



CIST-201 – Windows Administration 2

Technology

Effective Term & Year: Fall 2026

Course Outline Review Date: 2031-03-01

Program Area: Information Technology

Description:

In this course, students extend their understanding of Windows server administration by applying core system administration concepts to cloud and hybrid environments using Microsoft Azure. Topics include identity and access management, virtual networking, compute, storage, data protection, and monitoring.

Students gain hands-on experience deploying and managing Azure resources through practical labs and applied scenarios. The course is aligned with the Microsoft Azure Administrator Associate certification and is designed to prepare students for entry-level roles in cloud and hybrid infrastructure administration.

Program Information:

This course is required for the second year of the Computer Information Systems Technology program.

Delivery Methods: Hybrid – On-campus (Face-to-Face) and Online

Credit Type: College of the Rockies Credits

Credits: 3

Instructional Activity and Hours:

Activity	Hours
Classroom, Directed Studies or Online Instruction	20

Seminar/Tutorials	
Laboratory/Studio	40
Practicum/Field Experience	
Co-op/Work Experience	
Other	
Total	60

Course Requisites:

- Completed the following:
 - [CIST109](#) – Windows Administration 1 (3)

Prior Learning and Recognition: Yes

Students are able to request formal recognition of their prior learning or experience outside the classroom. Challenge examination, portfolio-assisted assessment, work-based assessment or a combination of assessments that is appropriate to identify, assess, and recognize prior skills, competencies, and knowledge to achieve course credit. Tuition fees apply, refer to [Policy 2.5.5 Prior Learning Assessment and Recognition \(PLAR\)](#) or contact an education advisor for more information.

Course Transfer Credit:

For information about receiving transfer credit for courses taken at either British Columbia or Alberta institutions, please see <https://www.bctransferguide.ca/> or <https://transferalberta.alberta.ca> . For more transfer credit information, please visit <https://www.cotr.bc.ca/Transfer>

All requests for course transfer credit from institutions in British Columbia or elsewhere should go to the College of the Rockies Enrolment Services office.

Textbook Resources:

Instructor Provided.

Learning Outcomes:

Upon the successful completion of this course, students will be able to:

- administer identity, access, and governance in Azure by configuring Microsoft Entra ID, users, groups, roles, role-based access control (RBAC), and security policies that support compliance and secure access;
- deploy and configure Azure Virtual Machines by selecting appropriate compute options, managing extensions, configuring availability sets, and applying scaling strategies that support reliable workload performance;
- design and manage virtual networks by configuring subnets, IP addressing, network security groups (NSGs), load balancers, and secure connectivity options that support protected and resilient cloud operations;
- implement and manage Azure storage solutions by configuring Blob, File, and Disk storage services with appropriate access controls, redundancy options, and data protection measures including backup, replication, and disaster recovery;
- apply cloud security best practices by implementing multi-factor authentication (MFA), conditional access policies, Azure Key Vault, and zero-trust principles to protect identity, data, and resources across cloud and hybrid environments; and
- monitor and troubleshoot Azure infrastructure by using Azure Monitor, Log Analytics, and diagnostic tools to maintain visibility, identify issues, and support the ongoing performance and integrity of deployed cloud solutions.

Course Topics:

- Identity
- Governance and Compliance
- Azure Administration
- Virtual Networking
- Intersite Connectivity
- Network Traffic Management
- Azure Storage
- Azure Virtual Machines
- Serverless Computing
- Data Protection
- Monitoring

See instructor's syllabus for the detailed outline of weekly readings, activities and assignments.

Evaluation and Assessments

Assessment Type: On-Campus (face-to-face)

Assessment Type	% of Total Grade
Assignments/Labs	40%
Project	25%
Participation	5%

Final Exam	30%
Total	100%

Grade Scheme

A+	A	A-	B+	B	B-	C+	C	C-	D	F
>=90	89-85	84-80	79-76	75-72	71-68	67-64	63-60	59-55	54-50	<50

Evaluation Notes: A grade of “D” grants credit, but may not be sufficient as a prerequisite for sequential courses.

Evaluation Notes Comments:

Please see the instructor’s syllabus for specific classroom policies related to this course, such as details of evaluation, penalties for late assignments and use of electronic aids.

Exam Attendance:

Students must attend all scheduled exams at the appointed time and place. Instructors may approve an alternate exam to accommodate an illness or personal crisis. Department heads will consider other written requests. Any student who misses a scheduled exam without prior approval will receive a “0” on the exam.

Academic Policies:

College of the Rockies policies related to courses can be found at <https://cotr.bc.ca/about-us/college-policies/> and include the following:

- Policy 2.1.4 Course Audit
- Policy 2.4.1 Credential Framework
- Policy 2.4.3 Students with Documented Disabilities
- Policy 2.4.4 Student Rights, Responsibilities and Conduct
- Policy 2.4.8 Academic Performance
- Policy 2.4.9 Student Feedback and Concerns
- Policy 2.4.11 Storage of Academic Works
- Policy 2.5.3 Student Appeal
- Policy 2.5.5 Prior Learning Assessment and Recognition (PLAR)

Course Changes:

The College of the Rockies updates course outlines regularly to meet changing educational, employment and marketing needs. The instructor will notify students in writing of any updates to this outline during the semester. The instructor reserves the right to revise, add or delete

material while meeting the learning outcomes of this course outline.