

## Job Posting for Subject Matter Expert in Back-End Website Development

### Department Description:

[McMaster Continuing Education](#) (MCE) provides professional education to individuals and corporate clients, to enhance careers and foster workforce development. Our vision is “to achieve national distinction for high quality, flexible and innovative professional education programs”.

### Position Description:

MCE is currently accepting applications for subject matter experts for the Back-End Development program area. In this role, you will provide subject matter expertise, relevant industry/professional knowledge, and pedagogical practices to the development of an online course.

### Courses:

Subject matter experts are required for the development of the following courses (descriptions below):

#### Back-End Development

In this course, students will learn about the purpose of back-end development and how servers, databases and the code that makes them drive web applications. Students will be given opportunities to apply their knowledge through case study scenarios which will enable development of their knowledge of the complex structure of a website. Students will also examine current development systems like Amazon Web Services and e-commerce sites to better understand how their systems align with the future of website development.

#### Interactivity and Databases

In this course, students will learn about the structure of database systems within a website and how their code will impact the interactivity with that database system. Students will learn how to set up and configure a database, how information is queried from the database, how systems work with the front-end of a website, the difference in database capability and the structured query language (SQL).

#### Advanced JavaScript through Node.JS

Students will deepen their understanding of the JavaScript system and apply their knowledge through developing the back-end of a website using Node.JS. During this course, students will learn to develop their application programming interfaces (APIs), Lambda, and apply their knowledge by developing foundational code that will allow users to take action on any website.

### **Accountabilities:**

1. Develop structure for online course including all curricular and assessment elements.
2. Prepare course outline as per the standards and requirements of the department.
3. Work collaboratively with an instructional designer and learning systems technologist according to established timelines.
4. Investigate relevant literature and pedagogical practices to enable an engaging learning experience.
5. Select and prepare content including text, visuals, and other learning assets such as podcasts and short videos for all modules/units/lessons and in compliance with accessibility standards.
6. Develop and update learning activities including formative quizzes, reflective exercises, case studies, discussion board activities that re-enforce learning, in consultation with the instructional designer.
7. Prepare comprehensive evaluation files including but not limited to, pedagogically meaningful tests, written assignments and projects.
8. Cite and document all quotations, summaries, and paraphrases taken from secondary sources according to disciplinary standards (i.e., APA).
9. Ensure that all copyright standards are met.
10. Participate in quality assurance review of modules, assignments, and course as a whole.

### **Qualifications:**

The ideal candidate will be a subject matter expert with professional experience in Full-Stack Website development. Experience with user experience and user interface design and multiple coding languages are an asset. A minimum of a Bachelor's degree in relevant subject area is required. Additional requirements include broad sector knowledge, strong writing, interpersonal and organizational skills, proven research skills and problem-solving ability and computer acumen.

### **Interested candidates:**

Send resume and cover letter to McMaster Continuing Education (Instructor/SME email account), [instrapp@mcmaster.ca](mailto:instrapp@mcmaster.ca). Please indicate "Back-End Development SME Application" in the subject line and note the courses you are interested in developing in the body of the email.

*Only qualified candidates will be contacted. MCE does not send confirmation of receipt of applications.*

### **Employment Equity Statement**

McMaster University is located on the traditional territories of the Haudenosaunee and Mississauga Nations and within the lands protected by the "Dish With One Spoon" wampum agreement.

The diversity of our workforce is at the core of our innovation and creativity and strengthens our research and teaching excellence. In keeping with its Statement on Building an Inclusive Community with a Shared Purpose, McMaster University strives to embody the values of respect, collaboration and diversity and has a strong commitment to employment equity.

The University seeks qualified candidates who share our commitment to equity and inclusion, who will contribute to the diversification of ideas and perspectives, and especially welcomes applications from indigenous (First Nations, Métis or Inuit) peoples, members of racialized communities, persons with disabilities, women, and persons who identify as 2SLGBTQ+.

Job applicants requiring an accommodation to participate in the hiring process should contact the [Human Resources Service Centre](#) at 905-525-9140 ext. 222-HR (22247) to communicate accommodation needs.