30-12-2025

# Deliverable D4.8 Quality Assurance application in Academic Year 2025/2026

**Project acronym:** EMAI4EU

**Project title:** EMotion Artificial Intelligence specialists for Europe

**Deliverable D4.3**

| | |
|---|---|
| Contractual Date: | 31-12-2025 |
| Actual Date: | 31-12-2025 |
| Grant Agreement No.: | 101123289 |
| Work Package: | WP4 |
| Task Item: | T4.2 |
| Lead Partner: | UPM |

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**Abstract**

Report on the Quality Assurance Methodology application during M13-M24.

Universidad Politécnica de Madrid (UPM) on behalf of the EMAI4EU project

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# Versioning and contribution history

| Version | Date | Authors | Prepared by Name Org. | Approved by (WP-Leader) | Status |
|---|---|---|---|---|---|
| 0.1 | 10/09/2025 | Mayte Sánchez (UPM) | UPM | QA TEAM | Draft |
| 0.2 | 15/12/2025 | Javier Segovia (UPM), Mayte Sánchez (UPM), Alberto Tejero (UPM) | UPM | WP Leaders | Version to be reviewed by WP leaders |
| 0.3 | 19/12/2025 | Javier Segovia (UPM), Vilma Djala (EITD) | UPM | PC | Version to be reviewed by Project Coordinator |
| 1.0 | 30/12/2025 | Javier Segovia | UPM | PC | Final Version |

# Table of Contents

# 1 TASK 4.2 Quality assurance and harmonisation of curricula

The EMAI4EU project has established a comprehensive Quality Assurance (QA) framework to ensure the excellence and consistency of both project outputs and academic content. This framework was defined under Task 4.2 – Quality Assurance and Harmonisation of Curricula, as described in the Grant Agreement and detailed in Deliverable D4.3 for the first year of implementation.

Task 4.2 established a robust quality control framework to ensure that all project deliverables and academic outputs meet the highest standards. In D4.3, section 3.1, it was stated that all EMAI4EU partners share responsibility for producing high-quality deliverables on time, while the Project Coordinator (PC) holds ultimate accountability for submission to the European Commission, in close coordination with the Project Steering Committee and the Quality Assurance Committee (QAC). The Quality Manager (QM), appointed by UPM, oversees the entire review process—setting timelines, guiding peer reviewers, and supporting the Deliverable Team, which comprises Work Package (WP) and Task Leaders. WP Leaders lead the drafting and report progress to the PEC, while Task Leaders coordinate contributions from partners.

Every contractual deliverable undergoes an internal peer review by all WP partners, rather than limiting the process to two reviewers as initially foreseen in the Grant Agreement. This inclusive approach fosters collective responsibility, ensures accuracy, and strengthens alignment with project objectives. Peer reviewers assess content quality, presentation, and comprehensiveness, while the Project Manager (PM) performs a final check before submission. Standards for version control, file naming, and templates were already defined in D4.1 Project Management Handbook. These procedures are complemented by harmonisation activities—regular meetings and monitoring actions—to guarantee that the EMAI4EU Master's Programme and self-standing modules follow common principles and high standards. Student feedback and satisfaction surveys remain integral to this monitoring process.

In D4.3, section 3.1, it was described the Quality Assurance Plan (QAP), which serves as the cornerstone of the QA framework and addresses two critical dimensions:

1. Project Processes

   The QAP ensures that project activities and outputs are delivered on time and meet the required quality standards. Its objectives include:

   - Monitoring progress against milestones and deliverables.

- Verifying the completeness and quality of each activity and the overall project.
- Identifying potential bottlenecks and enabling corrective measures.
- Keeping the Project Executive Committee (PEC) informed and escalating issues when necessary.

2. Academic Content
   The QAP also encompasses academic quality assurance for:
   - WP1: Deployment of the EMAI4EU Master's Programme in Artificial Intelligence, with a specialization in Emotion AI and a minor in Innovation and Entrepreneurship.
   - WP2: Development and delivery of self-standing learning modules and related certification schemes.

To support these objectives, the QAP incorporates two key artefacts:

- Quality Checklists, designed to track compliance with defined standards and collect evidence throughout the project lifecycle.
- Risk Management Plan, which identifies and evaluates academic and management risks, assesses their likelihood and impact, and defines mitigation strategies to prevent or reduce their materialisation.

Building on the foundations laid in 2024, the focus for 2025 was to apply and extend the QA principles and methodologies to the next phase of the project, ensuring continuous improvement and adaptation to evolving needs. This includes:

- Implementing QA processes during the delivery of the EMAI4EU Master's Programme for its first academic cycle.
- Applying for the EIT Label for the EMAI4EU Master's Programme, a key milestone that reinforces compliance with EIT quality standards and recognition within the EIT Digital ecosystem
- Advancing the development and quality control of self-standing modules, ensuring compliance with ESG and EIT QALE standards.
- Strengthening risk management and monitoring mechanisms to address emerging challenges proactively.
- Enhancing stakeholder engagement and feedback loops, particularly from students and industry partners, to validate the relevance and impact of the educational offerings.

These objectives aim to consolidate the progress achieved in the first year and set the stage for sustainable quality assurance practices throughout the project lifecycle.

## 1.1 Contact Information

- For general questions regarding the Quality Assurance Plan, contact Javier Segovia (javier.segovia@upm.es)
- For specific questions regarding Quality Assurance in Project Progress, contact Mayte Sanchez (mayte.sanchez@ctb.upm.es)
- For specific questions regarding Learning Content Production Quality Assurance in WP1, contact Javier Segovia (javier.segovia@upm.es)
- For specific questions regarding Learning Content Production Quality Assurance in WP2, contact Alberto Tejero (alberto.tejero@upm.es)

# 2 Project Processes Quality assurance

Quality assurance in EMAI4EU relies on structured checklists to monitor compliance with the Quality Assurance Plan (QAP). These tools provide transparency and consistency across key areas such as deliverable review, milestone tracking, meeting documentation, risk management, and academic quality control. The following section consolidates all checklists used in 2025, offering a clear overview of how quality standards were applied and monitored throughout the project.

## 2.1 Deliverables Checklist

The progress of project deliverables for 2024 and 2025 is tracked using the checklist below. For the second year, the deliverable template has been updated to version 3.0.

The table presents a simplified summary of the full checklist, showing the current status of each deliverable:

- The "Status" column indicates whether a deliverable has been submitted (yellow) or submitted and approved (green).
- In the "Del" column, blue indicates that the document was submitted in a previous period, while violet marks documents that must be submitted during the current project period.

| Del. | Deliverable name | Lead Beneficiary | Due month | WP | Status (from EC) |
|---|---|---|---|---|---|
| D1.1. | EMAI4EU master's programme: Market analysis and curriculum design | UCA | M13 (31/01/2025) | WP1 | Approved |
| D1.2 | Report on EMAI4EU master's programme delivery - Academic Year 2024/2025 | POLIMI | M30 (30/06/2026) | WP1 | |

| Del. | Deliverable name | Lead Beneficiary | Due month | WP | Status (from EC) |
|---|---|---|---|---|---|
| D1.3 | Report on EMAI4EU master's programme delivery - Academic Year 2025/2026 | UPM | M42 (30/06/2027) | WP1 | |
| D1.4 | Report on EMAI4EU master's programme delivery - Academic Year 2026/2027 | ELTE | M54 (30/06/2028) | WP1 | |
| D2.1 | EMAI4EU self-standing modules: Market analysis and curriculum design | UTU | M22 (31/10/2025) | WP2 | Submitted |
| D2.2 | Intermediate report on delivery of EMAI4EU self-standing learning modules | UNITN | M38 (28/02/2027) | WP2 | |
| D2.3 | Final report on delivery of EMAI4EU self-standing learning modules | UNITN | M54 (30/06/2028) | WP2 | |
| D3.1 | Marketing and Dissemination Plan | EITD | M6 (30/06/2024) | WP3 | Approved |
| D3.2 | Report on marketing and dissemination activities - Year 1 | EITD | M18 (30/06/2025) | WP3 | Submitted |
| D3.3 | Report on marketing and dissemination activities - Year 2 | UR1 | M30 (30/06/2026) | WP3 | |
| D3.4 | Report on marketing and dissemination activities - Year 3 | EITD | M42 (30/06/2027) | WP3 | |
| D3.5 | Report on marketing and dissemination activities - Year 4 | UR1 | M54 (30/06/2028) | WP3 | |
| D4.1 | Project Management Handbook | EITD | M6 (30/06/2024) | WP4 | Approved |
| D4.2 | Data Management Plan | EITD | M6 (30/06/2024) | WP4 | Approved |
| D4.3 | Quality Assurance Methodology and application in the first year | UPM | M12 (31/12/2024) | WP4 | Approved |
| D4.4 | Enrolment to EMAI4EU education programmes and scholarship allocation– Results (Year 1) | EITD | M12 (31/12/2024) | WP4 | Approved |
| D4.5 | Enrolment to EMAI4EU education programmes and scholarship allocation– Results (Year 2) | EITD | M24 (31/12/2025) | WP4 | submitted |
| D4.6 | Enrolment to EMAI4EU education programmes – Results (Year 3) | EITD | M36 (31/08/2027) | WP4 | |
| D4.7 | Enrolment to EMAI4EU education programmes – Results (Year 4) | EITD | M54 (30/06/2028) | WP4 | |
| D4.8 | Quality Assurance application in Academic Year 2024/2025 | UPM | M24 (31/12/2025) | WP4 | submitted |
| D4.9 | Quality Assurance application in Academic Year 2025/2026 | UPM | M36 (31/12/2026) | WP4 | |
| D4.10 | Quality Assurance application in Academic Year 2026/2027 | UPM | M54 (30/06/2028) | WP4 | |
| D4.11 | Intermediate Report on community, partnership, and mobility management | EITD | M30 (30/06/2026) | WP4 | |

| Del. | Deliverable name | Lead Beneficiary | Due month | WP | Status (from EC) |
|---|---|---|---|---|---|
| D4.12 | Final report on community, partnership, and mobility management | EITD | M54 (30/06/2028) | WP4 | |

All deliverables followed the process explained in D4.3, section 3.1: Deliverables Production and Review Process.

## 2.2 Milestone Checklist

The following checklist indicates and monitors the degree of achievement of each milestone and the associated comments. All milestones scheduled for the second year were successfully achieved on time.

| MS | Milestone | Associated WP | Lead Beneficiary | Scheduled Deadline | Means of verification | MS achieved |
|---|---|---|---|---|---|---|
| MS1 | Tentative curriculum of the master's programme defined | WP1 | 5-ELTE | M3 | Documentation collected and uploaded to the EMAI4EU data repository. | YES |
| MS2 | Labour market needs analysis completed, and curriculum of the master's programme finalised | WP1 | 2-UCA | M10 | Approval by all partners of the final curriculum of the master's programme. | YES |
| MS3 | First two-year cycle of the master's programme delivered | WP1 | 1-EITD | M40 | Graduation and awarding of double degree titles to students completing the full cycle of the master's programme | |
| MS4 | Second two-year cycle of the master's programme delivered | WP1 | 5-ELTE | M52 | Graduation and awarding of doubledegree titles to students completing the full cycle of the master's programme. | |
| MS5 | Self-standing learning modules and related certification schemes completed | WP2 | 4-UTU | M21 | Full curriculum of self-standing learning modules completed and available online. | YES |
| MS6 | First annual cycle of certification exams completed | WP2 | 3-INUTN | M40 | Certification exams completed and certifications released to successful participants. | |
| MS7 | Second annual cycle of certification exams completed | WP2 | 3-INUTN | M52 | Certification exams completed and certifications released to successful participants. | |
| MS8 | Development of a Marketing and Dissemination Plan | WP3 | 1-EITD | M4 | A detailed written Marketing and Dissemination Plan shared with and rolled out in cooperation with the consortium. Active website (regular updates). | YES |
| MS9 | Completion of the planned Marketing, Communication and Dissemination activities | WP3 | 1-EITD | M52 | Regular (monthly, quarterly) reports on the results of the co-run dissemination activities. To be shared with all partners digitally. | |
| MS10 | Completion of Project Management Handbook | WP4 | 1-EITD | M4 | Project Management Handbook completed and agreed by all partners. | YES |

| MS | Milestone | Associated WP | Lead Beneficiary | Scheduled Deadline | Means of verification | MS achieved |
|---|---|---|---|---|---|---|
| MS11 | Definition of a Data Management Plan | WP4 | 1-EITD | M4 | Data Management Plan defined and agreed by all partners. | YES |
| MS12 | Definition of a Quality Assurance Principles | WP4 | 7-UPM | M6 | Quality Assurance Principles defined and agreed by all partners. | YES |
| MS13 | Completion of the enrolment process of students for the first full cycle of master's programme | WP4 | 1-EITD | M18 | Enrolment confirmed by all universities. Final list of enrolled students drafted by EITD and shared with all partners | YES |
| MS14 | Definition of an internship programme for master students | WP4 | 1-EITD | M16 | Internship programme defined and opened to companies. | YES |
| MS15 | Completion of the enrolment process of students for the second full cycle of master's programme | WP4 | 1-EITD | M30 | Enrolment confirmed by all universities. Final list of enrolled students drafted by EITD and shared with all partners | |

