

# DevOps Level 2

**Beyond the Cloud** is designed to empower you for success in the rapidly evolving IT landscape. This is a 10-week comprehensive program that provides essential technical and soft skills training for in-demand digital infrastructure roles. Please note *Transition to your Cloud Career* and *Agile Industry Mindset (AIM)* workshops run concurrently with Technical and Soft Skills courses during the 10-week period. Please contact your administrator for the schedule. Only Newcomers to Canada are invited to AIM (a newcomer is someone who has immigrated to Canada within the last 5 years).

Course Name	Lessons	Learning Platform	Learning Objectives	Level and Time Commitment
<b>Course 1</b> <b>DevOps Culture and Mindset (4 units)</b>	<ul style="list-style-type: none"> <li>• DevOps Foundation</li> </ul>	Courseera	This course gives you the basic foundational principles of DevOps with a particular focus on culture and the DevOps mindset. We'll learn about how DevOps is grounded in lean principles, and how it can help improve collaboration between developers and operations team members. We'll learn about ideas regarding systems thinking, feedback loops, continuous improvement, loosely coupled architecture and teams, managing risk, and dealing with unplanned work. We'll learn about strategies to manage work, monitor it, keep it organized, and maintain a high level of quality by following key DevOps principles. You'll learn about value stream mapping, and ensuring continuous workflow. Ultimately, we'll learn key ideas and tactics that you can employ at your own organizations to improve both time-to-market and increase the value delivered for your customers, no matter your product line or industry.	<ul style="list-style-type: none"> <li>• Intermediate level</li> <li>• 14 hours (approximately)</li> </ul>
<b>Course 2</b> <b>DevOps Engineering on AWS</b>	<ul style="list-style-type: none"> <li>• Cloud Operations</li> </ul>	AWS Skill Builder	DevOps Engineering on AWS teaches you how to use the combination of tools, practices, and cultural philosophy of DevOps to improve an organization's ability to develop, deliver, and maintain applications and services at high velocity on AWS. This course covers Continuous Integration (CI), Continuous Delivery (CD), microservices, infrastructure as code, monitoring and logging, and communication and collaboration.	<ul style="list-style-type: none"> <li>• Intermediate level</li> <li>• 24 hours (approximately)</li> </ul>
<b>Course 3</b> <b>Managing Cloud-native Applications with Kubernetes</b>	<ul style="list-style-type: none"> <li>• Kubernetes</li> </ul>	Courseera	Use Kubernetes container management capabilities to deploy containerized applications. Create Kubernetes resources holding application configuration and secrets, and inject those values into applications. Enable intra-pod network communications for applications deployed in Kubernetes.	<ul style="list-style-type: none"> <li>• Intermediate level</li> <li>• 8 hours (approximately)</li> </ul>
<b>Course 4</b> <b>Developing Solutions for Microsoft Azure</b>	<ul style="list-style-type: none"> <li>• Azure Development</li> </ul>	Microsoft Learn	This course teaches developers how to create end-to-end solutions in Microsoft Azure. Students will learn how to implement Azure compute solutions, create Azure Functions, implement and manage web apps, develop solutions utilizing Azure storage, implement authentication and authorization, and secure their solutions by using KeyVault and Managed Identities. Students will also learn how to connect to and consume Azure services and third-party services, and include event- and message-based models in their solutions. The course also covers monitoring, troubleshooting, and optimizing Azure solutions.	<ul style="list-style-type: none"> <li>• Intermediate level</li> <li>• 15 hours (approximately)</li> </ul>
TOTAL HOURS				61 hours (approximately)