

# School of Construction and the Environment

## **CERTIFICATE IN ESSENTIAL TECHNICAL SKILLS FOR ARCHITECTURE, CONSTRUCTION & ENGINEERING (“ACE”)**



The **Certificate in Essential Skills in Architecture, Construction & Engineering (“ACE Certificate”)**, is a unique work-based entry level educational program designed to introduce recent high school graduates to the worlds of Architecture, Engineering and Construction. Students will be introduced to skills, concepts and terminologies used in these sectors, participate in site visits, work on both physical and digital models, and hear from leaders in these professions. This is in preparation for the work-integrated-learning practicums, during which students are temporarily hired and paid as junior team members by BCIT industry partners, where they are given opportunities to apply the skills and knowledge they learned in a classroom setting in the real world!

The ACE Certificate is delivered to students in a blended format, which includes classes held at BCIT’s Burnaby campus, virtual learning through BCIT’s Learning Hub platform, fieldtrips to local design firms and construction sites and, finally, in the work environment. The aim of the program is to build an understanding of the spectrum of careers that exist within these fields and to prepare students to explore those careers via this unique immersive polytechnic program.

The ACE Certificate offers students a chance to become familiar with different areas of the construction process from design, planning and building perspectives, highlighting the importance of BIM (Building Information Modelling) and

Project Management. This exposure will help students make more informed decisions about the area of speciality that most interests them to both continue their education and consider a career path.

**July 2024 – August 2025 [14 months]**

The ACE Certificate is a 14-month program runs from July 2024–August 2025, and is comprised of two segments:

1. The first segment of the ACE Certificate, the **ACE Summer Intensive**, runs from July 8 to August 2, 2024. Classes are held at the BCIT Burnaby Campus (3700 Willingdon Avenue, Burnaby, BC.) Monday to Friday from 9:00 am to 4:00 pm.

- **ACED 1200 Digital Modelling Fundamentals** (3.0 credits, in-person)
- **ACED 1210 Introduction to Construction Project Management** (2.0 credits, in-person)
- **ACED 1220 Introduction to Building Technology** (3.0 credits, in-person)

Students who successfully complete all three courses in the ACE Summer Intensive advance into the second segment of the ACE Certificate program.

2. The second segment of the ACE Certificate runs from September 2024 to August 2025, and includes the following elements:

a. Five online courses over one year:

- **ACED 1205 Revit Fundamentals** (3.0 credits, online)
- **COMM 1103 Intro to Business and Technical Communication** (3.0 credits, online)
- **BLDC 1050 Materials and Methods 1** (3.0 credits, online)
- **ACED 1305 Introduction to Systems – Structural, Mechanical & Electrical** (3.0 credits, online)
- **BLDT 1041 Basic Estimating with Computer Applications** (3.0 credits, online)

b. Two full-time paid practicum placements (‘work-integrated-learning’) supported by two practicum courses delivered over one year, concurrently with the above noted online courses.

The ACE Certificate has been developed in partnership with Gateshead College in the UK, and with Ryder Architecture, and is based on [PlanBEE](#), a similar program which has been offered by Gateshead College since 2016.

### **ENTRANCE RECOMMENDATIONS:**

It is recommended that applicants to the program possess the following skills and experience prior to entry:

- English 12 or equivalent
- Basic computer proficiency
- Good business communication skills, and/or the desire to develop or improve them (including speaking on the phone and in person, and writing emails)
- A keen interest in exploring careers within the field of Architecture, Construction and Engineering

Interested students should contact Ann Martineau for more information and to request an application package.

### **FOR MORE INFORMATION:**

**ANN MARTINEAU | 604.412-7492 | [AMARTINEAU@BCIT.CA](mailto:AMARTINEAU@BCIT.CA) | [BCIT.CA](http://BCIT.CA)**



## APPLICATION PACKAGE:

### *Certificate in Essential Technical Skills for Architecture, Construction & Engineering (“ACE”)*

Thank you for your interest in the *Certificate in Essential Technical Skills for Architecture, Construction & Engineering* (“ACE Certificate”).

