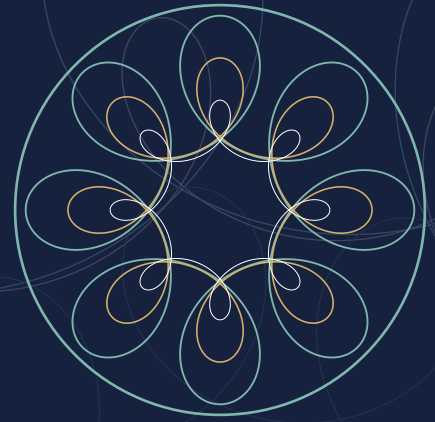




International Institute of
Applied AI Technology



Course guide for AI-BPR

Certified AI Business Process Re-engineering Professional

Redesign end-to-end processes around what AI makes possible, rather than automating today's steps, using process mining, value-stream analysis and intelligent automation.

About this guide

Redesign end-to-end processes around what AI makes possible, rather than automating today's steps, using process mining, value-stream analysis and intelligent automation.

This guide sets out what the AI-BPR examination covers and how to prepare for it. It assumes you already practice business process re-engineering, and concentrates on what changes when AI is part of the work.

How to use it

Work through the modules in order. Each one sets out the ideas, lists the topics the exam can test, and ends with an exercise. Do the exercises on your own projects where you can: the exam questions are written around the same situations.

Who it is for	Process analysts, operational excellence and Lean practitioners, BPM specialists and operations managers.
Recommended experience	Two years in process improvement, BPM or operations.
Study time	About 32 hours
Exam	12 multiple-choice questions in 30 minutes, online. Pass mark 9 correct. Up to 3 attempts per enrollment.
Certification	Valid for 3 years, with a downloadable certificate and a verifiable credential number.

Learning outcomes

When you have completed this program you will be able to:

- Discover how a process really runs using process and task mining
- Separate steps that should be removed from steps that should be automated
- Redesign processes around AI capabilities and human judgment
- Choose between rules, RPA, document AI, ML and generative AI for each step
- Model and simulate the future state before building it
- Measure process performance and keep improving after go-live

Contents

Module 1. Re-engineering, revisited

Module 2. Discovering the real process

Module 3. Value-stream analysis

Module 4. Matching technology to work

Module 5. Designing and simulating the future state

Module 6. Measuring and sustaining

Preparing for the exam

Module 1

Re-engineering, revisited

Classic re-engineering asked what a process would look like if it were designed from scratch. AI changes the answer to that question.

Topics covered

- Re-engineering versus incremental improvement
- Why automating a bad process makes it fail faster
- Outcome-based process design
- Where AI removes hand-offs entirely

Exercise

Take a process with more than five hand-offs and design it with as few hand-offs as possible.

Self-check

Before moving on, check that you can explain each topic above to a colleague in two or three sentences, and say how it would apply on a project you know.

Your notes

Module 2

Discovering the real process

Event logs and desktop activity show the process as it runs, including the variants nobody documented.

Topics covered

- Process mining from event logs
- Task mining
- Variant and bottleneck analysis
- Conformance checking

Exercise

From a sample event log, find the three most common variants and the step with the longest wait.

Self-check

Before moving on, check that you can explain each topic above to a colleague in two or three sentences, and say how it would apply on a project you know.

Your notes

Module 3

Value-stream analysis

Separating value-adding work from waste so that only the right steps are carried into the new design.

Topics covered

- Value-stream mapping
- Lean waste categories
- Touch time against elapsed time
- Eliminate, simplify, integrate, automate

Exercise

Map a value stream and calculate the ratio of value-adding time to total elapsed time.

Self-check

Before moving on, check that you can explain each topic above to a colleague in two or three sentences, and say how it would apply on a project you know.

Your notes

Module 4

Matching technology to work

Each step gets the simplest technology that does the job: a rule, a bot, a document model, a predictive model, a language model or a person.

Topics covered

- Rules and decision tables
- Robotic process automation
- Intelligent document processing
- Predictive and generative models
- Agentic workflows and their controls

Exercise

For each step of a claims process, choose the technology and justify why simpler options would not do.

Self-check

Before moving on, check that you can explain each topic above to a colleague in two or three sentences, and say how it would apply on a project you know.

Your notes

Module 5

Designing and simulating the future state

Future-state models with human checkpoints, exception paths and simulation of volumes and staffing.

Topics covered

- Future-state modeling
- Exception and escalation design
- Discrete-event simulation
- Business case from simulated results

Exercise

Simulate the future state at today's volume and at twice that volume, and report the staffing difference.

Self-check

Before moving on, check that you can explain each topic above to a colleague in two or three sentences, and say how it would apply on a project you know.

Your notes

Module 6

Measuring and sustaining

Process KPIs, control charts and the governance that stops a redesigned process drifting back.

Topics covered

- Process KPIs and service levels
- Monitoring automation and model performance
- Control plans
- Continuous improvement cadence

Exercise

Write a control plan with three KPIs and the action triggered when each goes out of range.

Self-check

Before moving on, check that you can explain each topic above to a colleague in two or three sentences, and say how it would apply on a project you know.

Your notes

Preparing for the exam

The AI-BPR exam has 12 multiple-choice questions drawn at random from every module. You have 30 minutes and need 9 correct answers to pass.

Before you start

- Finish every module's exercise. Most questions describe a situation and ask what a practitioner should do.
- Re-read the module summaries: they state the main idea each question is built on.
- Set aside uninterrupted time. The timer keeps running if you leave the page.
- Have this guide to hand. The exam is open book, but you will not have time to look up every answer.

Taking the exam

Log in to your account on the Institute's website and choose Take the exam. Check that your name is shown exactly as it should appear on your certificate. Your result is shown as soon as you submit, and if you pass, your certificate and credential number are issued straight away.

Each enrollment includes 3 attempts, and an attempt counts as soon as you start it. If you don't pass, you can try again after 24 hours. Each attempt draws a different set of questions.



International Institute of Applied AI Technology
A global leader in applied artificial intelligence education

iiaait.org