specialized knowledge and procedures.

(g) Integrate numerical and graphical applications in the solution of problems.

(h) Integrate principles of sustainability and a global perspective into the area of practice.

(i) Integrate basic computer workplace applications and be familiar with appropriate computer applications in the area of practice.

4. *Communication Skills*

(a) Use listening and reading skills to understand, assess, and interpret material related to the discipline and use it to perform tasks accurately.

(b) Use interpersonal and communication skills appropriate for the audience, purpose, and context to complete tasks individually or collaboratively to industry standards in the field of practice.

(c) Speak effectively about topics related to the field of practice both formally and informally for various audiences and group sizes, supported by different media.

(d) Craft clearly worded and organized documents that use appropriate evidence to support claims, can be substantiated by the writer, and align with practices within the discipline.

5. *Awareness of Limits of Knowledge*

(a) Develop a basic understanding of the limits to their knowledge and ability, and an initial appreciation of the uncertainty, ambiguity, and limits to knowledge and how this might influence analyses and interpretations.

6. *Professional Capacity/Autonomy*

(a) Perform defined activities, i.e., designing, planning, executing, and evaluating with the general body of knowledge, skills, and practices associated with the area with significant autonomy. Higher level activities may be performed under supervision.

(b) Evaluate their own performance.

(c) Take an appropriate level of responsibility for the supervision of others.

(d) Exercise judgment in the management of assigned work and resources.

(e) Work independently in a peer relationship with qualified practitioners or as a member of a team, within the confines of existing general practices.

(f) Demonstrate behaviour that is consistent with academic and professional ethics and integrity.

Bachelor's Degree

By the completion of a BCIT post-baccalaureate certificate, post-baccalaureate diploma, or bachelor's degree program, graduates are expected to attain the following standards.

1. *Depth and Breadth of Knowledge*

(a) Have a comprehensive, current, and integrated knowledge and critical understanding in a field of study that builds upon their secondary education and includes the key assumptions, methodologies, and applications of the discipline and/or field of practice.

(b) Develop a basic understanding of the range of fields within the discipline/field of practice and of how the discipline may intersect with fields in related disciplines.

(c) Have a detailed knowledge and understanding of one or more focused areas in the field.

(d) Demonstrate the ability to gather, review, evaluate, and interpret information from a range of sources, including emerging or evolving information relevant to the discipline; and to compare the merits of alternate hypotheses or creative options relevant to one or more of the major fields in a discipline.

(e) Demonstrate the capacity to engage in independent research or practice in a supervised context.

(f) Apply critical thinking and analytical skills inside and outside the discipline.

(g) Demonstrate the ability to apply learning from one or more areas outside the discipline.

The following guidelines outline the General Education requirements for BCIT Bachelor Degree Programs:

(h) Individual programs will set General Education credit requirements commensurate with the provincial degree level standards and professional practice with peer institutions and programs.

(i) While depth and breadth requirements for any given bachelor degree will correspond to the expectations of relevant approval and professional accreditation bodies, a General Education component is required.

(j) General Education requirements will vary depending on the educational focus, demands, and skills requisite to the specific bachelor degree credential. They normally consist of 24 credits of post-secondary education studies drawn from at least three academic disciplines (or faculties or departments). A typical post-secondary course is equivalent to 3 credits.

(k) BCIT bachelor degrees will normally include a minimum of 24 General Education credits at the post-secondary level over the duration of the entire 3 or 4 year degree program. For degrees that require a diploma or equivalent for admission, the program can determine that appropriate General Education credits were earned at the diploma level. The following provides a guideline for the breakdown of General Education credits for BCIT bachelor degrees:

  i. 9 credits from written and oral communication courses (such as, but not limited to BCIT COMM courses, and LIBS 7001); and,

  ii. 3 credits from an applied ethics course, either specific to the core discipline, or general in nature (such as, but not limited to BCIT LIBS 7002); and,

  iii. 3 credits in management principles, either specific to the discipline, or general in nature (such as, but not limited to BCIT BUSA 7250); and,

  iv. 9 credits from outside the core academic discipline, in at least 3 different academic disciplines at the first-year post-secondary level or above (such as but not limited to BCIT LIBS electives, which are multidisciplinary by design). "Outside the core discipline" will be determined in comparison to similar programs at peer institutions.

(l) Specific General Education requirements for each BCIT bachelor degree are outlined as appropriate on the program information pages of the specific program website (http://www.bcit.ca/study/).