## 2.3 Meetings Checklist

As described in D4.1 Project Management Handbook, the following meetings will be called regularly.

| | Ordinary meeting | Extraordinary meeting |
|---|---|---|
| **General Assembly (GEA)** | Four meetings:<br>1st - within first three month of year 1,<br>2nd - within second half of year 2,<br>3rd - within second half of year 3,<br>4th - within second half of year 4. | At any time upon request of the Project Executive Committee or 1/3 of the Members of the General Assembly |
| **Project Executive Committee (PEC)** | Monthly teleconferences.<br>Face-to-face meeting organize every 6 months: in March and September of each project year. | At any time upon request of any Member of the General Assembly |
| | | |
| **General Assembly and Project Executive Committee** | GEA and PEC will meet jointly at the beginning of the project for detailed strategy and planning. | |
| **Work Package (WP)** | Monthly for each WP. | At any time upon request of any Member of the WP or Project Coordinator |

As outlined in Deliverable 4.3, dedicated templates were developed to track meeting progress, capturing both agendas and minutes for each session. The image below illustrates the agenda and meeting notes for the General Assembly held during the 2025 reporting period.

**EMAI4EU·General·Assembly·Year·2**

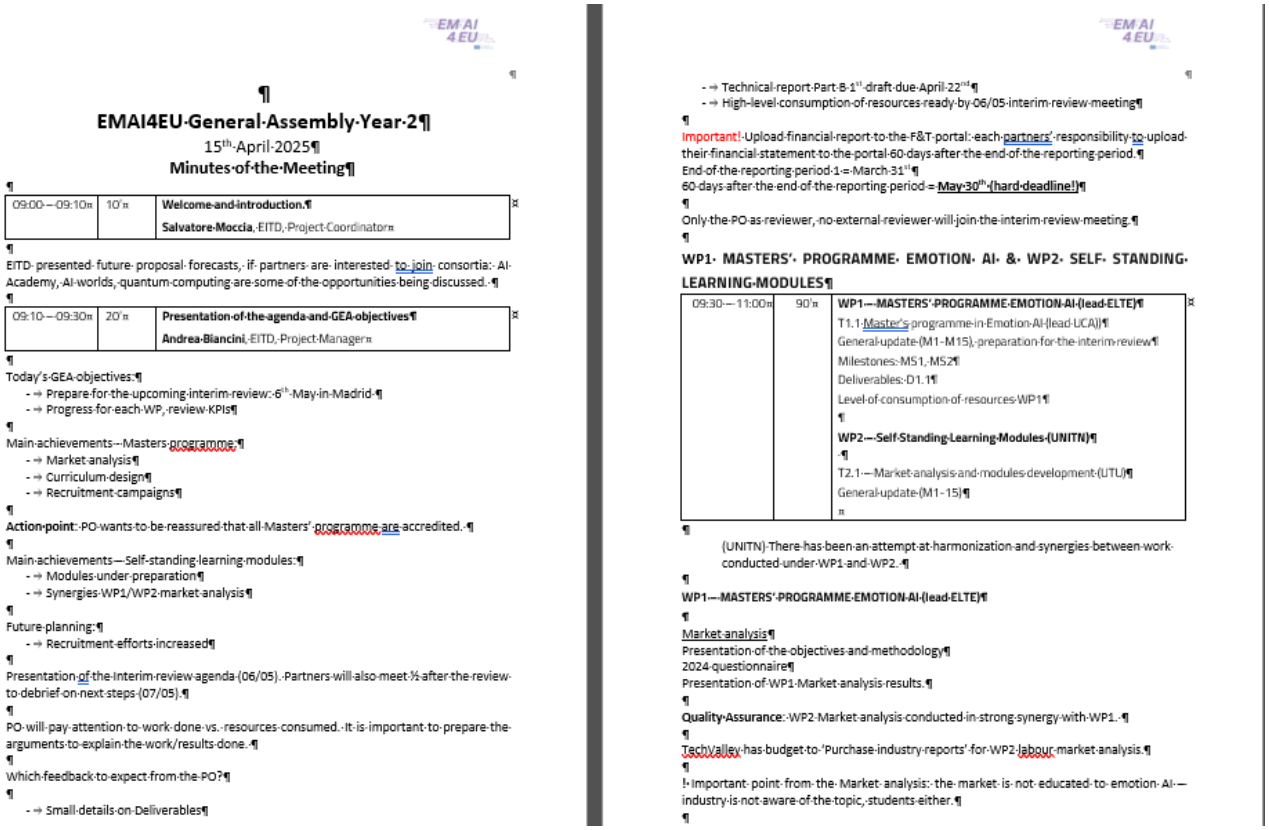
15th·April·2025

**Agenda**

Location:·EIT·House,·Rue·Guimard·7,·4th·floor
1040·Bruxelles,·Belgium.

| Timing | Length | Session |
|---|---|---|
| 09:00·–·09:10 | 10' | **Welcome·and·introduction.**<br>**Salvatore·Moccia**,·EITD,·Project·Coordinator |
| 09:10·–·09:30 | 20' | **Presentation·of·the·agenda·and·GEA·objectives**<br>**Andrea·Biancini**,·EITD,·Project·Manager |
| 09:30·–·11:00 | 90' | **WP1·–·MASTERS'·PROGRAMME·EMOTION·AI·(lead·ELTE)**<br>T1.1·Master's·programme·in·Emotion·AI·(lead·UCA)<br>General·update·(M1-M15),·preparation·for·the·interim·review<br>Milestones:·MS1,·MS2<br>Deliverables:·D1.1<br>Level·of·consumption·of·resources·WP1<br><br>**WP2·–·Self·Standing·Learning·Modules·(UNITN)**<br><br>T2.1·–·Market·analysis·and·modules·development·(UTU)<br>General·update·(M1-15) |
| 11:00·–·11:15 | 15' | **Coffee·break** |
| 11:15·–·12:45 | 90' | **WP4·–·Project·management·and·education·programme·administration·(lead·EITD)**<br>T4.1,·T4.2,·T4.3,·T4.4<br>Milestones·and·Deliverables·overview·(M1-M15)<br>General·updates,·changes·incurred,·risks·review<br>Milestones:·MS10,·MS11,·MS12<br>Deliverables:·4.1,·4.2,·4.3,·4.4<br><br>**KPI·Review** |
| 12:45·–·13:45 | 60' | **LUNCH·BREAK** |
| 13:45·–·14:45 | 60' | **WP3·–·Marketing·and·dissemination·(lead·EITD)**<br>T3.1·Marketing·and·promotion·activities·(lead·EITD) |

| Timing | Length | Session |
|---|---|---|
| | | General·update·(M1-M15),·preparation·for·the·interim·review<br>Milestones:·MS8<br>Deliverables:·D3.1 |
| 14:45·–·15:15 | 30' | **Wrap·up·and·end·of·the·day** |



**EMAI4EU General Assembly Year 2**

15th April 2025

**Minutes of the Meeting**

| | | |
|---|---|---|
| 09:00 – 09:10 | 10' | **Welcome and introduction.**<br>**Salvatore Moccia**, EITD, Project Coordinator |
| 09:10 – 09:30 | 20' | **Presentation of the agenda and GEA objectives**<br>**Andrea Biancini**, EITD, Project Manager |

Today's GEA objectives:
- ⇒ Prepare for the upcoming interim review: 6th May in Madrid
- ⇒ Progress for each WP, review KPIs

Main achievements – Masters programme:
- ⇒ Market analysis
- ⇒ Curriculum design
- ⇒ Recruitment campaigns

**Action point**: PO wants to be reassured that all Masters' programme are accredited.

Main achievements — Self-standing learning modules:
- ⇒ Modules under preparation
- ⇒ Synergies WP1/WP2 market analysis

Future planning:
- ⇒ Recruitment efforts increased

Presentation of the Interim review agenda (06/05). Partners will also meet ½ after the review to debrief on next steps (07/05).

PO will pay attention to work done vs. resources consumed. It is important to prepare the arguments to explain the work/results done.

Which feedback to expect from the PO?
- ⇒ Small details on Deliverables
- ⇒ Technical report Part B 1st draft due April 22nd
- ⇒ High-level consumption of resources ready by 06/05 interim review meeting

Important! Upload financial report to the F&T portal: each partners' responsibility to upload their financial statement to the portal 60 days after the end of the reporting period.
End of the reporting period 1 = March 31st
60 days after the end of the reporting period = May 30th (hard deadline!)

Only the PO as reviewer, no external reviewer will join the interim review meeting.

**WP1 MASTERS' PROGRAMME EMOTION AI & WP2 SELF STANDING LEARNING MODULES**

| | | |
|---|---|---|
| 09:30 – 11:00 | 90' | **WP1 – MASTERS' PROGRAMME EMOTION AI (lead ELTE)**<br>T1.1 Master's programme in Emotion AI (lead UCA)<br>General update (M1-M15), preparation for the interim review<br>Milestones: MS1, MS2<br>Deliverables: D1.1<br>Level of consumption of resources WP1<br><br>**WP2 – Self Standing Learning Modules (UNITN)**<br><br>T2.1 – Market analysis and modules development (UTU)<br>General update (M1-15) |

(UNITN) There has been an attempt at harmonization and synergies between work conducted under WP1 and WP2.

**WP1 – MASTERS' PROGRAMME EMOTION AI (lead ELTE)**

Market analysis
Presentation of the objectives and methodology
2024 questionnaire
Presentation of WP1 Market analysis results.

**Quality Assurance**: WP2 Market analysis conducted in strong synergy with WP1.

TechValley has budget to 'Purchase industry reports' for WP2 labour market analysis.

! Important point from the Market analysis: the market is not educated to emotion AI – industry is not aware of the topic, students either.

The progress of meetings has been recorded in a Meeting Checklist, which includes details from both the first and second years of the project (2024–2025).

As planned, the annual meeting took place on 15 April 2025 in Brussels. In addition, a project interim review meeting with the Project Officer was held on 6 May 2025 in Madrid, followed by an internal consortium meeting the next day to review the discussion and define follow-up actions based on feedback from the European Commission.

WP1 and WP2 meetings continued on a biweekly basis throughout the second reporting year. A member of the QA team usually joins these WPs meetings.

Although WP3 (Marketing and Dissemination) was initially scheduled to hold monthly meetings, only six meetings were conducted during 2025, primarily from June onwards. This reduction resulted from the strong interconnection between WP3 and WP1 activities: most marketing and dissemination decisions were closely linked to addressing the core challenge of student recruitment, which was a key focus of WP1. Consequently, WP3 discussions were incorporated into WP1 meetings rather than managed separately. The dedicated WP3 meetings were maintained mainly for coordination purposes and for sharing promotional materials and templates.

