

DevOps Practitioner[®] Certification Courses



DevOpsInstitute.com

DevOps Defined

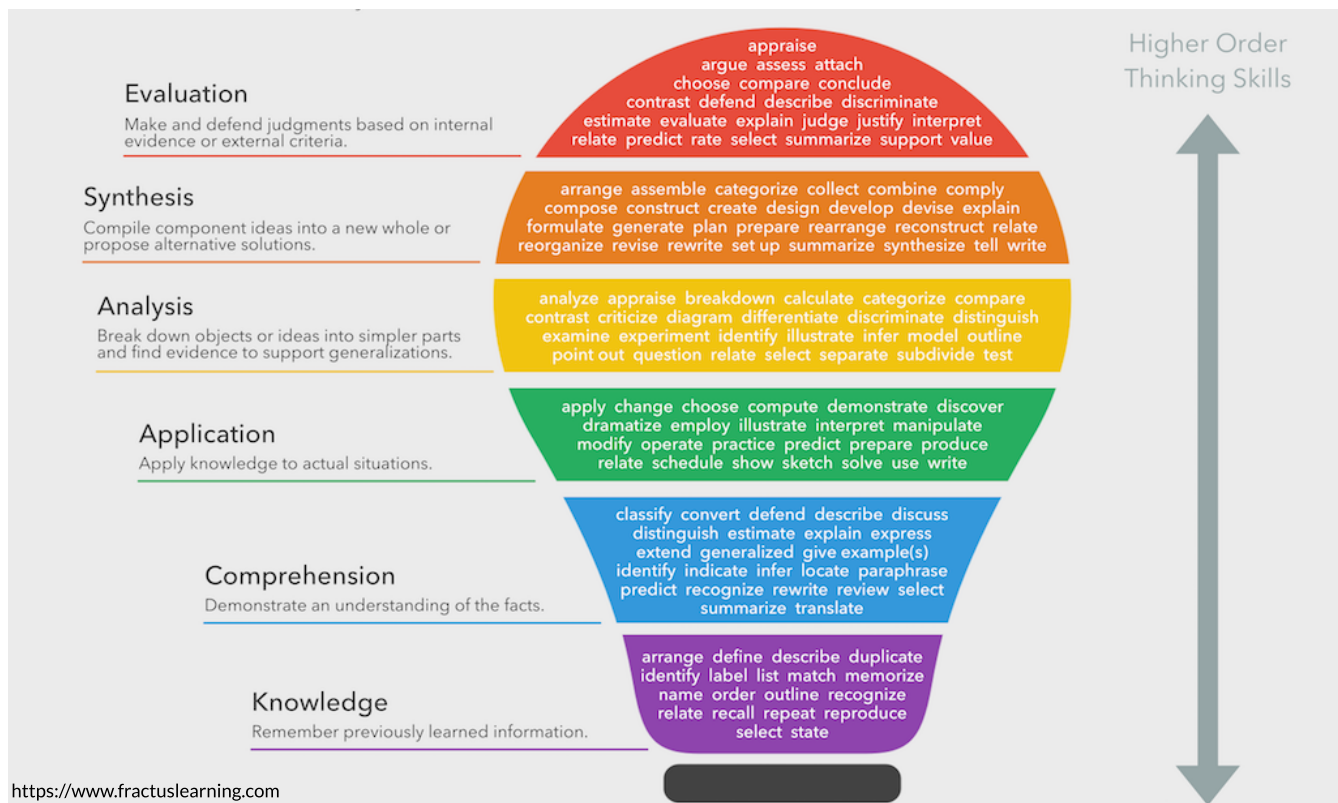
As the emerging practice grows, the definition of DevOps continues to change. According to Wikipedia, **DevOps** is a set of practices that emphasizes the collaboration and communication of both software developers and other information-technology (IT) professionals while automating the process of software delivery and infrastructure changes. It aims at establishing a culture and environment where building, testing, and releasing software can happen rapidly, frequently, and more reliably. Certified DevOps Practitioner roles fulfill this definition through evolutionary skills and improved communication and collaboration between IT teams.

What are our courses based on? Bloom's Taxonomy

DevOps Institute (DOI) courses are based on Bloom's Taxonomy. This educational model is used to categorize learning objectives and assess learning achievements.