2. *Knowledge of Methodologies and Research*

Have an understanding of methods of enquiry or creative activity, or both, in their primary area of study that enables the student to:

(a) Evaluate the appropriateness of different approaches to solving problems using well established ideas and techniques.

(b) Devise and sustain arguments or solve problems using these methods.

(c) Describe and comment upon particular aspects of current research or equivalent advanced scholarship in the general area of practice and within some specialty areas, and how these are relevant to the evolution of the discipline.

3. *Application of Knowledge*

(a) Demonstrate the ability to review, present, and critically evaluate qualitative and quantitative information to:

    i.   develop lines of argument;

    ii.   make sound judgments in accordance with the major theories, concepts and methods of the subject(s) of study;

    iii.   apply underlying concepts, principles, and techniques of analysis, both within and outside the discipline; and,

    iv.   where appropriate, use this knowledge in the creative process.

(b) Demonstrate the ability to use a range of established techniques to:

    i.   initiate and undertake critical evaluation of arguments, assumptions, abstract concepts, information, techniques, and practices;

    ii.   propose solutions;

    iii.   frame appropriate questions for the purpose of solving a problem; and

    iv.   solve a problem or create a new work.

(c) Have the ability to make critical use of scholarly reviews and primary sources.

(d) Analyse, design, plan, execute, and evaluate activities within current established general practices; recognize, define, and analyse novel problems and plan strategies for their solution, which may be based on limited data or diverse information sources.

(e) Creatively apply research knowledge, understanding, and diagnostic skills to new professional, managerial or technical situations, both in support of more senior colleagues and with peer groups.

(f) Apply the main practices and techniques of the area in a variety of technical, specialized, or professional contexts, including some which are novel, complex, or advanced.

(g) Apply numerical and graphical applications as required by the area and one or more of its specialities.

(h) Participate in work involving emerging techniques, practices, and applied research.

(i) Apply principles and adapt procedures to handle non-routine operational problems within the area of practice.

(j) Make some contribution to further development within the area of practice, its techniques, and practices.

(k) Integrate principles of sustainability and a global perspective into the area of practice.

4. *Communication Skills*

(a) Demonstrate an ability to communicate information, arguments, and analyses accurately and reliably, orally and in writing, to a range of audiences, to specialist and

non-specialist audiences, using structured and coherent arguments, appropriately informed by key concepts and techniques of the discipline.

(b) Develop and present a well-structured and supported line of argument both in writing and orally using appropriate media.

5. *Awareness of Limits of Knowledge*

Develop an understanding of the limits to their own knowledge and ability, and an appreciation of the uncertainty, ambiguity, and limits to knowledge and how this might influence analyses and interpretations.

6. *Professional Capacity / Autonomy*

(a) Demonstrate qualities and transferable skills necessary for further study, employment, community involvement, and other activities requiring:

    i.   the exercise of initiative, judgement, personal responsibility, and accountability in both personal and group contexts;

    ii. working effectively in a peer relationship with other qualified personnel;

    iii. behaviour consistent with academic and professional ethics and integrity.

(b) Perform a broad variety of technical and professional activities with the area of practice with substantial autonomy. Higher-level activities may be performed with supervision.

(c) Evaluate their own performance and the performance of others.

(d) Demonstrate an awareness of management principles.

(e) Take significant responsibility for the management of their own work and a range of resources.

(f) Supervise and lead individuals and small groups within the normal scope of practice.

Master's Degree

Graduate Certificate and Master's Degree programs build on knowledge and competencies acquired during related undergraduate study. By the completion of a BCIT Graduate Certificate or Master's Degree program, graduates are expected to achieve the following standards.

1. *Depth and Breadth of Knowledge*

(a) Develop a systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study, or area of professional practice.

(b) Have an in-depth knowledge and understanding of theories and concepts in one or more specialities in the area of practice.

2. *Knowledge of Methodologies and Research*

Develop a conceptual understanding and methodological competence that enables the graduate to:

(a) Have a working comprehension of how established techniques of research and inquiry are used to create and interpret knowledge in the discipline.

(b) Have a capacity to evaluate critically current research and advanced research and scholarship in the discipline or area of professional competence.

(c) Have a capacity to address complex issues and judgments based on established principles and techniques.

(d) Approach intellectual enquiry autonomously.

Based on that competence, graduates will have shown at least one of the following:

i.   The development and support of a sustained argument in written form;

ii. Originality in the application of knowledge;

iii. Contribution to new applied knowledge.

