



AGORÀ ITALIAN ACADEMY

PROGRAMME SYLLABUS

ADVANCED TRAINING COURSE IN HOSPITALITY 4.0

Artificial Intelligence in the Hotel Industry

Edition: 2027–2028

Programme Start: 15 March 2027

Programme Completion: 15 March 2028

Duration: 12 months

Total: 30 ECTS

Language: English

Delivery: Online + Individual Study + Case Studies + Project Work

Programme Director: Mauro Di Chicco

1. PROGRAMME PURPOSE

The programme develops practical competences in the application of Artificial Intelligence to hotel management, hospitality operations and digital transformation.

2. PROGRAMME LEARNING OUTCOMES

Participants develop knowledge and skills in:

- AI and Machine Learning fundamentals;
- Revenue Management;
- demand forecasting;
- guest profiling;
- personalisation;
- AI-based marketing;
- conversational AI;
- operational analytics;
- digital transformation;
- sustainability and ESG.

Participants will also be able to evaluate potential business applications of AI and develop AI-based solutions for hospitality organisations.

3. PROGRAMME STRUCTURE

Component	ECTS	Hours
Academic Modules	21	576
Final Project Work	9	174
TOTAL	30	750

4. TEACHING AND LEARNING METHODOLOGY

The programme combines:

- online lessons;
 - guided individual study;
 - real-world case studies;
 - practical exercises;
 - AI tool analysis;
 - project activities;
 - individual tutoring;
 - Final Project Work;
 - final assessment.
-

5. FINAL PROJECT WORK

9 ECTS – 174 hours

The Final Project Work requires participants to develop a concrete AI-related project for the hospitality industry, integrating strategic analysis, technological applications and business impact evaluation.

6. ASSESSMENT

Assessment includes:

- assignments;
- practical activities;
- case studies;
- presentations;
- Final Project Work;

- final project presentation and assessment.
-

7. QUALITY ASSURANCE

Agorà Italian Academy applies internal Quality Assurance procedures covering:

- programme content;
 - learning outcomes;
 - teaching methodology;
 - Project Work;
 - assessment;
 - student feedback;
 - programme monitoring;
 - continuous improvement.
-

8. ADMISSION REQUIREMENTS

- Upper-secondary school diploma or university degree;
- English language competence approximately at B1 level or higher;
- motivation letter;
- admission interview.

Previous specialist AI training is not required.

9. DETAILED CURRICULUM

MODULE 1 – Fundamentals of Artificial Intelligence and Machine Learning

Fundamental principles of AI and Machine Learning, terminology, technological evolution and their impact on hospitality.

MODULE 2 – AI in Revenue Management and Demand Forecasting

Applications of AI to demand forecasting, pricing, Revenue Management and managerial decision support.

MODULE 3 – Guest Profiling and Personalisation through AI

Guest data analysis, profiling, personalisation and intelligent use of customer data.

MODULE 4 – AI-Based Marketing and Social Media Automation

AI applications in content creation, digital marketing, social media, segmentation and marketing automation.

MODULE 5 – Chatbots and Virtual Assistants for Hotels

Chatbots, virtual assistants, conversational AI and automated guest communication.

MODULE 6 – Operational Analytics with AI Tools

AI applications for operational data, performance, processes and hotel KPIs.

MODULE 7 – Innovation and Digital Transformation in Hospitality

Technological innovation, digital transformation and new organisational and business models in hospitality.

MODULE 8 – Sustainability and ESG in AI-Driven Hotels

AI applications to sustainability, ESG, resource efficiency and monitoring of environmental and social impact.

MODULE 9 – FINAL PROJECT – AI BUSINESS PLAN FOR THE HOSPITALITY INDUSTRY

Development of a Business Plan focused on the application of Artificial Intelligence in the hospitality industry.

10. FORTHCOMING CORE STUDY REFERENCE

HOSPITALITY 4.0 – ARTIFICIAL INTELLIGENCE IN THE HOTEL INDUSTRY

From Digital Transformation to Intelligent Hotel Management

Mauro Di Chicco

Forthcoming publication – 2026

The forthcoming book will serve as a study and reference resource for the programme's content on Artificial Intelligence applied to hotel management.

11. CERTIFICATION

Upon successful completion of the programme and final assessment, Agorà Italian Academy issues:

CERTIFICATE OF ADVANCED TRAINING IN ARTIFICIAL INTELLIGENCE IN HOSPITALITY

Programme workload: 30 ECTS