

## Data Center Curriculum

Aligned with Oracle's leadership in artificial intelligence, Oracle Academy is leading the way in providing technology education resources to prepare the next generation for fulfilling careers in data center technical operations.



Our data center curricula help learners build foundational knowledge and practical, job-ready skills needed to succeed in modern data center careers with industry-aligned data center technology education. It helps graduates become job ready, able to hit the ground running with real-world operational skills, reducing employer onboarding time and building a strong conduit of workforce-ready talent.

By combining technical concepts with hands-on operational experience and professional practices, these courses help educators equip the next generation of AI, cloud, and infrastructure professionals with the confidence, skills, and industry-relevant experience they need to fill entry-level data center technical roles in today's rapidly evolving digital economy.

Designed for community college and technical and vocational education, Oracle Academy data center curricula:

- provides institutions and their educators with industry-aligned, ready-to-teach resources that help prepare students for high-demand careers globally in data center operations, cloud infrastructure, and AI-driven technologies
- combines foundational concepts with hands-on, practical learning experiences that reflect real-world data center operations
- enables educators to support learners at multiple skill levels—from foundational exposure to more advanced operational and infrastructure support—while helping institutions strengthen workforce readiness initiatives and expand career pathways in rapidly growing technology fields
- delivers relevant, career-focused learning aligned with the evolving needs of industry globally.



## Curriculum

### Data Center Operations Foundations

This foundational course introduces practical concepts used in data center operations and critical facilities work. By the end of the course, learners will be able to:

- understand and explain data center basics and critical facility roles
- demonstrate safety-first and professional behavior
- understand key electrical and mechanical (HVAC) concepts
- recognize monitoring, alarms, and response procedures
- follow standard operating and emergency procedures
- use technical documentation and basic tools
- prepare for entry-level critical facilities roles.

**60 hours**

### Data Center Technician Foundations 1

This introductory course is designed to provide learners with practical knowledge and skills required for entry-level roles in data center operations and infrastructure support. By the end of this course, learners will be able to:

- explain core data center concepts and architectures
- understand cloud fundamentals and Oracle Cloud Infrastructure (OCI)
- apply structured troubleshooting methodologies
- demonstrate effective ticketing and communication practices
- recognize key hardware, cabling, and asset management principles used in modern data centers.

**60 hours**

### Data Center Technician Foundations 2

This intermediate-level course is designed to build on the foundational knowledge gained in Data Center Technician Foundations 1. It focuses on developing practical, job-ready skills required for real-world data center operations, field work, and infrastructure lifecycle management.

By the end of this course, learners will be able to:

demonstrate effective incident ownership and operational response behaviors

perform rack and stack installations following industry best practices

execute safe and compliant hardware decommissioning processes

operate effectively within a 24/7 data center environment using structured workflows, ticketing systems, and service level agreements (SLAs).

The course emphasizes hands-on operational tasks, professional practices, and real-world scenarios that prepare learners for entry-level and junior data center technician roles.

Prerequisite: Completion of Data Center Technician Foundations 1 or equivalent knowledge.

**50–60 hours**

*Suggested course times include instruction, guided practice, scenario simulations, projects, self-study/homework, and assessments. Courses are available in English language only.*

Oracle Academy's new data center-focused curricula prepares learners with the knowledge, hands-on experience, and professional skills they need to succeed in today's data center and cloud infrastructure environments. By combining foundational concepts with practical, real-world skills, the courses help educators develop the next generation of AI infrastructure professionals ready for successful careers in today's digital economy.

Oracle Academy, Oracle's global philanthropic educational program, is open to academic institutions and their educators to help advance student technology education, skills, innovation, and inclusion. We offer free teaching and learning resources — including curriculum, cloud, software, and more — that help develop key knowledge, hands-on practice, and career-relevant skills.

**Join Oracle Academy today and access all the benefits of membership.**

Learn more about Oracle Academy data center curriculum at [academy.oracle.com/datacenter](https://academy.oracle.com/datacenter)



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