FORCE Ai

Co-funded by the European Union

Artificial Intelligence Manager for Higher Education: Micro-Credential Programme Curriculum

Fachhochschule des Mittelstands

UNIVERSITY OF TWENTE.

RISEBA UNIVERSITY

ANADOLU ÜNİVERSİTESİ

Document Metadata

Project name	Fostering Opportunities, Resources, and Capabilities in AI for Effective Management of Higher Education Institutions
Acronym	FORCE AI
Reference number	2024-1-DE01-KA220-HED-000250975
Funding programme	Erasmus+, Cooperation Partnerships in Higher Education – KA2
Name of the Result	Artificial Intelligence Manager for Higher Education: Micro-credential Programme Curriculum
Work package	Work package 3 – Building AI Manager Microcredential Framework
Lead partner	Anadolu University
Contributors	Fachhochschule des Mittelstands, University of Twente, University of Applied Sciences RISEBA
Language	English
Release date	October 31, 2025
Dissemination level	Public

Financial support

Funded by the European Union. Views and opinions expressed are, however, those of the author(s) only and do not necessarily reflect those of the European Union or the National Agency DAAD. Neither the European Union nor the National Agency DAAD can be held responsible for them.

Co-funded by the European Union

With support from

ÖZYEĞİN UNIVERSITY
AKAD UNIVERSITY
EDTECH-U EUROPEAN ASSOCIATION FOR EDUCATIONAL TECHNOLOGY IN HIGHER EDUCATION
AISA ADVANCED INFORMATION SOCIETY ASSOCIATION

AIM4HE Curriculum

1. Identification

Programme Title	: AIM4HE – Artificial Intelligence Manager for Higher Education
Type	: Micro-credential Programme
Workload	: 155 hours (6 ECTS-equivalent, non-formal recognition)
Target Groups	: Higher education administrative and academic staff Digital transformation leaders IT and data governance professionals Staff preparing for or acting in AI management roles
Certification & Recognition	: Course Completion Badges & AIM4HE Certificate recognized by all EU partner and other higher education institutions

2. Description

The AIM4HE (Artificial Intelligence Manager for Higher Education) micro-credential programme is designed to equip those who are working or planning to work as an AI Manager in a higher education institution with the strategic, ethical, and practical competencies required to foster responsible integration of artificial intelligence in academic institutions. In addition to developing strategic, ethical, and technical competencies in AI management, the AIM4HE programme also encourages participants to adopt a sustainability mindset. As AI systems increasingly impact environmental, social, and economic dimensions, the training incorporates elements of green skills—such as systems thinking, digital sustainability awareness, and responsible innovation. Through course activities and capstone projects, participants are guided to consider the ecological impact of AI implementation, promote sustainable digital practices, and contribute to greener, more inclusive higher education ecosystems.

The AIM4HE training programme consists of six courses, each aligned with a key area of expertise outlined in the AIM4HE qualification profile, developed in the FORCE AI Project. The programme is designed with flexibility and accessibility in mind, offering a modality-independent learning experience that allows participants to engage with the content in ways that best suit their individual and institutional contexts. The piloting is conducted as a blended learning course. Besides, the training and materials are offered as open educational resources (OERs), so that they can be downloaded and used as part of fully online, blended, hybrid, or face-to-face formats, enabling institutions and learners to adapt the programme to their preferred mode of delivery via their own learning management systems. This ensures wide applicability for diverse professional development settings while maintaining consistent quality across modalities. The curriculum is designed to support formal learners pursuing certification as well as non-formal learners seeking professional development through self-paced study. The recognition pathways for non-formal learners will be established through internal validation mechanisms at each institution.

The micro-credential programme concludes with a practical, application-oriented capstone project—such as an AI audit plan, an implementation concept, or a pilot initiative—ensuring that participants can directly apply their learning in institutional contexts. Quality assurance is embedded throughout the programme, aligned with the European Standards and Guidelines (ESG) for higher education, and supported by continuous monitoring through learning analytics and peer review processes. This ensures both academic rigor and tangible real-world impact.

3. Programme Goal and Learning Outcomes

The programme intends to build a transnational, modular training ecosystem that qualifies higher education staff to function as AI Managers, capable of strategically and ethically integrating AI across academic, administrative, and technological dimensions within their institutions—while supporting institutional autonomy in delivery, recognition, and adaptation.

