



**INGENIUM**  
European University

## **Deliverable 4.1**

# **Joint Programmes Report**

*Work Package 4 – The INGENIUM European Campus*



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# Table of Contents

List of Figures.....	4
Document information .....	4
Document history .....	5
Definitions & Acronyms.....	5
EXECUTIVE SUMMARY .....	8
DESCRIPTION, METHODOLOGY AND DISCUSSION OF THE FINAL OUTCOME.....	11
1. Introduction.....	13
2. Information Collection and Validation Process .....	14
3. INGENIUM Joint Programmes.....	16
3.1. INGENIUM Flagship Programmes.....	19
3.1.1. Joint Bachelor Programme in Entrepreneurship and Innovation .....	21
3.1.2. Joint Master Programme in Advanced Practice Nursing in Acute Care .....	23
3.1.3. Joint Master Programme in Artificial Intelligence .....	24
3.1.4. Joint Master Programme in Chemical and Biochemical Process Technologies.....	26
3.1.5. Joint Master Programme in Sustainable Development and Circular Economy .....	27
3.1.6. Joint Master Programme in Sustainable Management in Coastal Conservation .....	30
3.2. INGENIUM's Joint Study Programmes .....	31
3.2.1. Double Master's Degree Programme in Legal Sciences for Internationalisation and Business Innovation and International Law.....	33
3.2.2. Double Master Degree in Health Professions of Rehabilitation Sciences and Rehabilitation & Balneology .....	34
3.2.3. Double Master Degree in Civil Engineering.....	36
3.2.4. Double Master Degree in Chemistry.....	37
3.2.5. Joint Master Degree in Mechatronic Engineering (Erasmus Mundus).....	39
4. Key Thematic Areas.....	40
5. Governance and Operational Frameworks for Joint Programmes .....	42
6. From Planning to Progress: Building the Foundations of the INGENIUM European Campus .....	47
CONCLUSION .....	52
References.....	53
Annex 1. Implementation Timeline for INGENIUM Joint Programmes.....	54
Annex 2. Overview of Achieved Requirements for INGENIUM Joint Programmes.....	56
Annex 3. Comparison Table for INGENIUM Double and Joint Degree Programmes .....	58

## List of Tables

<b>Table 1.</b> Overview of INGENIUM Pathway Programmes Pilots.....	19
<b>Table 2.</b> INGENIUM Flagship Programmes - Overview and Feasibility.....	21
<b>Table 3.</b> Overview INGENIUM Double and Joint Degree Programmes - Overview and Feasibility.....	32

## List of Figures

<b>Figure 1.</b> Visualisation of the INGENIUM European Campus. ....	14
<b>Figure 2.</b> Governance Structure of the INGENIUM European Campus.....	43
<b>Figure 3.</b> Workflow for developing and evaluating INGENIUM Joint Programmes, from faculty proposal to INGENIUM Alliance Council endorsement with revision loop.....	45
<b>Figure 4.</b> Flow diagram of the INGENIUM programme proposal process, from idea sharing to partner review and final outcome.....	47

## Document information

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Description of the deliverable (3-5 lines)	The INGENIUM Joint Programmes Report describes the INGENIUM European Campus, its inter-connections with the majority of initiatives within the alliance. The INGENIUM European University has introduced several structures and processes to develop a joint academic offer which are outlined in this report. Moreover, several challenges and transformative actions have been identified and listed in the document to outline the next steps to be taken both on alliance level and on institutional level.
Key words	Joint programmes, QA Framework, double degrees, joint degrees, processes and structures, joint academic offer, joint education, INGENIUM Pathway Framework, INGENIUM Scholarship

## Document history

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## Definitions & Acronyms

Definition/ Acronym (in alphabetical order)	
<b>AI</b>	Artificial Intelligence
<b>APN</b>	Advanced Practice Nursing
<b>ARACIS</b>	The Romanian Agency for Quality Assurance in Higher Education
<b>AY</b>	Academic Year