For the Quality Assurance Team, this approach is acceptable as long as WP3-related agreements and decisions are stored in an official record—which the WP1 minutes provide. The QA team also emphasized that interrupting a discussion in a WP1 meeting simply because the topic also relates to WP3, and postponing

it to a separate WP3 meeting, would be artificial and counterproductive. Since these conversations often start in WP1 because they address the core problem—student recruitment—it is more effective to discuss the problem and possible solutions together in the same meeting. Consolidating these discussions within WP1 meetings ensured efficiency, coherence, and timely decision-making.

This integration is evident from the WP1 minutes, which regularly included WP3-Related Topics, such as:

| WP1 Meeting Date | WP3-Related Topic Discussed |
|---|---|
| January 31, 2025 | Official EIT Digital communication and promotion materials; link to WP3 folder and toolkit |
| April 10, 2025 | Promotion ideas to attract more students; emphasis on multi-platform visibility |
| May 22, 2025 | Brainstorming session for EMAI promotion; shared document for ideas |
| June 5, 2025 | Follow-up brainstorming session; prioritization of promotion strategies |
| September 11, 2025 | Discussion on programme naming for better marketing impact |
| October 23, 2025 | Final decision on new programme name and adaptation of communication materials |

Additional WP1 action points required partners to:

- Update the Promotional Activities Tracker stored in the WP3 folder.
- Report dissemination activities such as social media posts, newsletters, and events.
- Coordinate with the WP3 leader for communication strategies and social media campaigns.

Therefore, WP1 minutes serve as the official record of WP3-related decisions, and this integrated approach was endorsed by the QA team as both practical and aligned with the project's objectives. The QA team confirmed that this solution complies with quality assurance standards, as all WP3-related decisions are traceable in official documentation.

It should be noted that, as the significance of WP3 increased during the recruitment phases throughout the year, the project took the strategic decision to enhance its capacity by appointing an additional team member, Ms. Dorina Stanculescu, to reinforce WP3 activities.

With regard to the monthly PEC meetings, minutes were prepared for only three sessions in 2025. The rationale was similar to that of WP3: as PEC members regularly participate in all WP meetings, they typically address ongoing issues either during those sessions or immediately thereafter. This approach was adopted to optimize time, with separate PEC meetings convened only when strictly necessary. Since September 2025, Prof. Javier Segovia, serving as Quality Manager, has also joined the PEC meetings.

## 2.4 Risks Analysis and Matrix

As stated in D4.3, the EMAI4EU project applies a structured risk management strategy to address potential threats to its success in a complex, multi-stakeholder environment. The approach focuses on early identification, analysis, evaluation, and treatment of risks through systematic monitoring and escalation to appropriate decision-making levels. Regular reviews ensure the detection of new risks, reassessment of existing ones, and adaptation of mitigation measures. Periodic updates maintain accuracy in risk severity and imminence. The process follows defined steps—identification, analysis, evaluation, decision, and treatment—and is continuously updated in alignment with the General Agreement.

The risks identified in the EMAI4EU proposal are shown in the table below:

| Risk Number | Description | Work Package | Proposed Mitigation Measures |
|---|---|---|---|
| ID1 | Key deliverables, milestones delayed due to disagreement or purpose. Likelihood: Low | WP3; WP4, WP1, WP2 | The Description of Actions to be performed is drafted in the clearest way in the Grant Agreement. In case of disagreement, a conflict resolution process is initiated |
| ID2 | Failure to recognise linkages between tasks, and critical paths. Likelihood: Low | WP3; WP4, WP1, WP2 | Regular online meetings within and between WPs are planned to ensure that linkages are identified and strengthened |
| ID3 | To produce high-quality results, the consortium will have to dedicate more efforts, corresponding to a higher budget. Likelihood: Low. | WP3; WP4, WP1, WP2 | Advanced monitoring mechanisms will be put in place by the Project Manager to track the resources spent. All consortium partners are experienced in this field, being used to work efficiently in organisations that have sufficient resources to predict the amount of work to perform within the time limit of the project. |
| ID4 | During the definition of the curricula of the master's programme, the courses offered by one of the higher education institutions do not have learning outcomes aligned with the courses offered by another institution. Likelihood: Low. | WP1 | A tentative curriculum of the courses offered in the master's programme by each partner (see Section 4) has been defined at proposal stage to avoid this issue as much as possible. Shall this issue arise during the finalisation of the curricula, a conflict resolution process will be initiated (see Section 2.3.2) by WP1/WP2 Leader with the support of the Project Coordinator if required. |

| | | | |
|---|---|---|---|
| ID5 | The understanding process of the needs of the labour markets does not provide enough significant information to find an agreement on the target audience of the self-learning modules. Likelihood: Medium | WP2 | The approach to understand the labour market needs will integrate various methods (e.g. surveys) and diverse sources to analyse relevant literature and gather data from the labour market, also leveraging on the SMEs part of EMAI4EU consortium and industry partners in the EITD ecosystem. In case that one of the methods does not provide the required information, they will complement with each other |
| ID6 | Lack of participation to some of the education programmes. Likelihood: Medium | WP1, WP2 | Thanks to the preparation work carried out in the context of WP1 and WP2 to define education curricula that are market-relevant, the education programmes will be very well aligned with the needs of the labour market, especially the ones from the 7 EMAI4EU |
| ID7 | Key deliverables and milestones related to the development and deployment of education programmes delayed due to external factors such as health crisis. Likelihood: Low | WP1, WP2 | All higher education institutions in the consortium are available to adjust the course format and have learnt a lot in the past couple of years during the COVID-19 pandemic. As an extreme measure, in order to achieve the desired impact, the delivery of the some of the face-to-face courses envisaged as part of the master's programme will be done in online format. |
| ID8 | Marketing and promotion campaigns does not allow to reach the target audience and generate new leads.Likelihood: Medium | WP3 | A multi-channel marketing strategy will be put in place, involving coordinated promotion activities from all partners, especially the business/professional associations. This strategy will allow to understand which channels are most effective to reach the target audience. These channels will be prioritised, while channels that will be underperforming over time will be discontinued. |
| ID9 | Lack of consensus in the definition of the scholarship programmes. Likelihood: Low | WP4 | The scholarship programmes to target different people in needs and to promote diversity has been already discussed by the Project Coordinator with the consortium |

| | | | |
|---|---|---|---|
| | | | during the preparation of EMAI4EU project proposal. Shall any issue arise during the duration of the project, a clear decision-making system will be put in place since the early stage of the project to take decisions. |

A EMAI4EU Risk Matrix was generated from the proposal, as stated in D4.3. The QA team elaborated an Impact index, from 0 to 5, so that an Impact 0 means that there is no damage to the project, and an Impact of 5 means an extreme damage. From those levels of likelihood (1 very low, 2 low, 3 medium, 4 high, 5 very high) of the risk and the impact, we calculated a Risk Intensity, multiplying the likelihood of the risk with its impact, as the table below shows together with the matrix (colour reflecting the Intensity). The 2024'S risk matrix was:

| ID Risk | ikelihood (L | Impact (I) | Risk intensity (IxL) |
|---|---|---|---|
| ID 1 | 1 | 5 | 5 |
| ID 2 | 3 | 4 | 12 |
| ID 3 | 2 | 5 | 10 |
| ID 4 | 1 | 4 | 4 |
| ID 5 | 1 | 4 | 4 |
| ID 6 | 1 | 4 | 4 |
| ID 7 | 2 | 3 | 6 |
| ID 8 | 2 | 4 | 8 |
| ID 9 | 3 | 3 | 9 |

At the beginning of its second year, EMAI4EU entered a decisive phase: the first full recruitment cycle for the master's programme had concluded, and its outcomes were ready for review. Deliverable D4.5 provides a detailed account of this cycle, recording 123 applications, 50 offers, 22 acceptances, and 17 final enrolments. Against the initial KPI target of 80 students, these figures highlight a significant shortfall and reinforce a key assumption in the project's risk matrix: Risk ID6—insufficient participation, identified in the proposal as having medium likelihood.

One possible explanation is that marketing efforts failed to reach the intended audience, a challenge linked to Risk ID8—ineffective marketing. Deliverable D3.2 (June 2025) documents the consortium's extensive and balanced promotional activities, yet it was concluded that the programme's name might lack appeal and alignment with global IT trends. In response, the consortium undertook a strategic rebranding, renaming the programme from *"Emotion AI"* to *"AI and Affective Computing"* to improve clarity and market resonance. This change was accompanied by renewed targeted promotion and stronger partner-level engagement, aimed at boosting application numbers and enhancing diversity in Cycle 2.

Another important mitigation measure addressing Risk ID6 was the launch of the Parallel Entry Scheme (PES), offering an accelerated pathway for students already enrolled in national master's programmes at

partner institutions (see Deliverable D4.5, Section 1.1.2). PES allows eligible students to transition into EMAI4EU without waiting for the next full recruitment cycle, provided they meet admission requirements.

Taking all this into account, until the upcoming cycles are completed and we can assess the effectiveness of the corrective measures being implemented, we will keep the likelihood of ID6 and ID8 at medium.

Significant progress was made in scholarship governance, which had previously been identified as Risk ID9 with a likelihood rating of 3 in 2024. Deliverable D4.5 records the successful publication of the first FSTP call on the Funding & Tenders Portal, followed by a dedicated call for parallel-entry students. This achievement not only mitigates Risk ID9 but also resolves two unforeseen risks highlighted in Deliverable D4.3 (2024, Section 3.5): the requirement for a legally robust scholarship framework and the initial lack of portal publication. As a result, the likelihood of Risk ID9 is now assessed as very low for 2025.

Other risks remain under control:

- ID1 and ID7 (deliverable delays): Likelihood for 2025 very low, with deadlines consistently met ahead of schedule.
- ID2 (task interdependencies): compared to 2024 effectively mitigated through regular WP and PEC meetings, ensuring strong communication and coordination. Likelihood for 2025 very low.
- ID3 (resource shortages): Likelihood for 2025 very low, with no foreseeable issues.
- ID4 (curriculum harmonisation) and ID5 (labour-market alignment): stable as very low, supported by QA templates and indicators introduced in Year 1, alongside market analyses in Deliverables D1.1 and D2.1.

Looking ahead, Year 2 represents a period of learning and strategic refinement. Although enrolment numbers remain below expectations, corrective actions are firmly in place. The upcoming Cycle 2 will serve as the critical test of whether these interventions—rebranding, targeted outreach, and strengthened partner collaboration—can successfully turn identified risks into managed outcomes and translate ambition into achievement.

Consequently, for the second year of the project (2025), the risk matrix developed is presented in the following table, compared to 2024.

| | 2025 | | | 2024 |
|---|---|---|---|---|
| ID Risk | Likelihood (L) | Impact (I) | Risk Intensity (I x L) | Risk Intensity (I x L) |
| ID 1 | 1 | 5 | 5 | 5 |
| ID 2 | 1 | 4 | 4 | 12 |
| ID 3 | 1 | 2 | 2 | 4 |
| ID 4 | 1 | 2 | 2 | 2 |
| ID 5 | 1 | 3 | 3 | 6 |
| ID 6 | 4 | 4 | 16 | 8 |
| ID 7 | 1 | 5 | 5 | 5 |
| ID 8 | 3 | 4 | 12 | 8 |
| ID 9 | 1 | 4 | 4 | 8 |

# 3 Learning Content Production Quality Assurance

## 3.1 The Quality Assurance Principles applied to Learning Content Production in WP1 and WP2

On June 12th, 2024, the consortium agreed the following Quality Assurance Principles:

| **QA Main Principle for the Educational Programs** |
|---|
| Apply Academic QA standards:<br>• At European Level, ESG: "Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). (2015). Brussels, Belgium.", Part 1: Standards and guidelines for internal quality assurance https://ehea.info/page-standards-and-guidelines-for-quality-assurance.<br>• At EIT Level, EIT QALE: EIT Quality Assurance and Learning Enhancement system (EIT QALE) described in the EIT Digital Handbook |
| **QA Derived Principles** |
| Apply and extend the I&E Minor design structure, already checked against standards and refined over the years:<br>1. Define General Learning Objectives (GLOs): A very general statement about the larger goals of the Master program or Learning Path in the Self-Standing on-line Modules<br>2. Define Overarching Learning Outcomes (OLOs): observable and measurable terms what a student is able to do as a result of completing the program or Learning Path<br>3. Define GLO's and OLOs reflecting the needs of the labour market in AI and the specific needs in relation to future applications of Emotion AI technology.<br>4. Describe the Master program in terms of a hierarchy of modules, not courses, with flexible ranges of ECTS to facilitate the organization and matching of courses within each university<br>5. For each module describe Intended Learning Outcomes (ILOs): define what a learner will have acquired and will be able to do upon successfully completing their studies. ILOs should be expressed from the students' perspective and are measurable, achievable and assessable. |

6. Use common templates for the I&E Minor, Technical Major and Self-Standing on-line Modules for the description of the modules

Apply and extend the QALE model's set of quality indicators:

7. Create Quality Indicators specific to the I&E Minor
8. Create Quality Indicators specific to the Technical Major
9. Create Quality Indicators specific to the Master Programme as a whole, transversal to the major and minor
10. Create Quality Indicators specific to the Self-Standing On-line Modules as a whole, transversal to all
11. Create Quality Indicators specific to each Self-Standing on-line Module

For details on the reasoning and rationale behind this definition, please refer to document D4.3.