The ACE Certificate is a 14-month program, running from July 2024-August 2025, and is comprised of two segments:

1. ACE Summer Intensive

The ACE Summer Intensive runs from July 8 to August 2, 2024. Classes are held at the BCIT Burnaby Campus (3700 Willingdon Avenue, Burnaby, BC.) Monday to Friday from 9:00 am to 4:00 pm.

Students who successfully complete all three courses in the ACE Summer Intensive advance into the next segment of the ACE Certificate.

2. The next segment of the ACE Certificate runs from September 9, 2024 to August 29, 2025, and includes the following elements:

- a. Five online courses over one year, delivered concurrently with
- b. Two full-time paid practicum placements (‘work-integrated-learning’) supported by two practicum courses delivered over one year.

An information session for the ACE Certificate will take place on March 4, 2024, from 6:30 to 7:30 pm. You may register to attend through the following link: [ACE Certificate Info Session](#).

If you have any additional questions, please contact Ann Martineau, [amartineau@bcit.ca](mailto:amartineau@bcit.ca).



## Applying to the Program

Applications are accepted:

- February 1st\* to March 31st\*
- April 1st\* to May 31st\*

\*or next business day

This program has multiple application deadlines and may fill after each deadline date. We recommend that you apply early and include all supporting documents with your application.

## Entrance Requirements

- English 12 or equivalent
- Basic computer proficiency
- Good business communication skills, and/or the desire to develop or improve them
- A keen interest in exploring careers within the field of Architecture, Construction and Engineering

## Application Documents

To apply for the Certificate in Essential Technical Skills for Architecture, Construction & Engineering please submit the following by email to Ann Martineau, [amartineau@bcit.ca](mailto:amartineau@bcit.ca):

1. Your completed Certificate in Essential Technical Skills for Architecture, Construction & Engineering ("ACE") Application Form (attached).
2. Your 250-to-500-word essay, describing why you are applying to the ACE program and why you believe the ACE program is a good fit for you.
3. Your High School Transcript showing proof of completion, or proof of registration in, English 12 (or equivalent).
4. Two letters of reference from individuals that can speak to your qualities, experiences, and suitability for the ACE Certificate program. Referees can be your employer, a teacher, a volunteer organization, your coach, etc. (not a family member).
5. Optional: You may wish to submit a portfolio or examples of work that you have completed which may be considered relevant to your application to the ACE Certificate Program. This may include written materials (by you), images of projects you have completed, sketches, drawing plans, and any other details or information about your hobbies, interests, and extracurricular activities. Please submit your documents and images in PDF format.



**Application: Certificate in Essential Technical Skills for Architecture, Construction & Engineering (“ACE”)**  
 School of Construction and the Environment  
 3700 Willingdon Avenue, Burnaby, BC, Canada V5G 3H2  
 T 604.412.7492 F 604.435.4219 E [amartineau@bcit.ca](mailto:amartineau@bcit.ca)

**Instructions for fillable PDF form:** 1) Save this PDF to your desktop, 2) Open with Adobe Reader or Adobe Acrobat (not a browser), 3) Complete all required fields (\*), 4) Save form, 5) Close PDF then re-open form to ensure the content you filled in has been saved, 6) Submit completed and signed form to [amartineau@bcit.ca](mailto:amartineau@bcit.ca).