The DevOps Foundation® Certification Course encompasses the **Knowledge** and **Comprehension** domains, while the DevOps Practitioner™ courses includes not only these first two domains, but also the **Application** area.

Bloom's Taxonomy Explained



Digital Badging and Membership Program

Digital Badging

DOI is proud to announce its new digital badge program for all of its course offerings. Learners who have passed DOI's qualifications are awarded a digital badge as a means of showcasing their achievements. Learners are able to share their success online by displaying digital badges via social media sites.

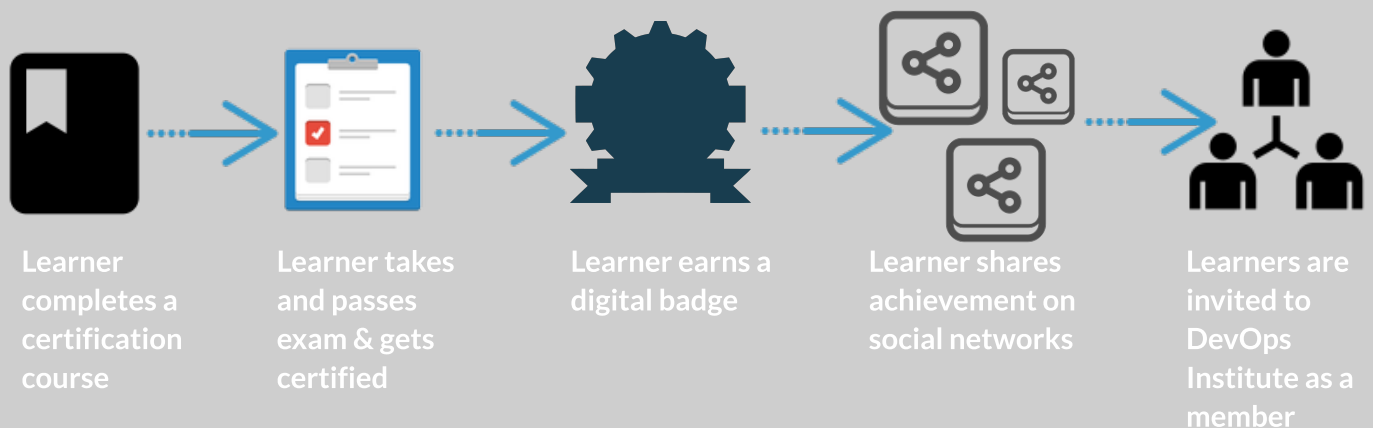
DevOps Institute Professional Membership Program

Starting in 2017, successful candidates are receiving a free membership in the DOI Professional Membership Program. This program offers access to current information and thought leaders in the emerging community of DevOps professionals.

Members are able to:

- ▶ Stay current with emerging DevOps best practices and skills
- ▶ Access discount codes for worldwide DevOps conferences and events
- ▶ Enhance their network with a thriving community of DevOps professionals
- ▶ Gain instant access to exclusive content
- ▶ Attend Digital DevOps pop-up events
- ▶ Contribute to the crowd-sourced DevOps Open Source Collective Body of Knowledge (cBoK) (coming soon)!

How To Become a DevOps Game Changer



Course Name: DevOps Foundation®

This 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.



Available Now

COURSE OBJECTIVES:

The learning objectives for DevOps Foundation include an understanding of:

- 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 indicators
- Real-life examples and results

COURSE / STUDENT MATERIALS:

- 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:

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 independent, global examination partner. The DevOps Foundation Certificate will be the pre-requisite for future DevOps certification courses.

PREREQUISITES:

- Completion of pre-class assignment
- Familiarity with IT software development and operations responsibilities

AUDIENCE:

- Anyone seeking an understanding of DevOps principles, practices and cultural considerations
- Organizations wanting to instill a common DevOps vocabulary and mindset
- Employees and managers responsible for leading DevOps transformations
- Consultants, internal and external suppliers

Course Name: Certified Agile Service Manager (CASM)®

This sixteen (16) hour course provides an introduction to Agile Service Management – the application and integration of agile thinking into service management processes and process design projects. Agile thinking improves IT's effectiveness and efficiency, and enables IT to continue to deliver value in the face of changing requirements.