As stated in D4.3, the main principles used to ensure the quality of the academic activities of WP1 and WP2 is to follow and comply with the guidelines indicated in the EIT Quality Assurance and Learning Enhancement system (EIT QALE), which in turn assures that the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) are met as well[1].

EIT introduced the EIT Label in 2012 as a certificate of quality that is awarded to excellent educational programmes. It is based on the EIT overarching learning outcomes and the following key principles:

- knowledge triangle integration.
- innovation and entrepreneurship (I&E) education.
- highly integrated, innovative 'learning-by-doing' curricula.
- international engagement and experience, inter-sectoral and inter-organisational experience, geographic inclusion, diversity and gender mainstreaming and equality.

Ethics and digitalisation are transversal elements that are embedded in EIT education programmes and run through all of the key principles.

The EIT QALE model is the framework that operationalizes these principles and ensures that programmes awarded the EIT Label maintain high standards of quality and continuous improvement. EIT QALE is enhancement-led and aligned with ESG, focusing on transparency, accountability, and student-centered learning. It provides structured processes for planning, monitoring, and reviewing programmes, integrates stakeholder feedback, and emphasizes the achievement of EIT Overarching Learning Outcomes (OLOs).

[1] https://www.eit.europa.eu/sites/default/files/2021-11_20210317-gb66-11_label_framework.pdf https://www.eit.europa.eu/sites/default/files/eit_label_handbook_degree_programmes_-_final.pdf https://www.enqa.eu/esg-standards-and-guidelines-for-quality-assurance-in-the-european-higher-education-area/

Through independent peer review, systematic evaluation, and ongoing improvement measures, EIT QALE guarantees that EIT-labelled programmes deliver innovation-driven education and remain consistent with European higher education quality norms.

In D4.3, section 4.2.1, we described QA aspects covered by ESG and EIT QALE:

A) Design and approval of programmes
B) Student-centred learning, teaching and assessment
C) Student admission, progression, recognition and certification
D) Information management
E) Public information
F) On-going monitoring and periodic review of programmes

All those aspects are contemplated under subprinciples 7-11, via Quality Indicators.

## 3.2 WP1 Master's programme

### 3.2.1 WP1: QA aspects covered in 2024

For WP1, during 2024 the project focused on some aspects of:

A) Design and approval of programmes

B) Student-centred learning, teaching and assessment

The control and monitoring of WP1 was done using and extending the ESG-EIT QALE standard's set of quality indicators (D4.3, section 4.3.2):

- Quality Indicators specific to the Master Programme as a whole, transversal to the major and minor
- Quality Indicators specific to the Technical Major
- Quality Indicators specific to the I&E Minor

The quality indicators outline the aspects that must be monitored and verified to ensure the programme complies with the ESG-EIT QALE standard. To facilitate this process, the QA team has developed a set of templates for programme designers to complete, providing the necessary evidence to confirm that the requirements associated with each indicator are fulfilled.

### 3.2.2 WP1: QA aspects covered in 2025

In 2025, the main quality assurance activity was the application for the EIT Label. This accreditation process is based on a new, comprehensive framework of Quality Indicators, outlined below, and slightly different from what we used in 2024.

The first set of indicators (Qi1.1–Qi1.7) ensures that the programme meets the mandatory standards required for EIT-labelled degrees. These requirements address areas such as:

- Collaboration between universities and non-academic partners
- Compliance with national and European quality standards
- Student selection and admission processes
- Graduate tracking systems
- Cross-organisational and international mobility (minimum ECTS workload)
- Language of instruction (English)

The second set of indicators (Qi2.1–Qi2.9) evaluates the programme's quality and ambition beyond minimum compliance, covering aspects such as:

- Coverage of all EIT Overarching Learning Outcomes (entrepreneurship, innovation, creativity, sustainability, leadership)
- Innovative pedagogies and active, student-centred learning
- Transparent and fit-for-purpose assessment and grading
- Knowledge Triangle Integration (academia–industry–research collaboration)
- International engagement, mobility, interdisciplinarity, inclusion, and diversity

Many of these aspects are drawn directly from the ESG framework, while others—such as collaboration between universities and non-academic partners, internationalization, diversity and inclusion (DEI), and Knowledge Triangle Integration—are specific requirements of EIT. The fact that they are not part of ESG does not diminish their importance; on the contrary, current reports consistently highlight that, in today's Europe, these elements are essential for any degree program aspiring to meet minimum quality standards[2].

Section 3.3.1 includes tables presenting all these indicators. Where relevant, they also indicate whether a related indicator was used in 2024, based on the ESG framework or the previous EIT QALE indicators.

It is important to note that indicators Qi2.1 and Qi2.2 refer to the EIT Overarching Learning Outcomes (OLOs), which are:

- EIT OLO 1 – Entrepreneurship skills and competencies

2

- Marinoni, G., & Pina Cardona, S. (2024). *Internationalization of Higher Education: Current Trends and Future Scenarios* (6th IAU Global Survey Report). Paris: International Association of Universities. ISBN: 978-92-9002-220-6 (print), 978-92-9002-223-7 (ebook).
- Kontelli, M., Marinoni, G., & Buckner, E. (2025). *Internationalization of Higher Education: Insights into Equity, Diversity, & Inclusion; Sustainable Development; and International Partnerships*. Paris: International Association of Universities. ISBN: 978-92-9002-228-2.
- European Commission. (2024). *Commission Recommendation (EU) 2024/774 on a Code of Practice on Industry–Academia Co-Creation for Knowledge Valorisation*. Official Journal of the European Union.
- Karakhanyan, S. (2022). *Quality and relevance of programmes in higher education*. Background paper for the 3rd World Higher Education Conference (WHEC2022), Barcelona, 18–20 May 2022. Paris: UNESCO.

- EIT OLO 2 – Innovation skills and competencies
- EIT OLO 3 – Creativity skills and competencies
- EIT OLO 4 – Intercultural skills and competencies
- EIT OLO 5 – Making value judgments and sustainability competencies
- EIT OLO 6 – Leadership skills and competencies

These OLOs are primarily linked to the Innovation & Entrepreneurship minor and differ from those defined in Deliverable D1.1 EMAI4EU Master's in Emotion AI: Market Analysis and Curriculum Design, section 2 (Curriculum Design), which relates to the master's major:

- Major OLO 1 – Scientific Method
- Major OLO 2 – Emotion AI Method
- Major OLO 3 – Data Management
- Major OLO 4 – Emotion AI System Development
- Major OLO 5 – Research
- Major OLO 6 – Collaborative Approach
- Major OLO 7 – Communication of Results and About Emotion AI Systems

Indicators Qi2.1 and Qi2.2 assess whether the EIT OLOs are achieved and properly evaluated, but they do not address the Major OLOs. Fortunately, as shown partially in the tables in section 3.3.1, in 2024 we had equivalent indicators that ensured the Major OLOs could also be achieved and correctly assessed (D4.3, section 4.3.2).

The program has met all the required EIT Label criteria, and following the highly positive feedback received, we are now awaiting the official confirmation of the award.

Nevertheless, there is an extra set of indicators, Qi3 and Qi4 (see section 3.3.2.1), that will be measured in the following years because they are focused on results from and impact of the program implementation and stakeholder experience. These indicators are used for follow-up evaluations, but the exact choice of the indicators will depend on the scope and focus of evaluation, defined prior to the evaluation taking place.

#### *3.2.2.1 EIT Label: Qi1 and QI2 Indicators*

The tables below present the Qi1 and Qi2 indicators and, where relevant, include a section describing their alignment with the indicators applied by the QA team in 2024. During the EIT Label accreditation process, evidence was provided to demonstrate compliance with each of these indicators.

| **Qi1.1 UNIVERSITY AND NON-ACADEMIC PARTNER COLLABORATION IN THE CURRICULUM**: The degree programme features collaboration between universities and non-academic partners in the design and implementation of the curriculum. |
|---|
| *Q1.1.1 Are at least 2 partner universities engaged in the implementation of the programme?* |

| |
|---|
| *Q1.1.2 Are the academic or non-academic partners at least from 2 different countries?* |
| *Q1.1.3 Are at least 2 non-academic partners engaged in the development of the curriculum?* |
| *Q1.1.4 Are at least 2 non-academic partners engaged in teaching activities?* |
| *Q1.1.5 Do all students receive both academic and non-academic support on their mandatory thesis?* |
| **Relation with the 2024 Indicators** |
| 2024 Indicator:<br>- *Are non-academic partners engaged or consulted in the development of the programme curriculum, to meet the needs of the labour market in AI and the specific needs in relation to future applications of Emotion AI technology?* |

| **Qi1.2. COMPLIANCE WITH NATIONAL AND EUROPEAN QUALITY STANDARDS AND RECOGNITION REQUIREMENTS:**<br>The degree programme meets the national requirements and the European quality standards: EHEA requirements for Master's level and Salzburg II Recommendation for Doctoral level as well as Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESGs). |
|---|
| *Q1.2.1a Is the master's programme aligned with the European guidelines on EHEA requirements and is the degree accredited or recognized in all the countries of the awarding universities?* |
| *Q1.2.2 Will each graduate receive a Diploma Supplement (DS) for the degree?* |

| **Qi1.3 STUDENT SELECTION AND ADMISSION:**<br>The degree programme selection processes are jointly organised by the partner universities (and KIC) and they identify students' entrepreneurial potential. |
|---|
| *Q1.3.1 Does the student selection process include criteria for the assessment of students´ entrepreneurial potential?* |
| *Q1.3.2 Do all the partner universities - and the KIC where relevant - implement jointly a shared process of application, selection and admission?* |

| **Qi1.4 GRADUATE TRACKING:**<br>The degree programme has in place a graduate tracking system. |
|---|
| *Q1.4.1 Does the programme have a system in place to track graduates, or advanced plans to introduce it?* |
| *Q1.4.2 Is there a KIC alumni organisation in place to track graduates or advanced plans to establish an alumni organisation?* |

| **Qi1.5 EIT COMMUNITY BRAND AND EIT LABEL PROMOTION AND RECOGNITION:**<br>The degree programme promotes the EIT/KIC brand and the EIT Label. |
|---|
| *Q1.5.1 Is the EIT Community Brand Book used as the basis for the programme promotion? Are the EU and the EIT emblems prominently displayed along with the EIT KIC logo?* |
| *Q1.5.2 Is the EIT brand and the EIT Label consistently communicated through the programme delivery and collaborative work with partners?* |

| |
|---|
| *Q1.5.3 Will/Do the programme promotion and the websites of all partnering universities include information of the EIT Label?* |
| *Q1.5.4 Will/Do all graduates receive either an EIT Label Certificate with the EIT logo or a degree certificate/Diploma Supplement with the EIT logo?* |

