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**CloudCamp**  
**4SMEs**

# UpSkill in **Cloud**.

**Cloud Training Program 2024**

High-skilled SMEs employees  
/ Cloud Developer

**Pathway Syllabus**



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# Cloud Developer Pathway Syllabus



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# Cloud Training Program 2024

## High-skilled Employees - Cloud Developer

### Pathway Syllabus

## Table of Contents

<u>Overview</u>	00
<u>What's included</u>	01
<u>What will you learn</u>	02
<u>Pathway Courses</u>	03
<u>Learning Platform</u>	07
<u>Certifications</u>	08
<u>Testimonials</u>	09



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Cloud Training Program 2024

## High-skilled Employees - Cloud Developer Pathway Syllabus

### Pathway Overview

This learning path will focus on the job-role skills needed to drive digital transformation at a business and it will cover both knowledge and implementation, with the final goal being that they will be able to assist the SME to independently migrate to the Cloud.

Learners in this group are skilled workers and experts at SMEs.

They have significant work experience, but may not have completed a professional certification. They are primarily interested in upskilling to meet the current and future needs of their organisation.

00



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## High-skilled Employees - Cloud Developer Pathway Syllabus

### Courses Included

-  Pre-test to determine the level of knowledge before training
-  AWS Technical Essentials
-  Developing on AWS
-  DevOps and Continuous Integration and Deployment Pipelines
-  AWS Security Essentials
-  Post-test to evaluate level of learning
-  Exam Readiness Package
-  Certification exam

01





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## High-skilled Employees - Cloud Developer Pathway Syllabus

### What will you learn

Upon completing this level, learners should be able to:

- Apply skills and knowledge to excel in their technical job roles and drive digital transformation.
- Implement DevOps best practices and tools such as continuous integration and deployment (CI/CD), automated testing, and infrastructure as code.
- How to build, deploy, and debug cloud applications.
- Manage and secure cloud-based solutions by their job roles, ensuring data and operations' safety.

02



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Cloud Training Program 2024

## High-skilled Employees - Cloud Developer Pathway Syllabus

### Pathway Courses

#### 1. Pre-test to determine the level of knowledge before training:

- Key to be able to offer the right pathway for the right needs and experience of those interested.

#### 2. AWS Technical Essentials:

- Describe terminology and concepts related to AWS services,
- Navigate the AWS Management Console,
- Articulate key concepts of AWS security measures and AWS Identity and Access Management (IAM),
- Distinguish among several AWS compute services, including Amazon Elastic Compute Cloud (Amazon EC2), AWS Lambda, Amazon Elastic Container Service (Amazon ECS), and Amazon Elastic Kubernetes Service (Amazon EKS),
- Understand AWS database and storage offerings, including Amazon Relational Database Service (Amazon RDS), Amazon DynamoDB, and Amazon Simple Storage Service (Amazon S3),
- Explore AWS networking services, and
- Access and configure Amazon CloudWatch monitoring features.

03



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## High-skilled Employees - Cloud Developer

### Pathway Syllabus

## Pathway Courses

### 3. Developing on AWS

- Build a simple end-to-end cloud application using AWS Software Development Kits (AWS SDKs), Command Line Interface (AWS CLI), and IDEs.
- Configure AWS Identity and Access Management (IAM) permissions to support a development environment.
- Use multiple programming patterns in your applications to access AWS services.
- Use AWS SDKs to perform CRUD (create, read, update, delete) operations on Amazon Simple Storage Service (Amazon S3) and Amazon DynamoDB resources.
- Build AWS Lambda functions with other service integrations for your web applications.
- Understand the benefits of microservices architectures and serverless applications to design.
- Develop API Gateway components and integrate with other AWS services.
- Explain how Amazon Cognito controls user access to AWS resources.
- Build a web application using Cognito to provide and control user access.
- Use DevOps methodology to reduce the risks associated with traditional application releases and identify AWS services that help in implementing DevOps practices.
- Use AWS Serverless Application Model (AWS SAM) to deploy an application.
- Observe your application build using Amazon X-Ray.

04







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## High-skilled Employees - Cloud Developer

### Pathway Syllabus

## Pathway Courses

### 4. DevOps and Continuous Integration and Deployment Pipelines

- Integrate DevOps tools and practices such as continuous integration and deployment (CI/CD), automated testing, and infrastructure as code
- Implement DevOps practices and CI/CD pipelines

### 5. AWS Security Essentials

- Identify security benefits and responsibilities of using the AWS Cloud,
- Describe the access control and management features of AWS,
- Explain the available methods for encrypting data at rest and in transit,
- Describe how to secure network access to your AWS resources, and
- Determine which AWS services can be used for monitoring and incident response.



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## High-skilled Employees - Cloud Developer

### Pathway Syllabus

## Pathway Courses

### 6. Post-test: Evaluate the level of learning

- The pre-test, jointly with the post-test, is useful to validate the effectiveness of the training from the learner's perspective.