COURSE OBJECTIVES

The learning objectives for Certified Agile Service Manager (CASM) include an understanding of:

- ▶ What it means to “be agile”
- ▶ The Agile Manifesto, its core values and principles
- ▶ Agile concepts and practices including ITSM, Kanban, Lean and DevOps
- ▶ Scrum roles, artifacts and events as it applies to both products and processes
- ▶ The two aspects of Agile Service Management:
 - ▶ Agile Process Improvement—ensuring processes are lean and deliver “just enough” control
 - ▶ Agile Process Design—applying Agile practices to process design projects

COURSE / STUDENT MATERIALS

- ▶ Sixteen (16) hours of instructor-led training and exercise facilitation
- ▶ The Agile Service Management Guide and Scrum Guide (pre-class resources)
- ▶ Learner Manual (excellent post-class reference)
- ▶ Participation in unique hands-on exercises designed to apply concepts
- ▶ Sample documents, templates, tools and techniques
- ▶ Access to additional sources of information and communities

CERTIFICATION

Successfully passing (65%) the 60 minute exam, consisting of 40 multiple-choice questions, leads to the candidate's designation as a *Certified Agile Service Manager*. The certification is governed and maintained by the DevOps Institute; exams are delivered through an independent, global examination partner.

PREREQUISITES

- ▶ Completion of pre-class assignment
- ▶ Familiarity with IT service management processes and ITIL® is recommended

AUDIENCE

- ▶ Anyone interested in learning about Agile and Scrum from a products and process perspective
- ▶ Employees and managers responsible for designing, reengineering or improving process
- ▶ Consultants guiding their clients through process improvement initiatives
- ▶ Internal and external suppliers
- ▶ Process stakeholders

COURSE LOGISTICS

- ▶ Maximum learners per instructor is 25
- ▶ Traditional classroom or U-shaped seating arrangement
- ▶ Whiteboard, flipchart, projector



Available Now

Course Name: Certified Agile Process Owner (CAPO)®

This sixteen (16) hour course describes process owner responsibilities and provides the education needed to oversee the design, reengineering and improvement of IT Service Management (ITSM) processes; particularly in the context of Agile Service Management. Participants learn how to use Agile and Lean principles and practices to put in place 'just enough' process and how to continually align process performance with overall business goals.

COURSE OBJECTIVES:

The learning objectives for CAPO include an understanding of:

- ▶ Basic Agile and Agile Service Management concepts
- ▶ Process owner role and responsibilities
- ▶ Managing and prioritizing a process backlog
- ▶ Creating and utilizing user stories
- ▶ Collaborating with process stakeholders and other process owners
- ▶ Overseeing Agile process design and improvement activities
- ▶ Managing organizational change activities
- ▶ Monitoring and measuring process performance
- ▶ Conducting process reviews and identifying improvements

COURSE / STUDENT MATERIALS:

- ▶ Sixteen (16) hours of instructor-led training and exercise facilitation
- ▶ The Agile Service Management Guide and Scrum Guide (pre-class resources)
- ▶ Digital Learner Manual (excellent post-class reference)
- ▶ Participation in unique hands-on exercises designed to apply concepts
- ▶ Sample documents, templates, tools and techniques
- ▶ Access to additional sources of information and communities

CERTIFICATION:

Successfully passing (65%) the 60 minute exam, consisting of 40 multiple-choice questions, leads to the candidate's designation as a *Certified Agile Process Owner*. The certification is governed and maintained by the DevOps Institute; exams are delivered through an independent, global examination partner.

PREREQUISITES:

- ▶ Completion of pre-class assignment
- ▶ Familiarity with Scrum
- ▶ Familiarity with IT and IT services

AUDIENCE:

- ▶ Process owners
- ▶ Process managers
- ▶ Employees and managers responsible for designing, reengineering or improving processes
- ▶ Consultants guiding their clients through process improvement initiatives
- ▶ Anyone responsible for:
 - Managing process-related requirements
 - Ensuring the efficiency and effectiveness of processes
 - Maximizing the value of processes



Available Now

Course Name: DevOps Test Engineering (DTE)

A DevOps test engineer is an individual accountable for testing software in a DevOps environment.

This sixteen (16) hour course describes culture and team aspects for team engineers, test strategies, test infrastructures, test tools, test automation, best practices, test management and analysis.

