## Camunda 7 Training Agenda (8 Days)

### **Daily Schedule**

Time	Activity	Duration
07:30 – 09:25	Session 1	1 hr 55 mins
09:25 – 09:35	Coffee Break	10 mins
09:35 – 11:30	Session 2	1 hr 55 mins
11:30 – 12:30	Lunch Break	1 hour
12:30 – 13:55	Session 3 / Hands-on Lab (Part 1)	1 hr 25 mins
13:55 – 14:05	Coffee Break	10 mins
14:05 – 15:20	Session 3 / Hands-on Lab (Part 2)	1 hr 15 mins

### Day 1: BPM Fundamentals & Basic BPMN

### **Topics**

- What is a business process?
- Why orchestration matters
- Camunda Platform 7 overview
- Modeling with BPMN basics

#### Hands-On

- Model a simple Leave Request process with:
  - Start  $\rightarrow$  User Task  $\rightarrow$  Manager Approval  $\rightarrow$  End
- Deploy and run on Camunda Tasklist

### Day 2: Variables, User Tasks & External Task Intro

### **Topics**

- Process variables (global, local, transient)
- User Task lifecycle and listeners
- External Task pattern (overview)

### Hands-On

- Extend the Leave Request process with:
  - Form fields
  - Task listeners for logging
  - Variable mappings between tasks

# Day 3: Implementing External Task Workers and Integrating Camunda APIs with .NET

### **Topics**

- External Task mechanics: fetch, lock, complete
- Retry and error handling
- Calling Camunda APIs from external systems (.NET project)
- Build a C# External Task Worker (using HttpClient or SDK)

#### Hands-On

- Build a C# Worker that:
  - Processes a "Send Notification" task
  - Handles BPMN errors and retries
  - Logs output to console
- Test with BPMN flow

### Day 4: Call Activities, Events, and Timers

### **Topics**

- Call Activity vs embedded subprocess
- Message events: intermediate, boundary, start
- Timer events and Terminate end event

#### Hands-On

- Build parent-child process using Call Activity
- Add a boundary message to interrupt a task
- Add timer to auto-escalate after 1 minute

### Day 5: Exceptions, Compensation & Job Executor

### **Topics**

- BPMN error events vs exceptions
- Compensation handlers
- Transaction boundaries
- Job Executor explained

#### Hands-On

- Model an Order Process:
  - Includes cancel path with compensation
  - Throws BPMN error on validation failure
- Use asyncBefore to define transaction boundary
- Simulate stuck job and analyze via Cockpit

### Day 6: DMN, Best Practices & Advanced Modeling

### **Topics**

- Decision tables with DMN
- Modeling best practices
- Multi-instance, escalation, event subprocesses

#### Hands-On

- Create a DMN for Leave Approval:
  - Inputs: Role, Days, Urgency
  - Result: Auto-approval or escalation
- Use DMN in process and visualize decisions

### Day 7: Final Project & Camunda 8 Intro

### **Topics**

- End-to-end process implementation
- Key differences between Camunda 7 & 8
- Zeebe engine, Tasklist, Operate, Optimize
- When to migrate and how

#### Hands-On

- Model a multi-stage process with:
  - User tasks
  - External tasks
  - Message events
  - DMN decision
- Present results to group

### Day 8: Migration Hands-On Workshop

### **Topics**

- Hands-on session on migrating processes from Camunda 7 to Camunda 8
- Common migration challenges and best practices
- Using one of the course's created Camunda 7 processes for migration exercise

#### Hands-On

- Migrate a selected Camunda 7 BPMN process to Camunda 8
- Test and validate the migrated process on Camunda 8
- Discuss tooling and strategy for migration