Upon completion of the full AIM4HE programme, participants will be able to:

1. Analyze institutional digital infrastructure, data dependencies, and AI system capabilities to select optimal and responsible AI solutions for higher education challenges.
2. Design comprehensive institutional AI strategies and roadmaps that align the university's mission with relevant ethical and regulatory frameworks.
3. Lead interdisciplinary AI innovation projects and institutional transformation by utilizing agile methodologies and performance indicators (KPIs).
4. Guide the ethical, transparent, and sustainable implementation of AI systems by integrating legal, social, and environmental responsibility into institutional decision-making.
5. Communicate complex AI topics effectively to diverse stakeholders and build collaborative networks to facilitate successful, responsible AI adoption.
6. Initiate AI-related professional development and capacity-building programmes that align with global digital education strategies.

4. Programme Structure

The programme consists of six courses and a capstone project:

Component	Title	Workload (ECTS)
Course 1	AI Literacy in Higher Education	25 h (1)
Course 2	Strategic Leadership in AI Governance	25 h (1)
Course 3	Innovation and Change Management	25 h (1)
Course 4	Ethics, Integrity and Social Responsibility	25 h (1)
Course 5	Communication and Collaboration for AI Transformation	25 h (1)
Course 6	Capacity Building	25 h (1)
Capstone	Institutional AI Governance & Capacity-Building Plan	5 h
	TOTAL	155 h (6)

5. Course Descriptions and Outcomes

Based on the competency framework outlined in the AIM4HE Qualification Profile, six courses were developed.

Course 1: AI Literacy in Higher Education
Competence Area: AI Literacy
Workload: ≈ 25 hours (1 ECTS)
This course introduces participants to the fundamentals of artificial intelligence as applied in higher education. Learners will analyze AI models, data dependencies, and institutional digital infrastructures, and practice evaluating systems for interoperability and readiness. The focus is on equipping participants to critically select and justify AI solutions that address teaching, research, administration, and student support needs. It intends to develop a conceptual and evaluative understanding of AI systems to make informed institutional decisions. At the end of the course, the participants will be able to:

1. Explain core AI concepts, functionalities, and limitations
2. Reflect on the societal and environmental impact of AI use in academic settings
3. Describe the key components of university IT systems and digital infrastructure
4. Analyse institutional digital infrastructure for AI readiness, including assessing algorithmic structures, data dependencies, model limitations, and system interoperability.
5. Evaluate AI systems' functionality, areas of application, and implications.
6. Select AI tools in a legally compliant and responsible way, aligned to institutional policies and practices.

Course 2: Strategic Leadership in AI Governance
Competence Area: Strategic Leadership
Workload: ≈ 25 hours (1 ECTS)
This course helps participants develop the skills to design institutional AI strategies aligned with mission, vision, ethics, and regulatory frameworks. Participants practice foresight and scenario planning to anticipate technological and policy changes and lead culture changes. At the end of this course, participants will be able to:

1. Identify key university processes where AI can improve decision-making and efficiency
2. Map AI-supported interventions across the student lifecycle
3. Develop institutional AI strategies and roadmaps aligned with mission, vision, and societal responsibilities, including sustainability and adapting energy-efficient digital solutions.
4. Lead organizational change including managing cultural resistance to AI adoption.
5. Conduct foresight and scenario planning for technological and regulatory shifts.

Course 3: Innovation and Change Management
Competence Area: Innovation & Change Management
Workload: ≈ 25 hours (1 ECTS)
This course equips participants to design and steer institutional AI strategies aligned with mission, vision, and regulation. The participants gain practical tools to manage interdisciplinary AI projects and drive digital transformation across the university. This course focuses on agile and participatory approaches, KPI tracking, and evaluating the impact of AI initiatives. At the end of this course, participants will be able to:

1. Develop project plans for AI initiatives

2. Manage AI innovation projects using agile approaches, including project management, design thinking, etc.
3. Identify and manage change-related risks and resistance
4. Facilitate co-creation and participatory innovation.
5. Use key performance indicators (KPIs) to guide and evaluate AI integration.

Course 4: Ethics, Integrity and Social Responsibility
Competence Area: Ethics, Integrity and Social Responsibility
Workload: ≈ 25 hours (1 ECTS)
This course positions participants as ethical leaders and role models in AI governance. In other words, it aims to enable participants to guide responsible, transparent, and sustainable AI implementation. Participants explore legal frameworks, bias mitigation, and green AI practices to integrate environmental and social responsibility into decision-making. At the end of this course, participants will be able to:

1. Identify ethical and legal considerations relevant to AI use in higher education
2. Apply ethical AI principles and regulatory frameworks (GDPR, AI Act).
3. Serve as ethical leader and role model in institutional AI transformation.
4. Integrate green and sustainable practices into AI-related decision-making.

