



Certificate in Biomedical Engineering

Frequency Asked Questions

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This document offers answers to common questions about the Certificate in Biomedical Engineering certificate offered by the Faculty of Engineering.

What is the Certificate in Biomedical Engineering?

The Certificate in Biomedical Engineering is a recognition for students in Electrical, Mechanical, Chemical and Industrial Engineering who specialize their studies in biomedical engineering by directing their coursework and senior year project towards biomedical topics and by taking a course in anatomy or physiology outside their degree program. This specialization is recognized with a certificate delivered with your parchment at convocation or from the registrar's office. Details on Dalhousie Certificate programs can be found here:

<https://academiccalendar.dal.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=117&chapterid=7474&loadusercredits=False>

Where can I find the requirements for the Certificate in Biomedical Engineering?

The current requirements for the Certificate can be found at

<https://academiccalendar.dal.ca/Catalog/ViewCatalog.aspx?pageid=viewcatalog&catalogid=117&chapterid=7474&topicgroupid=33077&loadusercredits=False>

I want to get a Certificate in Biomedical Engineering. How do I sign up?

You sign up for the Certificate via Dal Online by taking the following steps:

1. In DalOnline select the Student tab and click Admissions
2. Click *Declare your Major/Minor*
3. Fill in your banner ID, name and email in the fields at the top of the page.
4. At the bottom of the page, from the Certificate menu, select *Biomedical Engineering*
5. Click the Submit Information button

If I register for the certificate but fail to meet the requirements, what happens?

If you fail to meet the requirements for the certificate you will not receive the certificate, but there is no other record on your transcript or diploma showing that you registered for it and did not complete it. You will remain registered in the certificate after you graduate and you can still receive your certificate post-graduation if you complete all requirements within 36 months of registering for the certificate. This allows you, for instance, to take additional courses after graduation in order to complete the requirements if you are not able to do so during your undergraduate degree.

I met some of the requirements before I registered for the certificate. Do they still count?

Yes. You can count courses or senior year projects done prior to registering for the certificate toward the certificate.

How do I meet the requirement 1a for PHYL 1001 Human Physiology or ANAT 1010 Basic Human Anatomy?

Anatomy and Physiology are the two most foundational topics in medicine. Anatomy concerns the different parts of the human body. Physiology concerns how systems within the body perform important functions like delivering oxygen and nutrients, controlling motion and removing wastes. Both courses may be taken either in-person or online (distance learning) and are offered in multiple semesters during the school year. Please check the Online Academic Timetable for current listings. The availability of these courses as online courses makes it feasible to take them in addition to the standard engineering curriculum either during academic terms or during co-op terms (as long as the coursework is done on evenings and weekends). Neither course has a pre-requisite and you can register for them the same way you do any other course through Dal Online.

How do I meet requirement 1b for a discipline-specific core course?

The courses listed in 1b are core courses within your program that must be taken by all students within your discipline. You will register for the relevant discipline-specific course when you register for your program.

How do I meet requirement 1c for “one additional Biomedical Engineering-related courses”?

Most students will meet this requirement by taking a biomedical-related technical elective within their discipline from the courses listed. Alternatively, students may take one of the biomedical courses from a different discipline if it fits with their schedule and with permission from the course instructor and their undergraduate advisor. For example, a mechanical engineering student could meet requirement 1c by taking ECED4760 with permission of the instructor and the mechanical engineering undergraduate advisor. Alternatively, students may take courses with biomedical content within the Faculties of Medicine, Dentistry, Science or Health with approval from the Certificate Director, Dr Rob Adamson (rob.adamson@dal.ca) and with permission of the instructor. Please see the Undergraduate Calendar for courses offered in these other faculties.

How do I meet the sub-requirement of requirement 2 that my Senior Year Project must be designated as “being on a biomedical engineering topic by their department’s senior year project coordinator”?

When you go to register for a senior year project, the senior year project coordinator will indicate which projects are eligible for the certificate. You are strongly encouraged to form a group with other students who are interested in the certificate program to help ensure that everybody who wants a biomedical project can do one. In some disciplines you also have the option of proposing a project if you can't find one that seems suitable. You can consult with your senior year project coordinator on the applicable rules on senior year projects within your department. The Certificate coordinator, Dr. Rob Adamson (rob.adamson@dal.ca), can help if you are having trouble finding a senior year project to meet the Certificate requirements.

I've met all the requirements. When do I receive my certificate?

If you complete all the requirements before graduating then the Biomedical Engineering Certificate will be given to you at convocation along with your degree or can be sent by mail from the registrar's office on request. Even if you have registered for the Certificate and meet all its requirements before graduating you still must wait until you graduate with your engineering degree in order to receive the certificate. If you have not met all your Certificate requirements at the time of graduation, you have up to 36 months from the time you registered in the Certificate to complete the requirements. If you complete your Certificate requirements after graduating, please notify the certificate coordinator, Dr. Rob Adamson (rob.adamson@dal.ca) when you have completed the requirements and the registrar's office will issue a Certificate to you.

I have more questions. How do I get them answered?

If you have any more questions, you can contact the Certificate Coordinator, Dr. Rob Adamson at (rob.adamson@dal.ca).