**This program is intended for Grade 12 students graduating in June 2024 and recent graduates with an interest in exploring the fields of Architecture, Construction and Engineering.**

**COLLECTION AND USE OF PERSONAL INFORMATION**

Personal information on this form is collected under the authority of College and Institute Act, RSBC, 1996, c. 52 and s. 26 of the Freedom of Information and Protection of Privacy Act, RSBC, 1996, c. 165 for admissions, enrolment, decisions on your academic status and other purposes related to you attending a post-secondary institution in the Province of British Columbia and being a member of the BCIT community including the BCIT Student Association, BCIT Alumni Association, and BCIT Foundation. The information that you provide is used and disclosed for these purposes and only in accordance with the above legislation or as required by provincial or federal government authorities. If you have any privacy concerns, please visit [bcit.ca/admission/privacy](http://bcit.ca/admission/privacy) or contact the Associate Director, Privacy; 3700 Willingdon Ave, Burnaby, BC V5G 3H2; tel: 604.432.8508; email: [privacy@bcit.ca](mailto:privacy@bcit.ca)

**CONTACT INFORMATION**

Fields marked with an asterisk (\*) are mandatory.

First Name (given name)*	Middle Name	Last Name (family name)*	
Mailing Address (number and street)*			
City*	Province*	Postal Code*	Personal Phone Number*
Country*	Email Address*		

**KNOWLEDGE/SKILLS:**

I confirm the following\*:

<input type="checkbox"/>	I am currently in Grade 12 (or have recently graduated)	School Name:	
<input type="checkbox"/>	I have completed or I am currently enrolled in English 12 ( <a href="#">or equivalent</a> )		
<input type="checkbox"/>	I have Basic Computer Proficiency		
<input type="checkbox"/>	I possess good communication skills and/or I have the desire to develop good communication skills		
<input type="checkbox"/>	I have an interest in pursuing a career in the field of Architecture, Construction, Construction Management or Engineering		

**If I am accepted into this program, I acknowledge that I understand the following:**

There are three components to the ACE Certificate, which runs from July 2024 to August 2025:	
July 8 to Aug 2, 2024	The “ACE Summer Intensive”, consists of: Three (3) courses, delivered in person at the BCIT Burnaby Campus.
Sept 2024 to Feb 2025 Mar 2025 to Aug 2025	Two (2) 6-month paid practicum placements and related practicum courses.
Sept 2024 to Aug 2025	Five (5) online courses delivered concurrently with the above noted work placements/practicums.
I must successfully complete the ACE Summer Intensive (three courses) to continue in the ACE Certificate program.	
I am expected to adhere to BCIT’s standards for Academic Integrity (see <a href="http://bcit.ca/student-conduct/academic-integrity/">bcit.ca/student-conduct/academic-integrity/</a> ).	

**BCIT PATHWAY PROGRAMS:**

One of the goals of the ACE Certificate is to help students understand where their career and educational interests lie. There are three BCIT programs listed below that some graduates of the ACE Certificate may be interested in pursuing. The entrance requirements for the BCIT programs below are not required for acceptance into the ACE Certificate; the entrance requirements are provided for additional information and to support your educational planning (see chart below).

*NOTE: Students wishing to pursue further studies in one these programs must ensure that they meet all relevant entrance requirements prior to September 2025.*

Civil Engineering - Diploma			Architectural and Building Technology - Diploma			Interior Design Fundamentals - Certificate
<i>Pre-Calculus 12</i>	<i>Physics 11/12</i>	<i>Chemistry 11</i>	<i>Pre-Calculus 12</i>	<i>Physics 11/12</i>	<i>Math 11</i>	
<i>Please tick any courses in the row above that you have completed or are currently enrolled in</i>						

Please describe why you are applying for the *Certificate in Essential Technical Skills for Architecture, Construction & Engineering* at BCIT. (Between 250 – 500 words. Feel free to use a separate page.)

You may wish to consider the following questions when formulating your response:

*What are your interests as they relate to the fields of Architecture, Construction and Engineering?*

*Why do you think that this program is a good fit for you?*

*What do you hope to gain from this program?*

*The ACE Certificate involves working full-time while concurrently completing online studies; how will you manage your time?*

**By signing this form, I confirm all of the above information to be true and accurate.**

Signature*	Date (DD-MMM-YYYY)*
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