| **Qi1.6 CROSS-ORGANISATIONAL AND INTERNATIONAL MOBILITY:** |
|---|
| The degree programme includes cross-organisational and international mobility. |
| *Q1.6.1 Does the programme include a compulsory cross-organisational mobility, with the workload equivalent of at least 15 ECTS?* |
| *Q1.6.2 Does the programme include a compulsory international mobility, with the workload equivalent of at least 15 ECTS?* |
| *Q1.6.3. In case of a combined cross-organisational and international mobility, is the workload equivalent of at least 30 ECTS?* |

| **Qi1.7 LANGUAGE OF INSTRUCTION:** |
|---|
| The degree programme is taught in English. |
| *Q1.7.1 Is the programme taught in English?* |

| **Qi2.1 EIT OLO COVERAGE:** |
|---|
| The degree programme enables students to achieve all EIT Overarching Learning Outcomes. Innovative pedagogies including active teaching and learning methods are implemented to enable the achievement of intended learning outcomes. |
| *Q2.1.1 Does the programme ensure that students develop all the EIT OLOs?* |
| *Q2.1.2 Are teaching and learning methods in the programme appropriate for achieving the intended learning outcomes which relate to the EIT OLOs?* |
| *Q2.1.3 Are teaching and learning methods activating and appropriate irrespective of the mode of learning whether in-class, online or blended?* |
| *Q2.1.4 What other innovative pedagogies are integrated into the programme design, particularly regarding the elements which relate to the EIT OLOs?* |
| **Relation with the 2024 Indicators** |
| 2024 Indicator:<br>- *Are the intended learning outcomes of the programme assessable, that is, with clear descriptions of skills and competencies rather than just content knowledge?*<br>- *Are teaching and learning methods of the programme aligned so that they are appropriate for achieving the intended learning outcomes of the major?* |

| **Qi2.2 ASSESSMENT AND GRADING:** |
|---|
| The intended learning outcomes are transparent and assessable. The student assessment is fit for purpose irrespective of the mode of delivery and allows feedback from students. Appropriate grading is used. |

| |
|---|
| *Q2.2.1 Are the programme's intended learning outcomes (which relate to EIT OLOs) transparent and assessable, and skills and competencies clearly described?* |
| *Q2.2.2 Is the student assessment fit for purpose regarding the content and mode of learning, competencies and the EIT OLOs, allowing feedback from students?* |
| *Q2.2.3 Are the rules and regulations for assessing and grading the programme in relation to EIT OLOs available to students before they begin the respective module?* |
| *Q2.2.4 Are the assessment criteria (grade descriptors) used when assessing and grading student work in relation to the EIT OLOs?* |
| **Relation with the 2024 Indicators** |
| 2024 Indicator:<br>- *Are the assessment tasks of the programme given to the students fit for purpose in relation to form (i.e. content-, competence or impact-based, depending on the ILO as this relates to the major's OLOs?*<br>- *Are assessment criteria (grade descriptors) used when assessing and grading student work from the programme related to the major's OLOs?*<br>- *Does the consortium provide information about their activities, including the programmes they offer and the selection criteria for them, the intended learning outcomes of these programmes, the qualifications they award, the teaching, learning and assessment procedures used, the pass rates and the learning opportunities available to their students as well as graduate employment information?* |

| **Qi2.3 KNOWLEDGE TRIANGLE INTEGRATION:**<br>The degree programme is based on bridging the academic and the non-academic world, and co-creation and collaboration which brings together universities and business and other non-academic partners whether public or third sector and civic society. |
|---|
| *Q2.3.1 Are industrial and non-academic partners actively involved in the curriculum development?* |
| *Q2.3.2 Are industrial and non-academic partners actively involved in teaching and learning activities?* |
| *Q2.3.3 Do all students receive joint academic supervision and non-academic mentoring in their thesis work?* |
| *Q2.3.4 Does the programme actively promote student's non-academic professional networks?* |
| **Relation with the 2024 Indicators** |
| 2024 Indicator:<br>- *Are other stakeholders (labour market, policy makers, etc.) given the opportunity to express their views of the programme on a regular basis through a formal appraisal process?* |

| **Qi2.4 INNOVATION AND ENTREPRENEURSHIP EDUCATION AND INTERDISCIPLINARITY:**<br>The degree programme develops an entrepreneurial mindset and capacity for innovation**.** |
|---|
| *Q2.4.1 Are students exposed/actively offered an access to the KIC's or university-based innovation and entrepreneurship ecosystem, including technical, financial and human services (incubators, mentoring and coaching, seed funding etc.) in order to develop their entrepreneurial skills and competencies and to test out the commercial potential and viability of their ideas/learning/research outcomes?* |
| *Q.2.4.2 Does the programme provide students with information and guidance on intellectual property rights (IPR) aligned with the respective (inter)disciplinary field?* |

| |
|---|
| *Q2.4.4 Does the programme adopt inter-/transdisciplinary approaches and bring together science/technology/knowledge in order to address broad societal and global challenges and/or link up with new business and innovation processes?* |
| **Relation with the 2024 Indicators** |
| 2024 Indicator:<br>- *Does the programme adopt a transdisciplinary approach which brings together science/technology knowledge in order to address broad societal and global challenges and/or link up with new business and innovation processes?* |

| |
|---|
| **Qi2. 5 HIGHLY INTEGRATED, INNOVATIVE "LEARNING-BY-DOING" CURRICULA:**<br>The programme utilises hands-on approached where learners interact with their environment in order to adapt and learn. |
| *Q2.5.1 Does the programme provide students with opportunities for learning by doing, exposure to the reality of professional life outside university and the future labour market needs?* |

| |
|---|
| **Qi2.6 INTERNATIONAL ENGAGEMENT AND MOBILITY EXPERIENCE:**<br>Mandatory physical mobility supports the achievements of OLOs and complemented with cross-border virtual or blended mobility where needed. |
| *Q2.6.1 Is the international physical mobility organized so that it enables the achievement of the intended learning outcomes? Alternatively, in situations where physical mobility is not possible, is the programme organised so that it can offer international experience through virtual, blended and hybrid mobility that enables the achievement of the intended learning outcomes?* |

| |
|---|
| **Qi2.7 INTER-SECTORAL EXPERIENCE AND CROSS-ORGANISATIONAL MOBILITY:**<br>The programme includes inter-sectoral or organisational mobility in non-academic organisations, (business and industry, public sector, government, regulators, third sector, start-ups). |
| *Q2.7.1 Is the cross-organisational mobility organized so that it enables the achievement of the intended learning outcomes in relation to the EIT OLOs?* |
| *Q2.7.2 Does the programme offer support for the university staff in the facilitation of cross-organisational mobility?* |

| |
|---|
| **Qi2.8 GEOGRAPHIC INCLUSION:**<br>*Geographic inclusion, the European dimension and openness to the world are embedded in the student recruitment, programme content and programme partner selection. Special efforts are made to enhance the participation from the countries eligible to take part in the EIT Regional Innovation Scheme (RIS).* |
| *Q2.8.1 Are appropriate plans in place to ensure a balanced recruitment of European vs. non-European students, including targets and monitoring mechanisms?* |
| *Q2.8.2 Are appropriate plans in place to enhance recruitment of students from the EIT RIS eligible countries, including appropriate monitoring mechanisms?* |

| |
|---|
| *Q2.8.3 Is at least 1 of the partner universities and at least 1 of the non-academic partners from the EIT RIS eligible countries or are there advanced plans to encourage institutions from EIT RIS eligible countries to participate in the programmes?* |
| *Q2.8.4 Are plans in place to enhance participation of instructors from the EIT RIS-eligible countries?* |

| **Qi2.9 INCLUSION, DIVERSITY AND GENDER MAINSTREAMING:** Recruitment and enrolment policies, alternative pathways and recognition of prior learning are promoted to improve social inclusion and diversity. Investments in the student support enable equal access and success. Balanced gender representation among learners and instructors is promoted**.** |
|---|
| *Q2.9.1 Are appropriate strategies and policies in place to enhance inclusion, diversity and non-discrimination, including targets and monitoring mechanisms?* |
| *Q2.9.2 Are appropriate strategies and policies in place to enhance gender equality and mainstreaming in line with the EIT policies, including targets and monitoring mechanisms?* |

#### *3.2.2.2 QA Surveys*

This section explains how the EIT Label utilizes surveys and outlines our transition plan for the period before these surveys are implemented.

##### ***3.2.2.2.1*** **EIT Label's Surveys**

Surveys constitute a core mechanism within the EIT Label's quality assurance and continuous improvement framework. Developed by the 28Digital Master School Office, they provide systematic feedback from key stakeholder groups and serve as primary evidence for Quality Indicator 4 (Qi4), while also complementing compliance and performance monitoring under Qi1–Qi3. Through structured data collection, surveys ensure that EIT-labelled programmes remain aligned with the EIT Overarching Learning Outcomes (OLOs) and key principles such as learning-by-doing and Knowledge Triangle Integration.

Stakeholder Coverage and Indicator Linkages:

- Students (Qi4.1): Surveys and focus groups capture students' experiences regarding programme design, teaching methods, achievement of OLOs, and engagement with non-academic contexts. These inquiries often address entrepreneurial skills, innovation competencies, and the effectiveness of mobility and interdisciplinary activities, supporting Qi2.1 (OLO coverage), Qi2.4 (Innovation and Entrepreneurship), and Qi1.6 (Mobility requirements).
- Alumni (Qi4.2): Alumni feedback evaluates long-term impact, including career progression, job changes, and involvement in start-ups or innovation projects. This evidence directly informs Qi3.4 (Graduate employment and career progress) and validates the programme's contribution to labour market outcomes and entrepreneurial success.

- Instructors (Qi4.3): Instructor surveys provide insights into programme implementation, teaching practices, and integration of EIT principles. They support assessment of Qi2.1 (Achievement of OLOs) and identify areas for pedagogical enhancement and professional development in innovation and entrepreneurship education.
- External Stakeholders (Qi4.4): Surveys targeting business partners, industry representatives, and other non-academic actors assess the relevance of the curriculum, graduates' competencies, and the programme's ability to address skills gaps. This feedback reinforces compliance with Qi2.3 (Knowledge Triangle Integration) and ensures effective collaboration between academia and industry.

All surveys, developed and managed by the 28Digital Master School Office, are designed to generate actionable insights for continuous improvement, as required by Qi4.5 (Support to EIT Label community of practice). The results are systematically analysed and integrated into programme review processes to refine content, enhance teaching methodologies, and strengthen partnerships. This structured approach ensures that EIT-labelled programmes maintain high quality and remain responsive to evolving societal and market demands.

#### *3.2.2.2.2* Transition Plan for Surveys

The official EIT Label surveys, which will be developed and administered by the 28Digital Master School Office as part of the long-term monitoring and evaluation framework under Quality Indicator 4 (Qi4), are scheduled for implementation at a later stage. In order to facilitate timely feedback collection and support continuous improvement during the initial implementation phase, the Quality Assurance (QA) team has introduced two interim instruments: a student survey and a teacher survey. These instruments will be deployed at the conclusion of the first and second semesters to capture preliminary insights regarding programme delivery, pedagogical practices, and the overall student experience.

Upon release of the official EIT Label surveys, the QA team will undertake a comprehensive review of their scope and methodology to determine the most appropriate integration strategy. This process may involve:

- Maintaining the current surveys where they provide complementary data;
- Adapting the existing instruments to ensure alignment with EIT Label requirements; or
- Replacing the provisional surveys entirely with the official instruments.

This phased approach ensures that quality assurance activities remain proactive, evidence-based, and adaptable, while preserving the flexibility required to incorporate EIT standards as they are progressively implemented.

#### 3.2.2.2.2.1 The student surveys

Below is the template for the student survey that will be conducted following semesters 1 and 2.