COURSE OBJECTIVES

The learning objectives for DTE include a practical understanding of:

- ▶ The purpose, benefits, concepts and vocabulary of DevOps testing
- ▶ How DevOps testing differs from other types of testing
- ▶ DevOps testing strategies, test management and results analysis
- ▶ Strategies for selecting test tools and implementing test automation
- ▶ Integration of DevOps testing into Continuous Integration and Continuous Delivery workflows
- ▶ How DevOps testers fit with a DevOps culture, organization and roles

COURSE / STUDENT MATERIALS

- ▶ Sixteen (16) hours of instructor-led training and exercise facilitation
- ▶ Digital Learner Manual (excellent post-class reference)
- ▶ Participation in exercises designed to apply concepts
- ▶ Sample documents, templates, tools and techniques
- ▶ Access to additional sources of information and communities

CERTIFICATION

Successfully passing the certification exam leads to the candidate's designation as a certified *DevOps Test Engineer (DTE)*™. The certification is governed and maintained by the DevOps Institute; exams are delivered through an independent, global examination partner.

PREREQUISITES

- ▶ DevOps Foundation® Certification Course
- ▶ Completion of pre-class assignment
- ▶ General knowledge of software quality assurance testing concepts

AUDIENCE

- ▶ Anyone involved in defining a DevOps Testing strategy
- ▶ Quality Assurance Managers
- ▶ Testers and Quality Assurance Teams
- ▶ Software Engineers and DevOps Engineers
- ▶ IT Managers
- ▶ Project Managers
- ▶ Lab staff
- ▶ Release Managers and delivery staff
- ▶ Maintenance and support staff
- ▶ Anyone involved in testing tool selection



Available Now

Course Name: Continuous Delivery Architecture (CDA)

A continuous delivery architect is a tool-agnostic individual engaged in the design, implementation and management of DevOps deployment pipelines and toolchains that support Continuous Integration, Continuous Delivery, Continuous Testing and, potentially, Continuous Deployment. A continuous delivery architect is also involved in defining or integrating underpinning processes, metrics, APIs and cultural considerations.

COURSE OBJECTIVES:

The learning objectives for CDA include a practical understanding of:

- ▶ The principles of Continuous Integration and Continuous Deployment
- ▶ Continuous Delivery vs DevOps
- ▶ Continuous Integration practices
- ▶ Extending CI to CD
- ▶ Principles for architecting a deployment pipeline
- ▶ Engaging Ops in Continuous Delivery
- ▶ Testing and continuous delivery
- ▶ Security and continuous delivery
- ▶ Continuous deployment and automated release
- ▶ Cultural and people consideration
- ▶ Change resistance
- ▶ Metrics
- ▶ Critical Success Factors, Risks and Challenges
- ▶ Getting started

COURSE / STUDENT MATERIALS:

- ▶ Sixteen (16) hours of instructor-led training and exercise facilitation
- ▶ Digital Learner Manual (excellent post-class reference)
- ▶ Participation in exercises designed to apply concepts
- ▶ Sample documents, templates, tools and techniques
- ▶ Access to additional sources of information and communities

CERTIFICATION:

Successfully passing the certification exam leads to the candidate's designation as a certified *DevOps Continuous Delivery Architect (CDA)™*. The certification is governed and maintained by the DevOps Institute; exams are delivered through an independent, global examination partner.

PREREQUISITES:

- ▶ DevOps Foundation® Certification Course
- ▶ Completion of pre-class assignment

AUDIENCE:

Anyone involved in or interested in learning about the principles of Continuous Integration and Continuous Delivery. Also:

- | | |
|--|---------------------------------|
| ▶ Enterprise architects | ▶ Security professionals |
| ▶ Software developers | ▶ Testers and QA managers |
| ▶ Build engineers | ▶ IT Managers |
| ▶ Release managers and engineers | ▶ Project Managers |
| ▶ Operational and infrastructure teams | ▶ Maintenance and support staff |



Available Now

Course Name: DevOps Leader (DOL)

A DevOps Leader is a tactical or strategic individual who helps design, influence, implement or motivate the cultural transformation proven to be a critical success factor in DevOps adoption. This individual understands the human dynamics of cultural change and is equipped with practices, methods and tools to engage people across the DevOps spectrum.