Course 5: Communication and Collaboration for AI Transformation
Competence Area: Communication & Collaboration
Workload: ≈ 25 hours (1 ECTS)
This course strengthens the ability to communicate AI topics across academic, technical, and administrative audiences. Participants practice intercultural and multilingual collaboration, and build skills to facilitate dialogue, trust, and stakeholder engagement. Emphasis is placed on developing partnerships with industry, government, and international networks to scale responsible AI adoption in higher education. At the end of this course, participants will be able to:

1. Design inclusive communication strategies around AI use
2. Align communication with organizational culture and values
3. Facilitate dialogue across academic, administrative, and technical stakeholders for building trust.
4. Liaise with IT departments and external providers during procurement, testing, and integration processes.
5. Demonstrate intercultural and multilingual communication skills in international collaborations.
6. Build networks and partnerships across institutions, industry, and government.

Course 6: Capacity Building
Competence Area: Capacity Building
Workload: ≈ 25 hours (1 ECTS)
This course prepares participants to design and evaluate AI-related professional development programmes. Participants align initiatives with the European and global digital-education strategies. They design training blueprints, apply evaluation metrics, and explore scalable models for institutional capacity building, reinforcing the multiplier role of the AI Manager in higher education. At the end of this course, participants will be able to:

1. Conduct a needs analysis for AI-related upskilling and reskilling as well as green and digital sustainability awareness
2. Design pedagogically sound AI training initiatives for all stakeholders (students, faculty and staff).
3. Align professional development initiatives with the European and global digital-education strategies (e.g., Bologna Process, EU Digital Education Action Plan, UNESCO Education 2030 Agenda).
4. Use AI tools effectively during professional development initiatives to be a model and example to others
5. Evaluate effectiveness, efficiency and appeal of the professional development initiatives using appropriate tools

Capstone Project: Designing an Institutional AI Governance and Capacity-Building Plan for Higher Education
Competence Area: All
Workload: ≈ 5 hours (0 ECTS)
The capstone synthesizes all learning outcomes of the six AIM4HE courses by challenging participants to create a comprehensive, evidence-based AI Management Plan for a real (their own) or hypothetical university. It demonstrates their ability to integrate AI literacy, strategy, innovation, ethics, communication, and capacity-building into one coherent institutional framework. At the end of this activity, the participants will provide an AI Management Plan Report (3,000–4,000 words), including the following sections:

- Executive summary
- Readiness audit
- Strategy and roadmap
- Implementation and change plan
- Ethics and sustainability charter
- Communication and collaboration framework
- Capacity-building blueprint.

The project will be assessed by using the following rubric:

Criteria	Weight	Exemplary (A)	Proficient (B)	Developing (C)
1. AI Readiness Audit (AI Literacy)	15 %	Provides comprehensive, data-driven audit using institutional or open datasets; integrates infrastructure, interoperability, and data-governance analysis.	Identifies key readiness factors with minor data gaps; partial integration of interoperability or governance.	Limited or generic audit; lacks data or actionable findings.

2. Strategic AI Roadmap (Leadership)	15 %	Fully developed multi-year roadmap aligning mission, regulation, ethics, and sustainability; includes foresight scenarios.	Coherent roadmap with clear alignment to mission and regulation; limited foresight analysis.	Fragmented or descriptive roadmap; weak strategic alignment.
3. Implementation & Change Plan (Innovation)	15 %	Agile implementation plan with milestones, KPIs, stakeholder roles; demonstrates realistic resource mapping.	Logical implementation plan with partial KPI use or unclear roles.	Minimal plan; lacks measurable indicators or change-management logic.
4. Ethics & Sustainability Integration (Ethics)	15 %	Embeds ethical, legal, and green AI principles across all components; provides mitigation and accountability framework.	Addresses key ethical and environmental aspects; limited operationalization.	Mentions ethics superficially; sustainability absent or unsupported.
5. Stakeholder Engagement & Communication Plan (Communication)	15 %	Clear mapping of internal/external actors; diversified channels; strong intercultural sensitivity and collaboration mechanisms.	Adequate stakeholder list and communication plan; minor clarity issues.	Minimal list; generic communication approach.
6. Capacity-Building & Training Design (Capacity)	15 %	Robust professional-development model aligned with EU Digital Education Action Plan & UNESCO Lifelong-Learning Agenda; includes evaluation metrics.	Reasonable design; partial alignment with frameworks or limited evaluation plan.	Basic or conceptual training idea; no evaluation strategy.
7. Integration & Coherence (All)	10 %	All sections logically integrated into one governance framework; strong evidence of systemic thinking.	Moderate coherence; some components disconnected.	Disjointed or repetitive sections; weak integration.

