





# Neuroscience & Neurotechnology Primer



The foundational course for the Neurotech Micro-Credential Program provides a primer on basic neuroscience principles and covers the spectrum of neurotechnologies. The asynchronous online modules focus on:

 <p><b>Module 01</b></p> <p><b>Neuroscience Primer</b> An orientation to the basic anatomy and physiology of the brain.</p>	 <p><b>Module 02</b></p> <p><b>Neuroprosthetics</b> A deep dive into the auditory, visual, and motor systems by examining neural prosthetic devices.</p>	 <p><b>Module 03</b></p> <p><b>Neuroimaging Primer</b> A review of the ways minimally-invasive technologies can be used to image the structure and function of the brain.</p>	 <p><b>Module 04</b></p> <p><b>Neurostimulation Primer</b> A survey of invasive and non-invasive technologies used to stimulate the nervous system.</p>
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## 🕒 Timeline

Course must be completed in  
**11 weeks**

Completing course takes approximately  
**50 hours**

## 💻 Tech Requirements

Regular access to a computer and a stable internet connection

Compatible internet browser  
(Google Chrome is recommended)

## 📋 Prerequisites

Being currently enrolled in, or having previously graduated from, an undergraduate degree program.

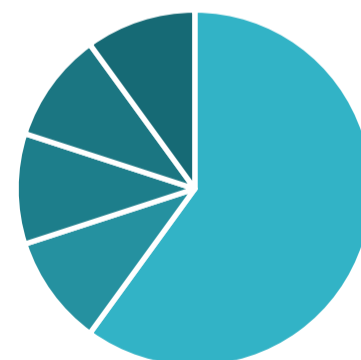
## 💡 Learning Outcomes

1. Differentiate between the different neurotechnologies and their use cases.
2. Obtain skill in exploring brain atlases, using MRI viewers, and building neuronal models to learn about the basic brain systems and processes relevant for neurotech.
3. Compare and contrast application of various neurotechnologies in assessing and modulating brain structure and function.

## 📊 Assessments

A pass in this course requires achievement of an overall grade of 70%.

4x **10%**  
**Asynchronous Quizzes**  
(1 per module)



**60%**  
**Final Synchronous Oral Exam**

## 📞 Contact Information

### Content and Accommodation Related Questions:

[neurotech.microcredentials@queensu.ca](mailto:neurotech.microcredentials@queensu.ca)

### Health Sci Ed Connect (HSEC) Technology Support:

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