3. *Application of Knowledge*

   (a) Demonstrate competence in the research process by applying an existing body of knowledge in the research and critical analysis of a new question or of a specific problem or issue in a new setting.

   (b) Apply a significant range of complex knowledge, practices, and techniques to existing and new technical problems, areas of practice, and circumstances.

   (c) Demonstrate competence and initiative in some of the specialized, advanced, and evolving techniques and practices that may be outside the primary area of expertise of the individual.

   (d) Apply principles to, and adapt procedures for, complex operational problems that may advance or expand the area of practice.

   (e) Recognize the limitations of existing technologies.

   (f) Solve complex problems using existing technologies or by the innovative use of current or new technologies.

   (g) Organize, plan, and implement laterally to apply in different areas outside the limits of practice.

   (h) Apply and adapt numerical and graphical applications as required by the area and one or more of its specialties.

   (i) Integrate principles of sustainability and a global perspective into the area of practice.

4. *Communication Skills*

   (a) Demonstrate an ability to communicate ideas, issues, and conclusions clearly and effectively to specialist and non-specialist audiences.

   (b) Demonstrate an ability to communicate effectively with various levels and professions on an individual and collective basis within the general area of practice and in one or more specialty areas.

   (c) Develop, present, and defend a well-structured, supported, and reasoned line of argument and effectively use a range of media.

5. *Awareness of Limits of Knowledge*

   Develop a cognizance of the complexity of knowledge and of the potential contributions of other interpretations, methods, and disciplines.

6. *Professional Capacity / Autonomy*

   (a) Demonstrate qualities and transferable skills necessary for employment requiring:

      i.   the exercise of initiative and of personal responsibility and accountability;

      ii. decision-making in complex situations, such as employment;

      iii. the ability to make judgements often involving situations of ambiguity;

      iv. behaviour consistent with academic and professional ethics and integrity.

   (b) Develop the intellectual independence required for continuing professional development.

(c) Develop the ability to appreciate the broader implications of applying knowledge in particular contexts.

(d) Exercise substantial autonomy in all or most of the professional/technical activities within the area of practice.

(e) Take significant responsibility for the work of others, and for the management of resources.

(f) Work with others and demonstrate leadership in problem-solving to achieve personal and group objectives.

(g) Organize and manage teams within the normal scope of practice.

3. Naming of Programs and/or Credentials

3.1. Background and Rationale

The following guidelines have been adapted from the Degree Quality Assessment Board (http://www2.gov.bc.ca/assets/gov/education/post-secondary-education/institution-resources-administration/degree-authorization/appendix-degree-program-criteria.pdf) to assist program areas in determining the name of a program and/or credential they will offer when they are proposing new programs.

Program areas proposing new degree names should indicate on what basis a degree name has been selected. This should be determined within BCIT's overall approach to program and degree nomenclature and reflect historical practice in British Columbia and, where necessary, within the broader Canadian and international context.

While these statements may be directed specifically to degrees, these:

- guidelines apply only to new programs and those undergoing a name change; and,
- principles apply to all programs including certificates, diplomas, and both undergraduate and graduate programs.

3.2. General Guidelines for the Naming of Programs and/or Credentials

1. Credentials for new academic programs should ordinarily be selected from degree names that are widely used and generally understood. The list of degrees currently offered by British Columbia post-secondary institutions is already very comprehensive and normally should be able to accommodate most proposals for new academic programs.

2. A generic degree name that already incorporates a broad range of academic disciplines or subject areas is preferable to a multitude of specific degree names. Examples include the Bachelor of Science at the undergraduate level and the Master of Science at the graduate level.

3. The name should be descriptive of the general area of study.

4. The name should be appropriate for adoption by other British Columbia post-secondary institutions developing similar programs. Comparable, but not necessarily identical, programs should lead to equivalent credentials. To a certain extent the system has already demonstrated its flexibility as outlined in the following examples:

    - the degrees of "Bachelor of Applied Science" and "Bachelor of Engineering" are both used as engineering credentials. As the Bachelor of Applied Science is already identified with engineering, its use should be limited to such programs to avoid confusion. Since engineering programs are accredited by the

profession, this additional requirement should be a condition of approval for degrees using the phrase "Applied Science".

- "Bachelor of Commerce" and "Bachelor of Business Administration" are both used as business credentials.

Occasionally different degree names reflect institutional preferences and do not represent a divergence of academic programs. While the degree designations differ in name, the credentials are equivalent.

