

Implementing DevOps

14 PMI PDUs | 14 IIBA CDUs



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Instructor

Format:

Live Instructor-Led Online
through Zoom

Date: June 11 - 13, 2025

Time: 12:00 PM - 4:30 PM EST

Price: \$550 per person

To register:

Email Chris Remmert
cremmert@nysforum.org
and indicate the course
title in the subject line.

Technology and Attendance

Requirements:

Computer with a
browser, Zoom, a
microphone and
speaker. For this
workshop, camera
should be on if possible
and you must be
actively participating.

Applying DevOps requires well-defined goals and a good understanding of the different tools available and which ones are right for you.

This course will provide you with hands-on experience of a DevOps environment: planning and setting the strategy; designing and implementing the pipeline; automating the provisioning and configuration of infrastructure and deployment of systems; monitoring the pipeline and the systems with telemetry; identifying bottlenecks; and applying continuous improvement to evolve the pipeline and the architecture.

Certification:



ICAgile accredited course: The ICAgile Certified Professional, Implementing DevOps certification is granted on the successful completion of this course. This certification is part of the ICAgile DevOps track along with our Agile Fundamentals and Foundation of DevOps courses. We offer the complete ICAgile DevOps Track for those looking to become an ICAgile Certified Expert in DevOps (ICD-DO).

This course will contribute 14 PMI® professional development units (PDUs) towards your chosen certification (2 Power Skills, 4 Business Acumen and 8 Ways of Working)

Learning Outcomes:

During this course you will learn about:

- Identifying policies and processes to support DevOps and prepare a strategy for continuous delivery
- The impact of various architectural patterns on DevOps
- Designing a deployment pipeline and implement it
- Automating the provisioning and configuring of environments in the cloud
- Implementing telemetry monitoring to support continuous improvement
- Techniques for involving the customer in continuous improvement efforts
- Maturing the pipeline, including evolving the architecture, using virtualization and cloud computing, and ensuring compliance and governance is maintained.

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Great for:

- Developers working in DevOps teams.
- Operations staff supporting or working in DevOps teams.

Prerequisites

This is an advanced technical course. To get the most out of this course, you should have an understanding of fundamental agile and DevOps concepts. These are covered in our Agile Fundamentals and Foundation of DevOps courses. Experience using command lines is also important as some of the hands-on work is performed in a Bash shell.

This program is offered as a classroom-based course as well as a LiveOnline program. Our LiveOnline delivery is over three days (each four and a half hours in duration). The instructor is 100% live and interaction and learning objectives are the same as our in-person classes with the added benefit of being able to take this course from your home, your office or your home office. Since this class is delivered over half-days it allows for greater flexibility and leaves you with time each day for other work or activities.

Contents:

Continuous improvement follows a Plan-Do-Study-Act cycle, and this course follows that cycle.

Plan – identify the objectives.

- Identify what changes are needed in the culture, policies, and processes.
- Use Value Stream Mapping to identify waste in the process.
- Apply the Theory of Constraints to improve the process.
- Define an architecture, including the pipeline and its stages, to support the goals.

Do – build the pipeline.

- Implement the pipeline (as code) in Go CD.
- Evaluate the benefits of automating each stage in the pipeline.
- Provision a VM in AWS EC2 with Terraform.
- Configure the VM and deploy the system with Ansible.

Study – monitor the pipeline.

- Manage log data with the Elastic stack:
 - Collect log events with Logstash,
 - Aggregate them in Elasticsearch,
 - Analyse them with Kibana.
- Evaluate the benefits of different types of telemetry and the policies around it.
- Diagnose problems using the telemetry.
- Identify symptoms of security problems using the telemetry – DevSecOps.
- Evaluate policies and practices for support in production.
- Use formal techniques to elicit feedback from the users and customers.

Act – mature the pipeline

- Evolve the architecture in response to issues identified, for example:
 - Moving to microservices to address deployment problems.
 - Using cloud computing and containers to address performance and scalability.
- Evolve the pipeline in response to issues identified:
 - Evaluate release patterns to address deployment problems.
 - Engineer the pipeline to make it more robust.
 - Ensure compliance and governance needs are satisfied.