**QUESTIONS ABOUT THE EMOTIONAL AI MAJOR**

1. For the Major in Emotional AI, how would you rate the **quality of teaching**? 5-point scale (5 –very good, 1 – very bad).
    - *Comment (open text)*
2. For the Major in Emotional AI, do you feel the **workload** of the classes is manageable? 5-point scale (5 – very manageable, 1 – too heavy).
    - *Comment (open text)*
3. For the Major in Emotional AI, how would you rate the overall **difficulty of the assessments**? 5-point scale (5 – too difficult, 1 – too easy).
    - *Comment (open text)*
4. For the Major in Emotional AI, how **interesting and motivating** do you find the courses? 5-point scale (5 – Very interesting and motivating, 1 - Not interesting or motivating at all).
    - *Comment (open text)*

**QUESTIONS ABOUT THE I&E MINOR**

1. For the I&E Minor, how would you rate the **quality of teaching**? 5-point scale (5 –very good, 1 – very bad).
    - *Comment (open text)*
2. For the I&E Minor, do you feel the **workload** of the classes is manageable? 5-point scale (5 – very manageable, 1 – too heavy).
    - *Comment (open text)*
3. For the I&E Minor, how would you rate the overall **difficulty of the assessments**? 5-point scale (5 – too difficult, 1 – too easy).
    - *Comment (open text)*
4. For the I&E Minor, how **interesting and motivating** do you find the courses? 5-point scale (5 – Very interesting and motivating, 1 - Not interesting or motivating at all).
    - *Comment (open text)*

**QUESTIONS ABOUT THE PROGRAM**

1. **How satisfied** are you with the master's **program**? 5-point scale (5 – Very satisfied, 1 – Very dissatisfied).
    - Comment (open text)
2. **How satisfied** are you with the **support** you received at your university during this semester. 5-point scale (5 – Very satisfied, 1 – Very dissatisfied).
    - Comment (open text)
3. What **do you like most** about the program? (open text)
4. What **improvements** would you suggest? (open text)

5.
6. I would **recommend this Master** to other students. 5-point scale (5 – Strongly agree, 1 – Strongly disagree).

#### 3.2.2.2.2.2 The teachers survey

Below is the template for the teachers' survey that will be conducted following semesters 1 and 2.

**QUESTIONS ABOUT TEACHING**

- Are you satisfied with the success rate of your course? (Scale: 1 – Very dissatisfied, 5 – Very satisfied)
- How would you rate student engagement and participation in your courses? (Scale: 1 – Very low, 5 – Very high)
- What specific actions or changes do you plan to implement next year to improve your teaching quality and enhance student learning, engagement and the success rate? (if any)
  *(Open text)*
- To what extent were EIT principles such as innovation, entrepreneurship and applied learning present in your teaching activities this semester. (Scale: 1 – Not at all present, 5 – Fully present)

**QUESTIONS ABOUT THE ORGANIZATION**

- Are you satisfied with the scheduling and organisation of courses and exams?
  (Scale: 1 – Very dissatisfied, 5 – Very satisfied)
- How effective is the coordination in resolving issues related to teaching or administration?
  (Scale: 1 – Not effective at all, 5 – Very effective)
- Do you feel your feedback is considered in programme-level decisions?
  (Scale: 1 – Strongly disagree, 5 – Strongly agree)
- How would you rate the overall support provided by the programme coordination team?
  (Scale: 1 – Very poor, 5 – Excellent)
- What do you consider the strongest aspects of the programme?
  (Open text)
- Any additional comments or suggestions?
  (Open text)

## 3.3 WP2 Self-Standing Learning Modules

### 3.3.1 WP2 QA aspects covered in 2024

For WP2, during 2024 the project focused on some aspects of:

A) Design of the Self-Standing Learning Modules (SSLMs)

B) Deliver SSLMs leading to certifications. To achieve this purpose, two sub-objectives were defined:

   a. Module Certification

   b. Identification of the platform for module delivery

To maintain quality in the development of WP2 SSLMs, a set of quality control guidelines was created, following the ESG-EIT QALE standard, as indicated in section 4.3, and using a guide such as the "Guidelines and Best Practices for Online Courses" from EIT Digital (November 2023), developed over the years by EIT Digital:

- Templates for gathering information regarding the design and the production of the SSLMs (the templates were based on the templates used for WP1).
- A quality indicators checklist to monitor their implementation (to ensure that the objectives outlined in the project proposal are being met through the generation of the SSLMs).

The quality indicators outline the aspects that must be monitored and verified to ensure the programme complies with the ESG-EIT QALE standard. To facilitate this process, the QA team has developed a set of templates for programme designers to complete, providing the necessary evidence to confirm that the requirements associated with each indicator are fulfilled.

Regarding the templates, two were created for WP2:

- The template for gathering information about the entire set of SSLMs. This template would, on the one hand, allow the unification of the development criteria for SSLMs (as a centralized control mechanism), but on the other hand, it would help teachers in the production of each SSLM as a support guide.
- The Template for gathering information about each SSLM. This template would aim to control and align the entire SSLMs production process, from creation to delivery.

### 3.3.2 WP2: QA aspects covered in 2025

In 2025, the main quality assurance activity was to ensure that the production of the SSLMs was aligned with the standards and requirements established in the project in 2024. In this regard, the quality team initially

met with the coordinator of the SSLM production task in WP2 to share with him the previously designed indicators and templates, so that the coordinator could validate these resources for quality assurance during production.

Once the use of the templates and indicators had been agreed upon with the WP2 SSLM production coordinator, the coordinator informed all consortium partners involved in the development of the SSLMs that they were required to use these templates in the production of their respective SSLMs, as described in section "3.3. Module template" of the deliverable "D2.1 EMAI4EU self-standing modules Market analysis and curriculum design". To this end, the coordinator uploaded the templates to the project repository for their availability and use.

As described in the executive summary of the deliverable "D2.1 EMAI4EU Self-Standing Modules Market Analysis and Curriculum Design", the final list of SSLMs was developed based on the previous WP1 market analysis, questionnaire results, and internal needs. Additional modules were included in the final list to address the need for a comprehensive introduction to the topic and for the use of Emotion AI in UI/UX.

#### *3.3.2.1 Courses Templates*

Regarding the use of the templates for the production of the SSLMs, the current level of completeness of the SSLM templates is around 90% (as can be seen from the review carried out in the WP2 SSLM repository of the project), since many of the SSLMs are still in the process of being finalized. An example of a nearly completed SSLM template is presented below:

| **Name of Module: Affective Computing with Case Studies** | **Credit Points (ECTS):** | **Module-ID:** |
|---|---|---|
| **Person Responsible for module (Name, Mail address):** Kinga Bettina Farago -- faragokinga@inf.elte.hu | | |
| **University:** Eötvös Loránd University (ELTE), Hungary | **Department:** Department of Artificial Intelligence | |
| **1. Short description of the module** | | |

This is a basic-level self-standing learning module on ***Affective Computing***.
Affective Computing is where technology meets human emotions. This **beginner-friendly, self-standing module (5–10 hours)** introduces the core ideas and real-world applications of this novel and constantly expanding research field. One can learn how emotions can be observed and recorded through facial expressions, speech, body pose, and gestures; and how AI systems process this data to understand a person's state of mind.
We explore both science and technology: from the fundamentals of human emotion theory to AI-assisted analysis, including the role of context in interpreting emotions. We pay particular attention to ***emotional interaction***, where machines not only sense emotions but also respond to them in a natural and empathetic way.
By the end of the course, students will have acquired the fundamental knowledge to understand how affective computing is transforming industries ranging from healthcare and education to gaming and assistive technologies, and how it may influence future interactions between humans, machines, and interfaces.

**2. Target audience**

Non-professionals, general audience with no prior knowledge assumed in Affective Computing, Emotion Theories, Artificial Intelligence, or Programming.

**3. The self-standing module is included in the following course/s of the Master's program (If not, add the text "N/A")**

Current self-standing module is not included. A similar course is part of ELTE's Masters' programme on ***Computer Science with AI specialisation***, but it has a prerequisite course and the target audience is experienced (MSc) students.
The relevant course is: Affective Computing (IPM-22fmiACEG, compulsory elective, 6 ECTS)

**4. Prerequisites for Participation (If not, add the text "N/A")**

N/A

**5. The self-standing module belongs to the following Learning path/s (If not, add the text "N/A")**

TBD

**6. Intended Learning Outcomes**

| ILO | Description | Session |
|---|---|---|
| **ILO1** | Understand the general concept and novel application areas of Affective Computing | 1, 8, 9 |
| **ILO2** | Understand the major concepts of human emotions and the observable cues | 3 |
| **ILO3** | Understand the data management, data collection methods and challenges for emotion-based data | 2, 9 |

| | | |
|---|---|---|
| **ILO4** | Understand the theoretical fundamentals of human-human interactions | 7 |
| **ILO5** | Understand the major concepts and application of multimodal human-computer interactions | 2, 8 |
| **ILO6** | Understand the concept and practical usage of various modalities (visual, acoustic, gesture-based, body movements, contextual etc.) | 2, 3, 4, 5, 6, |
| **ILO7** | Understand legal and ethical aspects of Affective Computing | 10 |

| OLO | ILO1 | ILO2 | ILO3 | ILO4 | ILO5 | ILO6 | ILO7 |
|---|---|---|---|---|---|---|---|
| **OLO 1 – Scientific Method** | x | x | | x | x | | |
| **OLO 2 – Emotion AI Methods** | | x | | | x | x | |
| **OLO 3 – Data Management** | | | x | | | | |
| **OLO 4 – Emotion AI Systems Development** | | | | | x | x | |
| **OLO 5 – Research** | | | | | | x | |
| **OLO 6 – Collaborative Approach** | | | | x | x | | |
| **OLO 7 – Communication of results and about Emotion AI systems** | | | | | x | | x |

## 7. Teaching and Learning Methods

The self-standing learning module (SSLM) is built around a series of micromodules, each focused on a well-defined topic. The micromodules are delivered entirely in English and online, and students are responsible for the technical preparation and operation of their own digital learning environment. This includes ensuring access to the required platforms, stable internet connection, and the ability to view and interact with the provided materials.

For each topic, students are provided with three key types of learning resources: a high-quality video lecture, a compact summary of additional reading material, and links to the original sources, which may include scientific surveys or peer-reviewed research papers. Video lectures are short (approximately 10 minutes per micromodule) and representing both visually and verbally the actual topic. The reading materials are text-based contents with PDF or PPTX format. These materials are designed to provide both core knowledge and opportunities for deeper exploration. Students are encouraged to engage with all materials to ensure comprehensive understanding.

The complete module consists of 10 micromodules, each accompanied by an online quiz that serves as the formal assessment for that topic. Students may progress through the micromodules at their own pace, enabling flexibility in scheduling and learning style. All assessments are completed individually, and there is no provision for group projects or pair work within the module. Performance is evaluated on an individual basis, ensuring that grades reflect each student's own mastery of the subject matter.

**Pedagogical Rationale**

This approach is designed to foster self-directed learning, critical thinking, and academic independence. By providing concise yet high-quality learning resources alongside references to primary scientific literature, students are guided toward both foundational knowledge and deeper, research-based insights. The self-paced structure allows learners to tailor their study schedule to their own needs, while the individual assessment format ensures accountability and personal responsibility for learning outcomes. This method is particularly effective for learners who value flexibility and autonomy.

