AW Academy T-Systems MMS DevOps Acdemy 2023

Duration of the Pre-Studies: approximately 1 month
Duration of the Training: 3 month
Format: client specific

Responsible Program Manager: Myriam Meyer/ Lucas Kindt
Client: T-Systems MMS

General Information about the Training Design

AW’s goal is to enable efficient learning journeys!

- Training will include 4 weeks of pre-studies & 12 weeks teacher lead – training. Training will offer a solid base to start working as Systems Engineers at T-Systems MMS
- Learning outcomes define the knowledge, skills and competencies consultants should have acquired at the end of an assignment, a lesson, a project, a course or a program. You as a client can state in a clear way what knowledge, skills and competencies you require and specify what is actually expected of participants after completing the training. Our learners can get an overall picture of their studies and maintain their motivations as well as learn most effectively.
- Our pedagogy is based on our 5 Guiding stars and focus on Accelerated Learning and Action Learning, Peer to Peer learning, Growth Mindset and Lifelong Learning. This makes us certain that whatever program we deliver, with The AW Academy Way as a foundation we will reach the learning outcomes in the most efficient and qualitative way.

Our methods

Accelerated learning
Time-efficient learning that focuses on using the entire brain

Action learning
Learning by doing when focusing on solving real problems

Growth mindset
A mindset that is based on the belief that your skills/qualities/
knowledge are things that can cultivate through your efforts

Peer-to-peer
Structured and flexible learning with and from peers in the class

Lifelong learning
A mindset that learning is an ongoing, self-motivated cycle of the pursuit of knowledge and development throughout life, both private and professionally

Overall Learning Outcomes

For the T-Systems MMS DevOps Academy 2023

The preliminary Global Learning Outcomes

1. DevOps Mindset & Cloud Paradigma

As a consultant I can explain concepts and a set of best practice of software engineering and DevOps.

2. Engineering Process & DevOps Soft Skills

1. As a consultant I understand common engineering processes and methodologies and can explain their basic principles.
2. As a consultant I know about necessary DevoOps Soft Skills sets, can assess my individual level and I am able to continuously improve them.

3.Cloud Basics & Linux Administration

1. A a consultant I have a basic knowledge of Microsoft Azure.
2. As a consultant I have a basic knowledge of Linux/ Linux Administration.

4.Puzzle Parts

As a consultant I have a basic knowledge of the following single technology parts and know how to use them. (Docker, Jenkins, Kubernetes, Ansible, Python Scripts).

5.Continuous Integration

As a consultant I know typical steps of Continuous Integration (CI) and can create pipelines.

6.Continuous Deployment

As a consultant I know typical steps of Continuous Deployment (CD) and can detect simple errors.

7.Bringing Parts together

As a consultant I am able to bring separate parts together into a working devops environment.

Global Learning Outcomes - Overview

What are the main Topcis the program should cover

MODULE 1: DevOps Mindset & Cloud Paradigma

- Concepts + set of best practice of software engineering and DevOps
  - Development and operations work together
  - DASA (DevOps Agile Skills Association)

MODULE 2: Engineering Process & DevOps Soft Skills

- Common engineering processes and methodolgies + their basic principles
  - Agile methods and tools (e.g. Jira, Confluence, Kanban, Scrum)
  - Kanban board to visualize User Stories
- General Soft Skills
  - How to handle ‚errors‘
  - Psychological safety
- DevOps Soft Skills

MODULE 3: Cloud Basics & Linux Administration

- Microsoft Azure
  - Azure Fundamentals Course
  - Preperation for Certificartion AZ 104
- Linux
  - Basics
  - Administration

MODULE 4: Puzzel Parts

- Understanding the following single technology parts + know how to use them:
  - Docker
  - Jenkins
  - Kubernetes
  - Ansible
  - Python Scripts

MODULE 5: Continuous Integration (CI)

- Typical steps of CI + creation of pipelines
  - Creation of Hello World
  - CI pipeline
  - Webhook to Jenkins

MODULE 6: Continuous Deployment (CD)

- Typical steps of CD + detect simple errors
  - Error messages in Jenkins or application logs and can fix them
  - Deploy using a Jenkins file
  - Inspect log files of my application
  - Deploy my application to an existing logging stack

MODULE 7: Bringing parts together

- To bring seperate parts together into a working DevOps environment
  - Setup a Kubernetes cluster locally
  - Setup a Kubernetes cluster in the Cloud (Azure)
  - Create a Webapplication (e.g. Springboot)
  - Automate the build process using jenkins
  - Containerize the application using Docker
  - Deploy the application locally/ into the cloud cluster
  - Update the application by using


Academy