



PROGRAM OVERVIEW

The DevOps for SysAdmins program transforms System Administrators into DevOps experts, learning automation, CI/CD, IaC, and more through hands-on exercises, culminating in a real-world capstone project. They'll emerge ready to tackle DevOps roles, applying critical skills to enhance system reliability and efficiency.



AUDIENCE

Systems Admins with a developer understanding.



INTENDED OUTCOME

Obtain a foundational understanding of the development process to bridge the gap between traditional SysAdmin and DevOps roles.

PRE-WORK

- **Fundamentals and Core Tools:** Review key command-line tools, scripting basics, and version control (Git) essential for DevOps.
- **Introduction to DevOps:** Understand the principles of DevOps, its impact on modern infrastructure, and cultural foundations.
- **Data Version Control Systems:** Explore tools and practices for tracking and managing data changes across environments.

ADVANCED TOPICS & PRACTICAL IMPLEMENTATION

- **Continuous Integration (CI):** Automate build and test processes to ensure fast, stable development pipelines.
- **Continuous Deployment (CD):** Implement automated deployment workflows to enable frequent, reliable releases.
- **Infrastructure as Code (IaC):** Manage and provision infrastructure using code with tools like Terraform or CloudFormation.
- **Containerization with Docker:** Package and run applications in isolated environments for consistency and portability.
- **Orchestration with Kubernetes:** Deploy and manage containerized workloads at scale using Kubernetes.
- **Monitoring and Logging:** Set up observability with tools like Prometheus, Grafana, and ELK stack for performance and diagnostics.
- **Cloud Services and Security:** Explore cloud platform services (AWS, Azure, GCP) with a focus on secure configuration and access controls.
- **Project and Wrap-Up:** Apply learning in a hands-on project simulating real-world DevOps workflows, tools, and decision-making.

SAMPLE LEARNING EXPERIENCE	Week 1	Week 2	Week 3	Week 4
Procured Self-Paced Learning	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>
Customized Assessment	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>
Instructor-Led	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>
Optional Office Hours	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>
Optional Q&A	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div></div>