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## Kubernetes Native Application Development

Varighed: 2 Days    Kursus Kode: CN230    Leveringsmetode: Company event (Firmakursus)

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### Beskrivelse:

In this Cloud Native course, developers will learn how to build containerized applications targeted for enterprise-grade production environments. You'll explore patterns in containerized application architecture, techniques for eliminating friction in the development process, how to test and debug containerized applications, and how to instrument applications with healthchecks, monitoring tools, and common container logging patterns. After mastering these techniques, we'll turn our attention to devops and building container-native continuous integration pipelines powered by Jenkins and Kubernetes.

### Firmakursus

Med et firmakursus bliver jeres it-kompetenceudvikling målrettet jeres behov. Det betyder, at vi hjælper med at finde og sammensætte det helt rigtige kursusindhold og den helt rigtige form. Kurset kan afvikles hos os eller kunden, standard eller virtuelt.

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### Målgruppe:

**This course is targeted at students with the following:**

**Motivations:** Develop container-native applications, and implement fully containerized CI

**Roles:** Developers, application architects, devops

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### Agenda:

- Rapid code-build-test iteration cycles
  - Developer-local Kubernetes environments
  - IDE & debugger container integration
  - Optimizing container startup
  - Gracefully handling container failure
  - Containerizing legacy applications
  - Instrumenting containers with health checks
  - Log management strategies
  - Instrumenting containers with Prometheus monitoring
  - Unit and integration tests for containerized applications
  - Containerized continuous integration pipelines
  - Image and config hierarchies in CI
  - Build server management
  - Unit and integration testing pipelines
  - Integrating Jenkins with registries, Kubernetes clusters and standalone Docker engines
  - Securing and packaging applications for production
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### Forudsætninger:

- Familiarity with the Bash shell
  - Filesystem navigation and manipulation
  - Command line text editors like vim or nano
  - Common tooling like curl, wget and ping
  - Familiarity with YAML and JSON notation
  - Basic familiarity with common software development patterns and tools like version control, testing, continuous integration and logging.
  - CN120 - Kubernetes Application Essentials
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## Indhold:

Modules:

- Container Development Environments
- The Container Lifecycle
- Containerizing Applications
- Container health and Monitoring
- Introduction to containerized CI
- CI Agent Deployment
- Building Images in CI
- Testing in CI

Releasing Containerized Applications

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## Flere Informationer:

For yderligere informationer eller booking af kursus, kontakt os på tlf.nr.: 44 88 18 00

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