### 7. Exam Readiness Package

- Test knowledge using the pre-certification exam,
- Review and discuss the results of the pre-certification exam,
- Evaluate your strengths and weaknesses based on exam topic domains,
- Ask questions about the exam,
- Create a study plan to prepare for the exam, and
- Identify effective test-taking strategies that can be used to answer exam questions.

### 8. Certification Exam

- The Certification Exams will be designed and developed specifically for the EU CloudCamp4SMEs program and will draw on questions that cover from the courses.

06





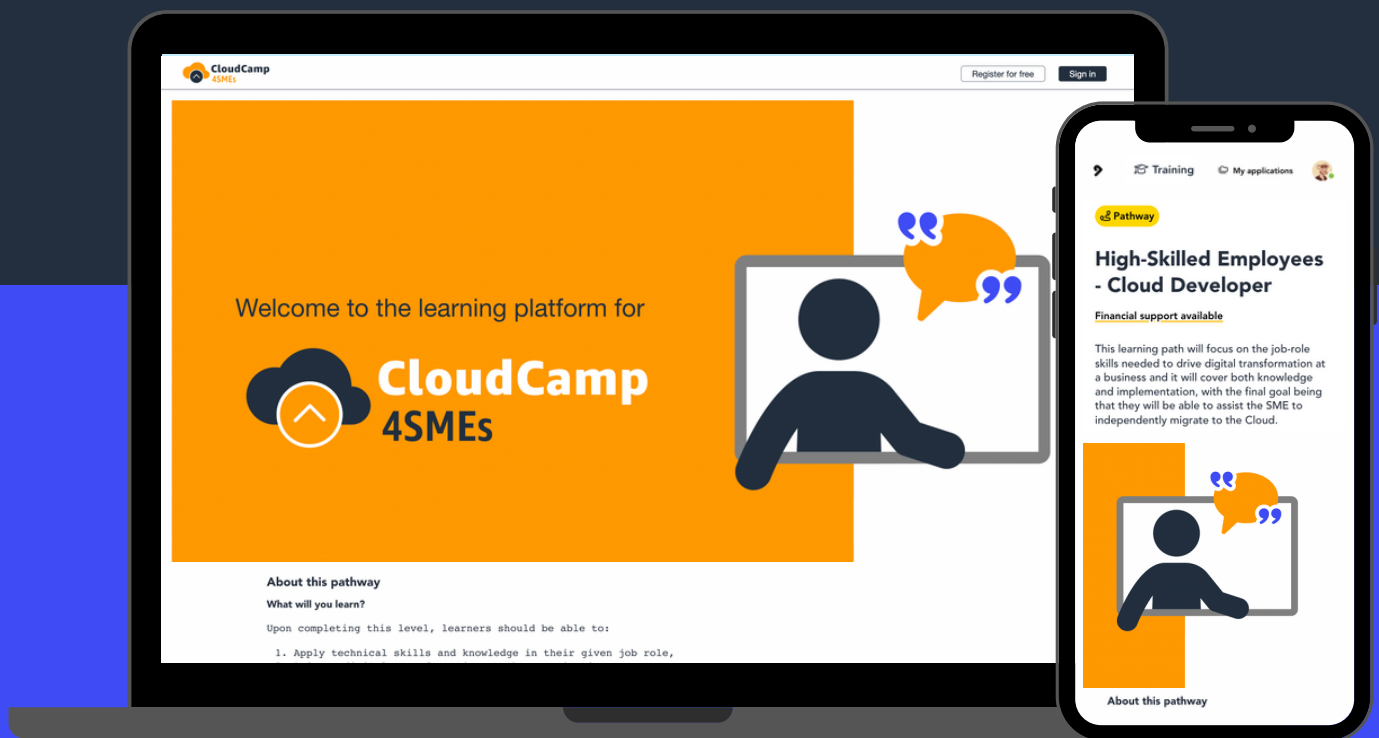
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## High-skilled Employees - Cloud Developer Pathway Syllabus

Learning Platform:  
<https://cloudcamp4sme.live>

The courses are done in our digital learning platform provided by CloudCamp4SMEs partners.



07



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## High-skilled Employees - Cloud Developer

### Pathway Syllabus

## Certifications

Upon successful completion of the pathways and the accompanying Certification Exam, CloudCamp4SMEs will provide alumni with a digital certification to validate their expertise and accomplishments in the realm of cloud technologies and solutions in the courses and pathway completed.



**High-skilled SMEs Employees**  
**Cloud Developer Certification**



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## High-skilled Employees - Cloud Developer Pathway Syllabus

### Testimonials

We've just started and this is our first cohort but our training partners want to share something with you!

**“Cloud, is not a tech option,  
it is a business must have!”**

**Magnus Histrup**  
AWS Business Dev Manager Nordics

**Launch Event**  
Sept23 / Copenhagen



09



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