3.3. How to Indicate a Specialization (Field of Study) in the Program and/or Degree Name

BCIT and the DQAB assume the principal reason for proposing a distinct program or degree name is to indicate an academic area of specialization. The question is how to achieve this objective while adhering to the four general principles outlined above. Where appropriate the subject of specialization could be included as part of the program or degree name leading to a new genus of both baccalaureate and master's degrees.

Increasing specialization is the main reason for the existing diversity and continuing expansion of program and degree names. Over time certain models have evolved:

- including the specialization in the degree name itself, e.g., "Bachelor of Science in Nursing";

- indicating the specialization in parentheses after the degree name, e.g., "Bachelor of Technology (Construction Management)";

- creating new generic forms, e.g., "Bachelor of Interior Design".

New degrees which identify an area of specialization should fit into one of the following categories:

1. "Bachelor of Science in _____". This is a widely accepted method of indicating specialization. There is a clearly identified and specialized field of study which finds its roots in science, but which derives its distinctiveness from being located in a separate academic unit. Examples include biochemistry, radiation therapy, forestry, kinesiology, nursing, and pharmacy. From the examples given, there is a strong link to a particular profession. What should be noted is that, while the degree names follow a standard pattern, the degree initials do not. Examples are: B.Sc. (Geo.) and B.S.N. Either format is appropriate and does not appear to lead to confusion.

2. "Bachelor of _____ Science". This approach is similar to the previous method for naming degrees with a significant scientific component. In this instance a descriptive adjective is used to distinguish the branch of science. Examples include Bachelor of Applied Science and Bachelor of Health Science. Again, recognized academic units offer the degree and there is a connection with a particular profession.

3. "Bachelor of Technology in _____". While not as common as the comparable degree in science, there are instances where this approach has been adopted, e.g., Bachelor of Technology in Technology Management. To warrant a separate degree name there should also be a demonstrated link with a particular profession or occupation.

4. "Bachelor of Science (Ecological Restoration)". This approach to indicating specialization is achieved by showing the specialty in parentheses after the generic

degree. In British Columbia it has been used primarily to distinguish various kinds of science degrees. An example is the "Bachelor of Science (Computing)".

5. "Bachelor of _____ Studies". There is an increasing number of degrees with an interdisciplinary focus. As a result, there is greater usage of degree names incorporating the word "studies". This trend is found at both the graduate and undergraduate levels. The word "studies" appears to be used in instances where there is a well-defined academic program but where the course offerings are provided by several academic units, often including units from more than one school.

4. Credential Changes

Refer to Procedure 5401-PR2 for details on the impact of credential changes on graduating students.

5. Multiple Credentials

Refer to the Admission Procedure 5003-PR1, Section 3.3 for details on multiple credentials.

6. Posthumous Credentials

This process recognizes that the award of a credential posthumously requires a relaxation of the graduation requirements and should be treated with reasonable care.

1. The death of the student must be brought to the attention of the Student Success Department who will then confirm the information and notify the Registrar's Office, appropriate department, program head or department head, and other relevant stakeholders.

2. The Registrar's Office will confirm with the program head or department head (or designate) to determine if, at the time of death, the student:
   a) was actively enrolled in the program;
   b) had commenced the final term of the program and/or completed 80% or more of the credits required to graduate; and,
   c) was meeting the continuance requirements (i.e., not "required to discontinue").

   If these conditions are met, the Registrar may recommend that a credential be awarded posthumously.

3. A recommendation for a credential to be awarded posthumously can also be made by direct appeal to the Registrar through the program dean in the case where all the criteria are not met but there is strong program support and reason for special consideration.

4. The program head or department head submits the needed documentation and a recommendation to the Registrar for the credential to be awarded posthumously.

5. In cases where the credential was not completed, alternative credentials can be considered for issuance (e.g., certificate instead of diploma).

Those responsible for Convocation will, in consultation with the family of the student, consider how to award the credential.

Forms Associated with This Procedure

- BCIT Program Change Form database
- BCIT Learning and Teaching Centre guidelines
- Education Council-approved proposal templates (on the Academic Planning and Quality Assurance website)

Amendment History

Procedure 5401-PR1 was created to establish a separate procedure for dealing with credentials and related items, with elements adopted from the associated Policy 5401 and Procedure 5401-PR2 (formerly PR1).

1. Created (version 1)   2017 Mar 1
2. Revised (version 2)   2024 Apr 3

Scheduled Review Date

2026 April 3