

# Cloud Computing

ICTC's WIL Digital Cloud Computing e-learning course introduces students to critical foundations of data storage and data movement within the cloud system. This course will allow students to strengthen their understanding, while applying practical knowledge for work placement data security.

Modules		Lessons	Learning Objectives	
Module 1	<b>Introduction to Cloud Computing</b>	<ul style="list-style-type: none"> <li>History of cloud and key concepts</li> <li>Hosting models</li> <li>Cloud service models</li> <li>Types of cloud</li> <li>Main cloud services</li> </ul>	<ul style="list-style-type: none"> <li>Analyzing history of cloud technologies</li> <li>Reviewing different service models, and types of cloud infrastructure</li> </ul>	Padlet Discussion
Module 2	<b>Cloud-native application development</b>	<ul style="list-style-type: none"> <li>Introduction to the cloud-native industry and history</li> <li>Key industry actors</li> <li>Software development approaches</li> <li>Intro to containers</li> <li>DevOps</li> <li>Related infrastructure concepts</li> </ul>	<ul style="list-style-type: none"> <li>Exploring the cloud-native industry, main technologies</li> <li>Understanding impact for developers</li> </ul>	Padlet Discussion
Module 3	<b>Cloud Economics</b>	<ul style="list-style-type: none"> <li>Cloud providers</li> <li>Economics of cloud computing</li> <li>Cloud service considerations</li> <li>Industry examples</li> <li>Cloud business cases</li> </ul>	<ul style="list-style-type: none"> <li>Understanding the economics of cloud computing</li> <li>Analyzing business case building process to justify cloud investments</li> </ul>	Quiz
Module 4	<b>Business Applications</b>	<ul style="list-style-type: none"> <li>Case study examples</li> <li>Implementation in practice</li> <li>SME interview</li> </ul>	<ul style="list-style-type: none"> <li>Learning from industry cases</li> <li>Discovering cloud-based implementations</li> </ul>	Padlet Discussion
Module 5	<b>Societal Impacts</b>	<ul style="list-style-type: none"> <li>Environmental impact</li> <li>Sovereignty</li> <li>Open source</li> </ul>	<ul style="list-style-type: none"> <li>Exploring potential environmental and social impact for cloud-enabled systems</li> </ul>	Padlet Discussion
Module 6	<b>Canadian context and career opportunities</b>	<ul style="list-style-type: none"> <li>Vendor-led training and professional certifications</li> <li>University and college training</li> <li>Career opportunities and main roles</li> </ul>	<ul style="list-style-type: none"> <li>Learning about the main actors in cloud computing</li> <li>Related opportunities for cloud computing careers in Canada</li> </ul>	Padlet Discussion