

DevOps Foundation®

Certification Course

Course Overview

The sixteen (16) hour course provides an introduction to DevOps - the cultural and professional movement that stresses communication, collaboration, integration and automation in order to improve the flow of work between software developers and IT operations professionals. Improved workflows will result in an improved ability to design, develop, deploy and operate software and services faster.

Course Objectives	Course / Student Materials
<p>The learning objectives for DevOps Foundation include an understanding of:</p> <ul style="list-style-type: none"> - DevOps objectives and vocabulary - Benefits to the business and IT - Principles and practices including Continuous Integration, Continuous Delivery, testing, security and the Three Ways - DevOps relationship to Agile, Lean and ITSM - Improved workflows, communication and feedback loops - Automation practices including deployment pipelines and DevOps toolchains - Scaling DevOps for the enterprise - Critical success factors and key performance 	<ul style="list-style-type: none"> - Sixteen (16) hours of instructor-led training and exercise facilitation - DevOps - The Basics (pre-class resource) - Learner Manual (excellent post-class reference) - Participation in unique exercises designed to apply concepts - Sample documents, templates, tools and techniques - Access to additional sources of information and communities
Certification	Prerequisites
<p>Successfully passing (65%) the 60 minute exam, consisting of 40 multiple-choice questions, leads to the DevOps Foundation Certificate. The certification is governed and maintained by the DevOps Institute; exams are delivered through an</p>	<ul style="list-style-type: none"> - Completion of pre-class assignment - Familiarity with IT software development and operations responsibilities

<p>independent, global examination partner. The DevOps Foundation Certificate will be the pre-requisite for future DevOps certification courses.</p>	
<p>Audience</p> <ul style="list-style-type: none"> - Anyone seeking an understanding of DevOps principles, practices and cultural considerations - Organisations wanting to instill a common DevOps vocabulary and mindset - Employees and managers responsible for leading DevOps transformations - Consultants, internal and external suppliers 	

DevOps Foundation Course Outline

Day One	Day Two
<p>Course Introduction Course Goals Course Agenda</p>	<p>DevOps Organizational Considerations</p> <ul style="list-style-type: none"> · DevOps Skills · DevOps Teams · DevOps Organizational Structures · DevOps Roles
<p>Why DevOps?</p> <ul style="list-style-type: none"> · The Business Perspective · The IT Perspective · Dev and Ops Stereotypes: Perceptions and Realities 	<p>Promoting Collaboration □ Improving Communication</p>
<p>What is DevOps?</p> <ul style="list-style-type: none"> · DevOps Introduction · DevOps Stakeholders · DevOps Goals · DevOps Values 	<p>DevOps Practices</p> <ul style="list-style-type: none"> · Continuous Integration · Continuous Delivery · Continuous Deployment · Value Stream Mapping

<ul style="list-style-type: none"> • DevOps Business Value • What DevOps is NOT • Who's Doing DevOps • Enterprise DevOps 	<ul style="list-style-type: none"> • Kanban • Theory of Constraints • Experimentation and Learning • The Deming Cycle • Improvement Kata • Preparing for Failure • ITSM Process Improvement Practices
<p>DevOps and IT Performance</p> <ul style="list-style-type: none"> • Demonstrated Results <p>DevOps and Automation</p> <ul style="list-style-type: none"> • Automation Enablers <p>Measuring DevOps Success</p> <p>DevOps Principles □</p> <ul style="list-style-type: none"> • The Three Ways <p>DevOps Patterns</p> <p>DevOps and Other Frameworks □</p> <ul style="list-style-type: none"> • DevOps and Agile • DevOps and Lean • DevOps and IT Service Management 	<p>DevOps Automation Practices and Tool Categories</p> <ul style="list-style-type: none"> • DevOps Automation Practices • Where to Begin□ • Application Life Concerns and Tool Categories <p>Adopting a DevOps Culture</p> <p>Getting Started</p> <p>Challenges, Risks and Critical Success Factors</p>
<p>DevOps Culture□</p> <ul style="list-style-type: none"> • Understanding Organizational Culture • Characteristics of Organizational Culture • Characteristics of a DevOps Culture • Managing Culture Change 	<p>Summary □</p> <p>Additional Sources of Information □</p> <p>Exam Preparations □</p> <ul style="list-style-type: none"> • Exam Requirements, Question Weighting and Terminology List • Sample Examination Review
<p>Homework: Day 1 study aids, reading, sample exam</p>	<p>Classroom examination or receive voucher and book online</p>

This course will be taught in a physical classroom. This course will be covered in two days (eight hours per day). The exam can be taken at the end of the course in the classroom or online at a date and time convenient to the learner.

Note: This certifiable course has been developed by the DevOps Institute (DOI). Ranger4 is a DOI Registered Education Partner. The examination is delivered by PeopleCert.