COURSE OBJECTIVES

- ▶ The learning objectives for DOL include a practical understanding of:
- ▶ DevOps and time to market
- ▶ The business and IT perspectives
- ▶ Key differences between DevOps IT and traditional IT
- ▶ Planning and organizing
- ▶ Understanding performance and culture
- ▶ Measurement differences
- ▶ Designing a DevOps organization
- ▶ Focusing on what matters
- ▶ Ideas for organizing workflows
- ▶ Sharing information
- ▶ Defining meaningful metrics
- ▶ Value stream mapping
- ▶ The Spotify Squad model
- ▶ Managing culture change
- ▶ Popular tools and key practices
- ▶ Putting it all together

COURSE / STUDENT MATERIALS

- ▶ Sixteen (16) hours of instructor-led training and exercise facilitation
- ▶ Learner Manual (excellent post-class reference)
- ▶ Participation in exercises designed to apply concepts
- ▶ Comprehensive glossary
- ▶ Access to additional sources of information and communities

PREREQUISITES

DevOps Foundation® Certification Course

AUDIENCE

- ▶ Anyone starting or leading a DevOps cultural transformation program
- ▶ Anyone interested in modern IT leadership and organizational change approaches
- ▶ IT team leaders, managers, directors and business stakeholders
- ▶ Practitioners and change agents
- ▶ DevOps tool providers, systems integrators, and consultants



**Expected first delivery
and exam release:
Q3 2017**

Course Name: DevSecOps Engineering (DSOE)

A DevSecOps Engineer is an IT Security professional who is skilled at “security as code” with the intent of making security and compliance consumable as a service. A DevSecOps Engineer uses data and security science as their primary means of protecting the organization and customer.

This sixteen (16) hour course explains how DevOps security practices differ from other security approaches, and provides the education needed to understand and apply data and security sciences. Participants learn the purpose, benefits, concepts and vocabulary of DevSecOps; particularly in how DevSecOps roles fit with a DevOps culture and organization.

COURSE OBJECTIVES

The learning objectives include a practical understanding of:

- ▶ The purpose, benefits, concepts and vocabulary of DevSecOps
- ▶ How DevOps security practices differ from other security approaches
- ▶ Business-driven security strategies
- ▶ Understanding and applying data and security sciences
- ▶ The use and benefits of Red and Blue Teams
- ▶ Integrating security into Continuous Delivery workflows
- ▶ How DevSecOps roles fit with a DevOps culture and organization

COURSE / STUDENT MATERIALS

- ▶ Digital Learner Manual (excellent post-class reference)
- ▶ Participation in exercises designed to apply concepts
- ▶ Sample documents, templates, tools and techniques
- ▶ Access to additional sources of information and communities

CERTIFICATION

Successfully passing (65%) the 90 minute, multiple choice, Bloom's Taxonomy levels 1, 2 and 3 exam leads to the *DevSecOps Engineer (DSOE)™* certificate. The certification is governed and maintained by the DevOps Institute; exams are delivered through an independent, global examination partner.

PREREQUISITES

- ▶ DevOps Foundation® Certificate
- ▶ Familiarity with IT software development and operations responsibilities

AUDIENCE

- ▶ Anyone interested in learning about DevSecOps practices
- ▶ IT Security Professionals, Practitioners and Managers
- ▶ Testers and Quality Assurance Teams
- ▶ Software Engineers and DevOps Engineers
- ▶ IT Managers
- ▶ Project Managers
- ▶ Managed Service Providers
- ▶ Release Managers and delivery staff
- ▶ Maintenance and support staff
- ▶ Anyone involved in Continuous Delivery toolchain architectures



Expected first delivery
and exam release:
Q3 2017



Expected first delivery
and exam release:

Q3 2017

Course Name: Site Reliability Engineering

Duration: 16 hours

Prerequisite: DevOps Foundation

COMING SOON!

EXAM AND CERTIFICATION

Successfully passing the 90 minute, multiple choice, Blooms Taxonomy levels 1, 2 and 3 exam leads to the DevOps Site Reliability Engineer certificate.

Coming Soon!

DevOps Drilldown Courses

In 2017, DOI plans to roll-out a brand new series of courses: DevOps Drilldown or DD. This adjunct series of "plug and play" non-certification courses further advances learners' knowledge of specific DevOps concentrations after completing the DevOps Foundation certification course.