Total Weight: 100 % Passing threshold ≥ 70 % (= Proficient).

6. Learning Resources (Materials)

Learning resources used in the training were produced within the framework identified among the FORCE-AI Project partners. Some materials were created from scratch, and some others are curated among available open education resources (OERs). During the production of the materials, including videos, texts and podcasts, some AI tools have been used. Courses located in the learning management system provided by University of Twente mainly included all the required learning resources in video, podcasts, texts, interactive learning materials formats to be used during the piloting.

7. Assessment & Certification

The learners' achievements in each course, during the piloting, are assessed via the following instruments:

Instrument	At least	Ratio (%)
Completion of the asynchronous activities	%75	20
Active participation to synchronous sessions	%75	20
End of course quizzes	Average 75	15
End of training exam	min 75	15
Completion of the capstone project	%100	30
TOTAL		100

In order to complete the course successfully the participants should receive at least 75 total points. These participants can receive the "Course Completion Badge". Those who do not get this score can repeat the course. Those who complete all the courses and the capstone project can receive "AIM4HE Certificate":

- **Course Completion Badge** will prove that a participant completed all the requirements of a course. A total of 6 badges will be available.
- **Certificate** will show that a participant has completed all the requirements of the training.

The badges and the certificate will be provided by University of Twente (UT).

8. Evaluation & Recognition

The effectiveness of the AIM4HE Training is evaluated via the following metrics:

- Course assessment results
- Course evaluation results
- End of training evaluations
- Designer and trainer evaluations
- Facilitator evaluation

The badges and the certificate are recognized by partner institutions. Also, they are recognizable by any EU higher education institution.

9. Quality Assurance

Quality assurance (QA) in the AIM4HE programme is designed to ensure academic rigor, relevance, transparency, and continuous improvement, in line with European higher education principles and relevant European policy frameworks for micro-credentials, digital education, and lifelong learning.

The programme design also reflects principles of constructive alignment, ensuring coherence between learning outcomes, teaching and learning activities, and assessment methods.

Quality assurance is embedded from the initial design phase through:

- Joint curriculum development by transnational partners with complementary expertise.
- Alignment of programme and course learning outcomes with the AIM4HE Qualification Profile and ESCO competence descriptors.
- Peer review of course concepts and learning scenarios by partner institutions prior to content development.
- Verification of workload, assessment balance, and level appropriateness to ensure consistency with ECTS principles, even where formal credit recognition is determined locally.

During delivery and piloting, quality is monitored through multiple mechanisms:

- Learner analytics collected via the virtual learning environment (e.g. participation rates, completion data, assessment results).
- Formative learner feedback gathered through module- and course-level evaluation instruments.
- Peer observation and review, whereby partner institutions review course delivery, materials, and assessment practices.
- Trainer reflection reports documenting strengths, challenges, and improvement actions after each delivery cycle.

Synchronous sessions conducted during piloting also serve as qualitative feedback points, allowing facilitators to identify learner needs, misconceptions, and contextual adaptation requirements.

Assessment quality is ensured by:

- Clear assessment criteria and rubrics aligned with course and programme learning outcomes.
- Use of both formative and summative assessment methods to support learning progression.
- Transparency of assessment requirements communicated to learners in advance.
- Capstone project assessment using a standardized rubric applied consistently across institutions.

Where applicable, academic integrity principles are reinforced through guidance on responsible AI use in assessments.

The programme follows a cyclical review process:

- Aggregated analysis of assessment outcomes, learner feedback, and completion data after each pilot or delivery cycle.
- Qualitative evaluation based on partner reflections and external stakeholder input, where available.
- Identification of necessary revisions to learning outcomes, content, assessment, or delivery methods.
- Documented updates to curriculum materials and OERs, ensuring transparency of changes.

Major curriculum reviews are planned at defined intervals or following significant regulatory, technological, or policy developments related to AI in higher education.

While the AIM4HE curriculum provides a common quality-assured framework, partner and adopting institutions retain autonomy regarding:

- Formal recognition and credit attribution
- Local quality assurance procedures
- Integration into institutional professional development or degree structures

This approach ensures both transnational consistency and contextual flexibility.