**8. Structure (content, lessons, etc.)**

| No | Sessions | Descriptions, Content and materials |
|---|---|---|
| 1 | Introduction to affective computing | **Topic description:** Affective Computing is the study and development of systems that can recognise, interpret, and respond to human emotions. Focus on general introduction, brief historical overview and recent application areas.<br>**Content and materials:**<br>• Video recording included<br>• Self-study/Reading: excerpt/presentation<br>• Online short quiz |
| 2 | Introduction to modalities | **Topic description:** This micromodule explores key human modalities (visual cues, acoustic signals, body pose and gesture-based movements) as sources of emotional and behavioral information. It highlights how these modalities can be captured and interpreted in affective computing systems to better understand human states.<br>**Content and materials:**<br>• Video recording included<br>• Self-study/Reading: excerpt/presentation<br>• Online short quiz |
| 3 | Emotion theories, facial expressions | **Topic description:** This micromodule covers key emotion theories and their relevance to understanding human affect. It also examines how facial expressions convey emotions and how they can be analysed in affective computing applications.<br>**Content and materials:** |

| | | |
|---|---|---|
| | | • Video recording included<br>• Self-study/Reading: excerpt/presentation<br>• Online short quiz |
| 4 | Human vision, gaze | **Topic description:** This micromodule introduces the principles of human visual attention and gaze, exploring how eye movements reveal cognitive and emotional states. Learners will discover how these signals can be tracked and interpreted in affective computing.<br>**Content and materials:**<br>• Video recording included<br>• Self-study/Reading: excerpt/presentation<br>Cartella, G., Cuculo, V., Cornia, M., & Cucchiara, R. (2024). Unveiling the truth: Exploring human gaze patterns in fake images. *IEEE Signal Processing Letters*, *31*, 820-824.<br>• Online short quiz |
| 5 | Speech analysis | **Topic description:** This micromodule introduces speech analysis as a means of detecting and interpreting emotional states through vocal characteristics such as tone, pitch, and rhythm. Learners will explore how affective computing systems process these features to assess and respond to human emotions.<br>**Content and materials:**<br>• Video recording included<br>• Self-study/Reading: excerpt/presentation<br>• Online short quiz |
| 6 | Gestures and human body pose estimation | **Topic description:** This micromodule examines human gestures and pose estimation as a method for capturing body posture and movement to infer emotional and behavioral cues. It explains how affective computing systems use these spatial and dynamic patterns to enhance understanding of human states.<br>**Content and materials:** |

| | | |
|---|---|---|
| | | • Video recording included<br>• Self-study/Reading: excerpt/presentation<br>• Online short quiz |
| 7 | Human-human interactions | **Topic description:** This micromodule examines human-human interactions as a rich source of emotional and social cues. It discusses how affective computing can analyse these dynamics to better understand relationships and communication patterns.<br>**Content and materials:**<br>• Video recording included<br>• Self-study/Reading: excerpt/presentation<br>• Online short quiz |
| 8 | Multimodal human-computer interactions | **Topic description:** This micromodule explores multimodal human-computer interactions, where systems integrate visual, auditory, and behavioural cues to interpret user emotions. It highlights how combining multiple modalities enhances the accuracy and responsiveness of affective computing applications.<br>**Content and materials:**<br>• Video recording included<br>• Self-study/Reading: excerpt/presentation<br>• Online short quiz |
| 9 | Wearable devices and measurements | **Topic description:** This micromodule examines wearable devices as tools for collecting physiological data related to affective computing. It highlights how sensors in wearable devices can monitor signals such as heart rate, skin conductivity and additional special indicators to infer emotional states.<br>**Content and materials:**<br>• Video recording included<br>• Self-study/Reading: excerpt/presentation<br>• Online short quiz |

| | | |
|---|---|---|
| 10 | Legal and ethical aspects | **Topic description:** This micromodule addresses the ethical and legal considerations of affective computing, including privacy, consent, and data protection. It explores how responsible design and regulation are essential to ensure safe and fair use of emotion-sensing technologies.<br>**Content and materials:**<br>• Video recording included<br>• Self-study/Reading: excerpt/presentation<br>• Online short quiz |

**9. Schedule (course agenda and dates, including synchronous and asynchronous sessions)**

| Delivery | Sessions (in chronological order) | Hours | Dates |
|---|---|---|---|
| **Asynchronous** | 1 – Introduction to Affective Computing | Approx. 30-60 minutes | self-paced |
| | 2 – Introduction to modalities | Approx. 30-60 minutes | self-paced |
| | 3 – Emotion theories, facial expressions | Approx. 30-60 minutes | self-paced |
| | 4 – Human vision, gaze | Approx. 30-60 minutes | self-paced |
| | 5 – Speech analysis | Approx. 30-60 minutes | self-paced |
| | 6 – Gestures and human body pose estimation | Approx. 30-60 minutes | self-paced |
| | 7 – Human-human interactions | Approx. 30-60 minutes | self-paced |
| | 8 – Multimodal human-computer interactions | Approx. 30-60 minutes | self-paced |
| | 9 – Wearable devices and measurements | Approx. 30-60 minutes | self-paced |
| | 10 – Legal and ethical aspects | Approx. 30-60 minutes | self-paced |
| **Synchronous** | N/A | N/A | N/A |

**Total 25 hours (1 ECTS) / 50 hours (2 ECTS)**

- Number of hours in ASYNC delivery: **10*(30-60 minutes) = 300-600 minutes = 5-10 hours in total**
- Number of hours in SYNC delivery: **None**

**11. Assessment and Grading Procedures (describe the passing Threshold used)**

The ***basic-level Affective Computing*** self-standing online learning module contains 10 micromodules, each assessed through a short quiz of approximately 10 questions. The quiz can

| |
|---|
| be completed asynchronously online and is automatically evaluated. According to the learning platform's restrictions (Icarus) the micromodules are available in a sequential order. The next micromodule can be viewed only after the previous one is completed.<br>All quiz questions are based on the corresponding video content and self-learning materials, ensuring that assessments are directly linked to the provided learning resources. Quizzes can be attempted multiple times, but only a perfect score (100%) counts as passing that micromodule. Repeated attempts to complete the quiz will not have any negative effect on the new result.<br>If a quiz is failed, the related micromodule and the entire module are considered failed. The module itself forms part of a learning path (details to be provided later). Completion of all 10 quizzes with 100% scores signifies full mastery of the module.<br>**Grading procedure:** The module is graded on a pass/fail basis. *Pass* is awarded only if all 10 quizzes are completed with a perfect score (100%). Any score below 100% in any quiz, or any incomplete micromodule, results in a *fail* for the entire module. |
| **12. Description about how can successfully complete the module to obtain the certificate (needs to be done in your self-standing module to obtain the certificate)** |
| Each micromodule covers a well-defined topic of the field of Affective Computing. These micromodules are structured into three main components: introduction, video lecture, reading (or Self-study Material). Students are expected to engage thoroughly with each element, focusing on comprehension.<br>The provided readings are summaries of more extensive materials (as scientific surveys or research papers), and while reviewing the full versions is not mandatory, it is recommended. Official, online freely available sources will be provided.<br>Once the student feels they have achieved a sufficient understanding of the micromodule, they should proceed to the quiz. If the quiz is not passed, the relevant sections should be revisited until the required level of understanding is reached. |

#### *3.3.2.2 SSLM Quality Indicators*

Regarding the indicators, the table below shows their status by the end of 2025.

| SSLM QUALITY CHECKLIST | | | |
|---|---|---|---|
| **1. GENERAL SELF-STANDING MODULE SET QUESTIONS** | | | |
| **Quality Indicator** | **Answer** | **Evidence** | **STATUS BY THE END OF 2025** |
| 1.1 Does the program include a definition of General Learning Objectives | NO | Template for the whole set of SSLMs | Work in progress, to be completed by all partners by end of March 2026 |

| | | | |
|---|---|---|---|
| (GLOs) for the set of self-standing modules? | | | |
| 1.2 Does the program include a definition of Overarching Learning Outcomes (OLOs) for the set of self-standing modules? | NO | Template for the whole set of SSLMs | Work in progress, to be completed by all partners by end of March 2026 |
| 1.3. Are there at least 11 self-standing modules on AI developed and delivered? | YES | https://eit.icarus.education/emai4eu/ | |
| 1.4. Are there at least 2 self-standing modules on Innovation and Entrepreneurship or Ethics developed and delivered? | YES | https://eit.icarus.education/emai4eu/ | |
| 1.5. Is there at least one partner responsible for each self-standing module? | YES | An internal document with mapping of responsibilities, and on Icarus platform there are the persons in charge of each module: "**SSLM curriculums ad courses.xlsx"** | |
| 1.6. Are all self-standing modules at least in English? | YES | https://eit.icarus.education/emai4eu/ | |
| 1.7. Has a common guideline or best practices been used for the design of all self-standing modules? | YES | Document with the common guidelines or best practices used: "**Guidelines for online courses.docx**" | Yes, within the consortium templates, common guidelines have been circulated among the partners and it was given the freedom to each partner responsible of a SSLM to adopt them to her/his freedom. |
| 1.8. Have common templates been used for the design of all resources | YES | Course's Templates | Yes, we adopted common template for the description of the SSLMs, and for the slides, although on this last |

| | | | |
|---|---|---|---|
| necessary for the self-standing modules (for slides, video creation, etc.)? | | | point it was given a bit of freedom to each teacher to adapt them to their needs. |
| 1.9. Have at least 2 certification schemes been defined for self-standing modules (ECTS schema, Coursera certificate, EIT Digital certificate, etc.)? | YES | An internal document with certification schemes: "**Certificates and Business Model.docx**" | Yes, we have two certification schemas:<br>Artificial Intelligence Basic: 3 courses from the foundation of Artificial Intelligence courses + 1 I&E module<br>Artificial Intelligence Advanced: 3 courses from the advanced level modules + 1 I&E module. Certificates are issued by EIT Digital (28 Digital now). |
| 1.10. Has it been considered that each certification includes at least something about I&E and ethics? | YES | An internal document with certification schemes: "**Certificates and Business Model.docx**" | Each certificate requires at least 1 course on I&E. |
| **2. SPECIFIC SELF-STANDING MODULE – MAIN QUESTIONS** | | | |
| **Quality Indicator** | **Answer** | **Evidence** | |
| 2.1 Are the Intended Learning Outcomes (ILOs) of the module assessable, that is, with clear descriptions of skills and competencies rather than just content knowledge? | NO | Course's Templates | Work in progress, to be completed by all partners by end of March 2026 |
| 2.2. Is the self-standing module included in any course of the Master's program? | NO | | No. However, we are encouraging the students of the EMAI master to take them. It might be that by the end of the project, some course will be also delivered as part of some course in the EMAI master program. |

| | | | |
|---|---|---|---|
| 2.3 Is the target audience is identified? | NO | Course's Templates | Work in progress, to be completed by all partners by end of March 2026 |
| **3. SPECIFIC SELF-STANDING MODULE - COURSE STRUCTURE QUESTIONS** | | | |
| 3.1. Is structure of self-standing module (lessons, etc.) designed to assure that the students will achieve the ILOs defined for the module? | NO | Course's Templates | Work in progress, to be completed by all partners by end of March 2026 |
| 3.2. Is there a definition of the module's schedule (course agenda and dates, including synchronous and asynchronous sessions)? | NO | Course's Templates | Work in progress, to be completed by all partners by end of March 2026 |
| 3.3. Has a balance between synchronous and asynchronous sessions been defined in your course? (modules should include an asynchronous portion in an online format that participants can follow at their own pace, including online lectures, exercises and business challenges, etc.). | NO | Course's Templates | Work in progress, to be completed by all partners by end of March 2026 |
| 3.4. Is it clearly defined the expected student | NO | Course's Templates | Work in progress, to be completed by all partners by end of March 2026 |

| | | | |
|---|---|---|---|
| workload for the self-standing module? | | | |
| **4. SPECIFIC SELF-STANDING MODULE - ASSESSMENT AND CERTFICATION QUESTIONS** | | | |
| 5.1. Are the assessment tasks of the programme given to the students fit for purpose in relation to form (i.e. content-, competence or impact-based, depending on the ILO? | NO | Course's Templates | Work in progress, to be completed by all partners by end of March 2026 |
| 5.2. Is it defined how can successfully complete the module to obtain the certificate? | YES | An internal document with certification schemes: "**Certificates and Business Model.docx**" | |
| 5.3. Has the module completion certificate been issued jointly by the EITD and the higher education institution coordinating the module? | NO | | Work in progress. The certificate will be issued by EIT Digital (28 Digital) only. |
| 5.4. As part of specific learning paths that offer participants the possibility of obtaining a certification at the end of the learning path, have certification schemes been | YES | An internal document with certification schemes: "**Certificates and Business Model.docx**" | EMAI4EU has defined certification schemas (Artificial Intelligence Basic: 3 courses from the foundation of Artificial Intelligence courses + 1 I&E module Artificial Intelligence Advanced: 3 courses from the advanced level modules + 1 I&E module). There is no final exam, but it is required that |

| | | | |
|---|---|---|---|
| developed by EMAI4EU partners that involve the following?<br>• mandatory completion of a specific set of modules,<br>• a final certification exam composed of a theoretical exam and a practical exam. | | | each module taken respecting the schema will be passed successfully to get the respective certificate. |
| **5. SPECIFIC SELF-STANDING MODULE - OTHER QUESTIONS** | | | |
| 6.1. Is the module descriptor accessible to students? | YES | https://eit.icarus.education/emai4eu/ | |
| 6.2. Is there a welcome video for the module? | NO | https://eit.icarus.education/emai4eu/ | Not in all courses. Work in progress, to be completed by all partners by end of March 2026 |
| **6. DELIVERY OF SELF-STANDING MODULES** | | | |
| 7.1. Is there a single digital learning platform for all modules that allows modules to be available for any country in Europe? | YES | https://eit.icarus.education/emai4eu/ | |
| 7.2. Is the platform where all the modules are located managed and | YES | The platform is technically managed by Icarus AI, with whom EIT Digital (28DIGITAL) has a contract. From our side, we coordinate the communication between the Icarus | |

