

15 hours over 10 days

## Day 1

### Module 1 - Introduction to Business Process Management (BPM)

- BPM principles, main concepts and value proposition
- Overview of the BPM lifecycle
- Shortfalls of traditional BPM

## Day 2

### Module 2 - Introduction to Process Mining

- Process mining value proposition
- Overview of process mining capabilities
- Process mining uptake & market analysis
- Case study (finance)

## Day 3

### Module 3 – Event logs & Process maps

- Anatomy of an event log
- Ingredients of a process map
- Abstraction and filtering
- Visual analytics and results interpretation
- Practical exercises

## Day 4

### Module 4 – Automated process discovery (Part 1)

- From process maps to BPMN models
- Quality of automated discovery
- Intermezzo: core BPMN language
- Visual analytics and results interpretation
- Practical exercises

## Day 5

### Module 5 – Automated process discovery (Part 2) & Performance mining (Part 1)

- Alternative discovery views (social networks, object lifecycle models)
- Automated process discovery analysis template
- Practical exercises
- Process performance metrics (time, cost, quality and flexibility)
- Overview of main performance mining techniques

## Day 6

### Module 6 – Guest lecture: Case studies

- Case studies from manufacturing, finance and tertiary education
- Settings, data collection, analysis, results
- ROI estimation
- Organisational challenges and lessons learnt

## Day 7

### Module 7 – Performance mining (Part 2) & Conformance Checking

- Visual analytics and results interpretation
- Performance mining analysis template
- Practical exercises
- Rule-based conformance checking: compliance checking
- Visual analytics and results interpretation
- Compliance checking analysis template
- Practical exercises
- Model-based conformance checking

## Day 8

### Module 8 – Variant analysis

- Drivers for variant analysis and overview of techniques
- Visual analytics and results interpretation
- Variant analysis template
- Practical exercises

## Day 9

### Module 9 – How to run a process mining project

- Types of process mining project
- Phases of a question-driven project approach and role of stakeholders
- Data acquisition and preparation
- Use-cases analysis templates
- ROI estimation
- Common pitfalls of process mining projects

## Day 10

### Module 10 – Course recap & Guest lecture: The future of process mining

- Predictive and prescriptive process monitoring
- Data-driven simulation
- Robotic process mining
- Causal process mining