

# Corporate Readiness Certificate.



## SYLLABUS

### Cloud Development and Operations

[ Number of hours: 14 h ]

#### DESCRIPTION OF THE COURSE

Course designed for people interested in IT topics and Cloud solutions. During training sessions basic terms from Cloud solutions will be introduced and most popular Cloud tools presented during workshops on IBM Cloud platform. Everything will be aligned with DevOps strategy and Agile methodology.

#### REQUIREMENTS

- Command Line (CLI) skills at least on basic level
- English language – at least at level allowing to read and understand technical documentation

#### REQUIRED BACKGROUND

Basic knowledge of Linux operating systems is required.

## **PASSING CRITERIA**

To successfully complete this course active participation in all sessions is required.

## **ADDITIONAL INFORMATION ON COURSE**

Cloud solutions are one of the most important topics in IT. Almost every company is already using Cloud or is on journey towards Cloud. There are many advantages of this approach but the most important are efficient utilization of resources, flexibility, standardization and high level of automation. Whoever is seriously thinking about career in IT needs to be familiar with these concepts and DevOps culture. Participating in this course with IBM that is no. 1 Cloud company world-wide (after buying Red Hat) gives students possibility to work with best professionals on the market.

## **CONTENT & LITERATURE**

The trainers will use presentations and handbooks developed for the CRC academic initiative.

## **TECHNICAL REQUIREMENTS FOR UNIVERSITY**

Webex Meetings licence

PC requirements: any operating system with SSH connectivity tool installed and internet connection.

Optionally: PC with installed Postman App

## **COURSE OVERVIEW**

1. Introduction to GitHub
  - a) Installing Git software
  - b) Idea of branches and collaboration
  - c) Creating first repo
  - d) Test commit, push, pull request
2. Container technology overview with Docker
  - a) What is DOCKER
  - b) Base commands
  - c) LAB DOCKER, first run, checks
  - d) DOCKERFILE, image build
3. Collaboration Platform for API Development Basics – Postman
  - a) Rest message basics
  - b) What is Postman and how to use it
  - c) Postman Overview: Environments, Collections, Requests, Tests and scripts

4. OCP on CRC: Container orchestration and management with RedHat Openshift Container Platform
  - a) Openshift overview: Operators, Workloads, Networking, Storage, Builds, Monitoring
  - b) LABs:
    - i. review all in one OCP on RedHat CodeReady Containers architecture
    - ii. configuring network, storage, deployment simple applications
5. Introduction to vRA
  - a) Introduction to vRA
  - b) How to setup pattern
  - c) Connect to endpoint and integration
  - d) Work with container solutions
6. Introduction to Agile
  - a) Introduction to Agile
  - b) Scrum: way of working
  - c) Agile road to Cloud
  - d) Scrum of Scrums – How to scale up scrum?