

# Network Administrator 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.

Course Name	Lessons	Learning Platform	Learning Objectives	Level and Time Commitment
<b>Course 1</b> Network Systems Foundations	<ul style="list-style-type: none"> <li>• Network Design</li> <li>• Networking Fundamentals</li> </ul>	Courseera	Describe networking layers in depth and how they relate to one another. Design a simplified routing protocol that has similar features as to what powers the Internet. Analyze traffic through python programming. Develop a client and server with socket programming.	<ul style="list-style-type: none"> <li>• Intermediate level</li> <li>• 19 hours (approximately)</li> </ul>
<b>Course 2</b> TCP/IP and Advanced Topics	<ul style="list-style-type: none"> <li>• TCP/IP</li> </ul>	Courseera	In this course, we give an in-depth study of the TCP/IP protocols. We examine the details of how IP enables communications across a collection of networks. We pay particular attention to the hierarchical structure of IP addresses and explain their role in ensuring scalability of the Internet. The role of address prefixes and the uses of masks are explained in details. We review in details about TCP three-way handshake, flow control, and congestion control. Furthermore, we provide an introduction to some advanced topics, including Multicast, SDN and security	<ul style="list-style-type: none"> <li>• Intermediate level</li> <li>• 16 hours (approximately)</li> </ul>
<b>Course 3</b> Designing and Implementing Microsoft Azure Networking Solutions	<ul style="list-style-type: none"> <li>• Networking</li> </ul>	Microsoft Learn	This course covers the process of designing, implementing, and managing core Azure networking infrastructure, Hybrid Networking connections, load balancing traffic, network routing, private access to Azure services, network security and monitoring. Learn how to design and implement a secure, reliable, network infrastructure in Azure and how to establish hybrid connectivity, routing, private access to Azure services, and monitoring in Azure. This course helps prepare you for the AZ-700 exam.	<ul style="list-style-type: none"> <li>• Intermediate level</li> <li>• 11 hours (approximately)</li> </ul>
<b>Course 4</b> Managing Network Security	<ul style="list-style-type: none"> <li>• Network Security</li> </ul>	Courseera	Describe the threats to data from information communication technology (ICT). Identify the practices, tools, and methodologies associated with assessing network security. Identify the issues and practices associated with managing network security. Describe the components of an effective network security program.	<ul style="list-style-type: none"> <li>• Beginner level</li> <li>• 15 hours (approximately)</li> </ul>
<b>Course 5</b> Microsoft Azure Security Technologies	<ul style="list-style-type: none"> <li>• Network Security</li> </ul>	Microsoft Learn	This course provides IT Security Professionals with the knowledge and skills needed to implement security controls, maintain an organization's security posture, and identify and remediate security vulnerabilities. This course includes security for identity and access, platform protection, data and applications, and security operations.	<ul style="list-style-type: none"> <li>• Intermediate level</li> <li>• 20 hours (approximately)</li> </ul>
TOTAL HOURS				81 hours (approximately)