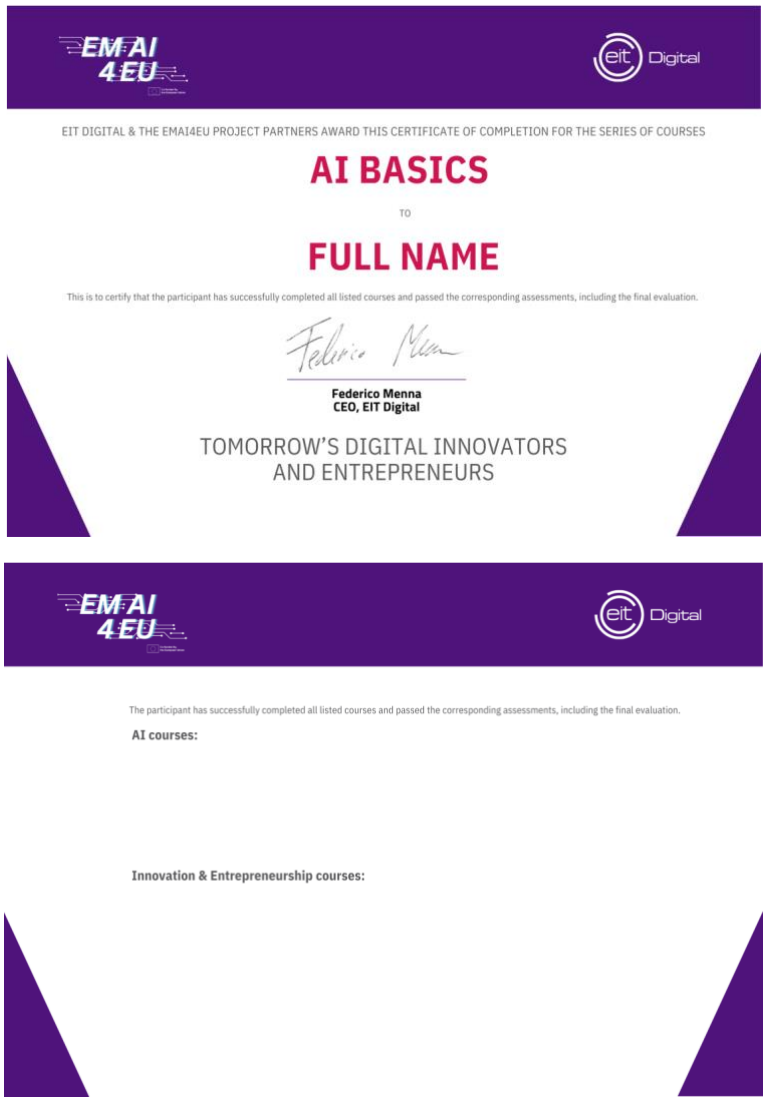
| | | | |
|---|---|---|---|
| coordinated by EITD? | | platform managers and the professors and module coordinators in the consortium. | |
| 7.3. Is registration for EMAI4EU autonomous learning modules as simple as possible for participants (registration for all courses is possible through a single registration page / single enrolment portal)? | YES | https://eit.icarus.education/emai4eu/ | |
| 7.4. Is the registration portal located on the same platform where the courses are available? | YES | https://eit.icarus.education/emai4eu/ | |
| 7.5. Has a Module Manager been assigned for each module who is responsible for evaluating the application to the modules and coordinating with the teachers involved the live classes and the grading of the exercises? | YES | Course's Templates | Each teacher acts as a Module Manager managing her/his SSLM with the technical support of Icarus AI team. |
| 7.6. Have specific month-long periods (i.e., in January and May of each year) been made available for participants who have successfully | NO | | Work in progress |

| | | | |
|---|---|---|---|
| completed the required online modules to take the certification exams? (during the one-month period, multiple dates must be made available to participants to take the certification exams) | | | |

With regard to the delivery of SSLMs, particularly with a focus on certification, as detailed in the deliverable "D2.1 EMAI4EU Self-Standing Modules Market Analysis and Curriculum Design", an analysis was carried out based on 151 responses from individuals and companies. The results, in addition to confirming the interest in training in AI and Emotional AI, guided the definition of a modular and flexible curriculum, divided into basic and advanced certification pathways. In particular, to address time and resource constraints, a flexible certification structure was introduced. Learners can earn micro-credentials by completing individual SSLMs or full certifications. The modules are divided into two certification paths: basic and advanced.

The details of the certification scheme are presented in section "3.6. Certification scheme" of the deliverable "D2.1 EMAI4EU Self-Standing Modules Market Analysis and Curriculum Design". In any case, the designs of the generated certificates are shown below:


Certification template for completing a series of basic (entry-level) self-standing modules. The template has a cover page with the main information and a second page where the related (and completed) modules are listed:



EIT DIGITAL & THE EMAI4EU PROJECT PARTNERS AWARD THIS CERTIFICATE OF COMPLETION FOR THE SERIES OF COURSES

AI BASICS

TO

FULL NAME

This is to certify that the participant has successfully completed all listed courses and passed the corresponding assessments, including the final evaluation.

Federico Menna
CEO, EIT Digital

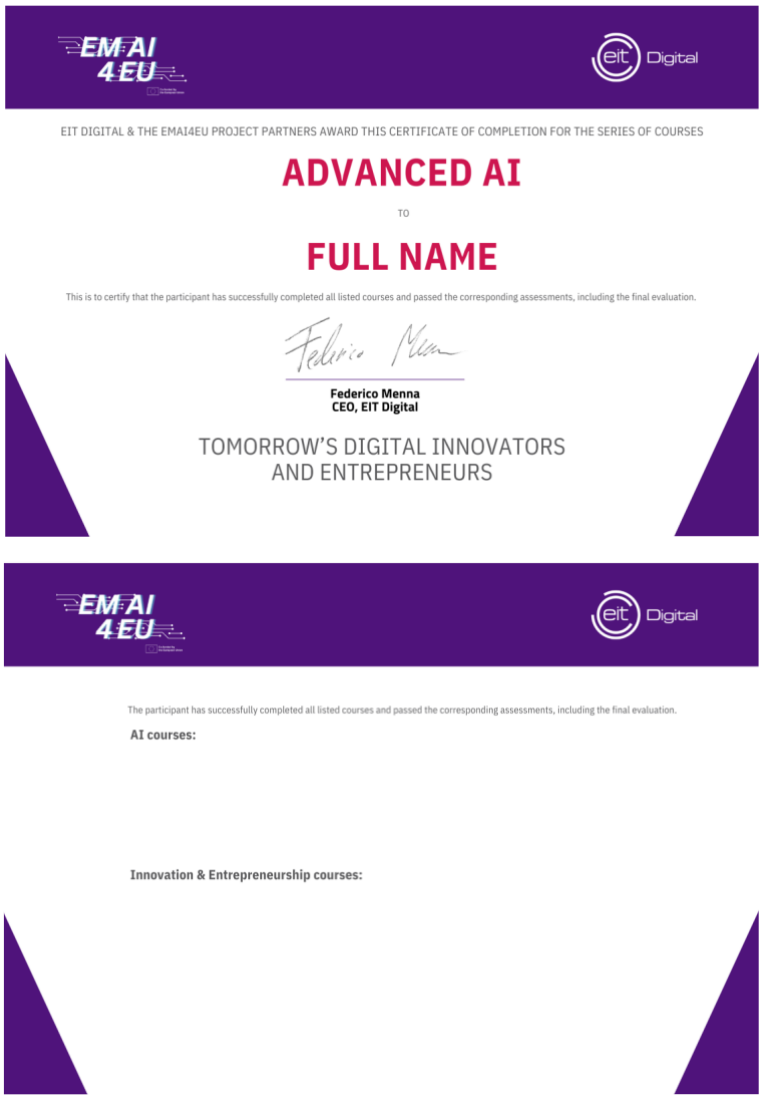
TOMORROW'S DIGITAL INNOVATORS
AND ENTREPRENEURS

The participant has successfully completed all listed courses and passed the corresponding assessments, including the final evaluation.

AI courses:

Innovation & Entrepreneurship courses:

Certification template for completing a series of advanced (expert-level) self-standing modules. The template has a cover page with the main information and a second page where the related (and completed) modules are listed:



EIT DIGITAL & THE EMAI4EU PROJECT PARTNERS AWARD THIS CERTIFICATE OF COMPLETION FOR THE SERIES OF COURSES

ADVANCED AI

TO

FULL NAME

This is to certify that the participant has successfully completed all listed courses and passed the corresponding assessments, including the final evaluation.

Federico Menna
CEO, EIT Digital

TOMORROW'S DIGITAL INNOVATORS
AND ENTREPRENEURS

The participant has successfully completed all listed courses and passed the corresponding assessments, including the final evaluation.

AI courses:

Innovation & Entrepreneurship courses:

Finally, regarding the identification of the platform to deliver the SSLMs, as described in the deliverable "D2.1 EMAI4EU self-standing modules Market analysis and curriculum design", the team evaluated the possible platforms available in the market including Coursera, Udemy and a more recent platform Icarus AI. Although, Coursera and Udemy are more accepted by companies, the team opted with Icarus AI which is committed to promoting diversity, equity, and inclusion (DEI) in all aspects of their business. Icarus AI is dedicated to ongoing education, training to ensure promotion of DEI in workplaces and in the education industry at large. Moreover, EITD has a strategic collaboration and direct contacts with the Icarus AI team to customize the platform to specific needs (e.g., create curriculum, group of modules, dependencies among modules, different assessment approaches, add specific certificates issued by EITD). The Icarus AI platform has been also successfully used for other similar projects funded by the EU (e.g., SPECTRO, RESHIP, ACHIEVE), with very positive feedback from the instructors. All the modules are available at this URL: https://eit.icarus.education/emai4eu/

# 4 CONCLUSION

During its second year, the EMAI4EU project successfully consolidated the Quality Assurance (QA) framework established in Year 1 and extended its application to critical academic and operational processes. The QA team ensured compliance with ESG and EIT QALE standards, supporting the delivery of high-quality educational content and robust project governance. Key achievements include:

- EIT Label Accreditation: The EMAI4EU Master's Programme met all mandatory and advanced quality indicators (Qi1 and Qi2), receiving highly positive feedback and now awaiting official confirmation of the EIT Label award.
- Learning Content QA: WP2 adopted standardized templates and indicators for the development of Self-Standing Learning Modules (SSLMs), achieving approximately 90% completion of module descriptors and aligning production with agreed guidelines.
- Risk Management: Continuous monitoring and mitigation strategies addressed critical risks such as low enrolment and marketing effectiveness. Corrective measures—programme rebranding, targeted outreach, and the Parallel Entry Scheme—are in place to improve recruitment outcomes in upcoming cycles.
- Governance and Coordination: QA principles were applied to streamline meetings and documentation, ensuring efficiency while maintaining traceability of decisions. WP3 and PEC meeting structures were adapted to optimize time without compromising quality standards.
- Stakeholder Engagement: Interim student and teacher surveys were introduced to capture feedback ahead of official EIT Label instruments, reinforcing a culture of continuous improvement.