Lean DevOps

Kanban for DevOps

ITSM DevOps

DevOps Simulation



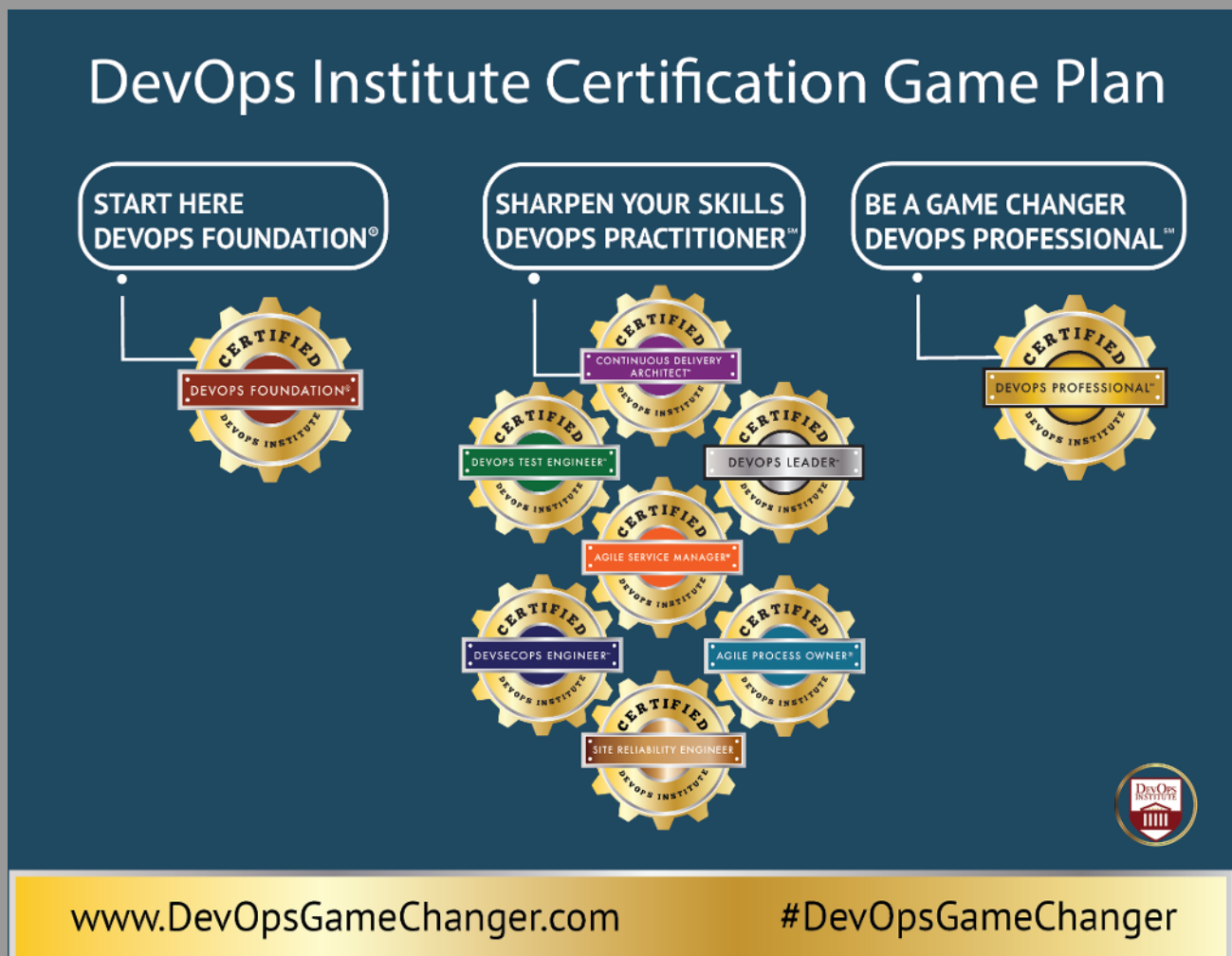
About The DevOps Institute

The DevOps Institute is the global learning community around emerging DevOps practices and is bringing enterprise level DevOps training and certification to the IT market. Working with digital influencers from our Board of Regents, strategic examination partner PEOPLECERT, and the DevOps Express vendor consortium, DOI has set the quality standard for relevant, current and sustainable DevOps course content and certification. For more information about DOI, visit <http://www.devopsinstitute.com>.

Release dates are approximate and subject to examination and other release cycles. Most will be released mid-month.

Trainers will be provided free exams and train the trainer materials and support. Trainers are expected to pass the related exam and have practical knowledge of the subject matter being covered.

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