

Corporate Readiness Certificate.



SYLLABUS

Architecture

[Number of hours: 33 h]

DESCRIPTION OF THE COURSE

The purpose of the course is to provide students with basic understanding of IT Architecture as a profession, design and architectural thinking principles, different domains within architecture, learn architecture practice, train design skills, understand architecture frameworks and help them develop a vision of technologies and architecture patterns.

Course participants will get an understanding of Business Architecture, Architectural Styles and Patterns, Modeling, Documentation, and Technology Domains and a basic understanding of additional skills that are required to be a successful architect as technology, leadership, project management, business communication, business presentation, business analysis.

REQUIREMENTS

- B2 English in speech and writing
- Good communication skills
- Analytical thinking
- Knowledge of basic concepts of project management, service management, computer technology
- Interest in business environment

REQUIRED BACKGROUND

Knowledge of English and Computer Science

PASSING CRITERIA

To successfully complete this course, attendee must:

- participate in learning/workshops classes (one absence is possible),
- complete HLD design in given scope by lectures,
- complete the class survey,
- be active,
- pass the final exam based on the classes' content with score 80% or higher.

CONTENT & LITERATURE

The trainers will use presentations and notes developed for the CRC academic initiative as well as printed case studies suited to the level of knowledge for participants. Content will be based on IBM's approach and methodology and will contain both theory and practice. Additionally, the participant will receive a reading list before a course that is recommended to finish this course.

TECHNICAL REQUIREMENTS FOR UNIVERSITY

Computer with Internet Access, MS Office Programs

Headphones and Microphone

Lectures will be done via Webex and/or Zoom

COURSE OVERVIEW

1. Introduction to Architecture
 - 1.1. What is IT Architecture?
 - 1.2. Different types of IT Architecture
 - 1.3. IT Architecture in IBM
 - 1.4. Architecture process – the three phases

2. Architecture standards
 - 2.1. Team Solution Design / Togaf / Unified Model Framework

3. Architectural Thinking overview
 - 3.1. Architectural Methods
 - 3.2. Modeling Techniques

4. Architectural Documentation
 - 4.1. High-Level Design
 - 4.2. Low-Level Design

5. Business Analysis
 - 5.1. Requirements
 - 5.1.1. Business
 - 5.1.2. Functional
 - 5.1.3. non-functional
 - 5.2. System Context diagrams
 - 5.3. Use case modeling

6. Introduction to Projects
 - 6.1. Introduction to Project Management
 - 6.2. Project Management methodology – types
 - 6.3. Business Communication – how, when, why
 - 6.4. Business presentation – how to build a good presentation, avoid common mistakes.

7. Assets & Artefacts
 - 7.1. Architecture Decisions
 - 7.2. Architecture Principles
 - 7.3. Viability Assessment

8. Architecture overview
 - 8.1. Component Model
 - 8.2. Service Model
 - 8.3. Operational Model (logical and physical)
 - 8.4. RACI Matrix

9. Final Exam