<b>CBPT</b>	Chemical and Biochemical Process Technologies
<b>DNISC</b>	Department of Neuroscience, Imaging and Clinical Sciences'
<b>DoA</b>	Description of Action
<b>EDI</b>	Equity, diversity and inclusion
<b>EHEA</b>	European Higher Education Area
<b>EI</b>	Entrepreneurship and Innovation
<b>ENQA</b>	European Association for Quality Assurance in Higher Education
<b>ENSM</b>	École nationale supérieure de mécanique et des microtechniques
<b>EQAR</b>	European Quality Assurance Register for Higher Education
<b>EQF</b>	European Qualifications Framework
<b>ESG</b>	European Standards and Guidelines for Quality Assurance in Higher Education
<b>HIS</b>	University of Skövde, Sweden
<b>HKA</b>	Karlsruhe University of Applied Sciences, Germany
<b>HCERES</b>	Haut Conseil de l'évaluation de la recherche et de l'enseignement supérieur (French accreditation agency)
<b>IAC</b>	INGENIUM Alliance Council
<b>ICN</b>	International Council of Nurses
<b>IEC</b>	INGENIUM European Campus
<b>IEC-AC</b>	INGENIUM European Campus Academic Committee
<b>IFP</b>	INGENIUM Flagship Programme
<b>IPP</b>	INGENIUM Pathway Programme
<b>IRSB</b>	INGENIUM Research School Board
<b>ISC</b>	INGENIUM Steering Committee
<b>MTU</b>	Munster Technological University, Ireland
<b>MUS</b>	Medical University - Sofia, Bulgaria
<b>NQF</b>	National Qualifications Framework
<b>QA</b>	Quality Assurance
<b>QQI</b>	Quality and Qualifications Ireland
<b>SDCE</b>	Sustainable Development and Circular Economy
<b>SDG</b>	Sustainable Development Goals

<b>SMaCC</b>	Sustainable Management in Coastal Conservation
<b>TUIASI</b>	'Gheorghe Asachi' Technical University of Iasi, Romania
<b>UdA</b>	University 'G. d'Annunzio', Chieti-Pescara, Italy
<b>UNIOVI</b>	University of Oviedo, Spain
<b>UoC</b>	University of Crete, Greece
<b>URN</b>	University of Rouen, Normandy, France
<b>Xamk</b>	South-Eastern Finland University of Applied Sciences, Finland
<b>Contributing Partner</b>	Partner institution involved in a study programme development by e.g.; providing individual courses but is not part of the degree-awarding consortium.
<b>Courses</b>	A self-contained, formally structured learning experience. It should have a coherent and explicit set of learning outcomes, defined learning activities consistent with the time allocated within the curriculum, and appropriate assessment criteria. <sup>1</sup>
<b>Degree-awarding Partner</b>	Partner institution involved in a study programme who is awarding the degree, e.g.; as part of a double or joint degree.
<b>Dissertation</b>	The final written paper written to complete the master programme, also known as Master's thesis.

<sup>1</sup> European Commission. *ECTS Users' Guide*. Publications Office of the European Union, 2015, [https://education.ec.europa.eu/sites/default/files/document-library-docs/ects-users-guide\\_en.pdf](https://education.ec.europa.eu/sites/default/files/document-library-docs/ects-users-guide_en.pdf)

## EXECUTIVE SUMMARY

This report presents the development and current status of the INGENIUM Joint Programmes and Double Degrees, forming a core element of the INGENIUM European University's ambition to create a fully integrated INGENIUM European Campus (IEC). The work, undertaken within Work Package 4 (WP4), contributes directly to the alliance's vision of enabling seamless academic collaboration, mobility, and innovation across its ten partner universities.

### Purpose and Context

The deliverable corresponds to Task 4.3, Establishing INGENIUM Joint Programmes, and builds upon the structural groundwork developed under Tasks 4.1 (Organising the IEC Faculty) and 4.2 (Developing the INGENIUM Pathway Framework). While the Description of Action (DoA) originally allocated twelve months for this task in 2024, the alliance has since demonstrated that multi-institutional programme creation requires a longer, phased approach. This report therefore documents not only the programmes build but also the structures, governance, and adaptive mechanisms that ensure sustainability and quality in the long term. It does not provide detailed participants statistics which are not yet available due to the ongoing preparation and recruitment phases.

### Methodology

Data for this report were gathered through a structured institutional self-assessment survey conducted between mid-August and early October 2025, completed by all INGENIUM partners. The survey combined quantitative and qualitative components, providing a comprehensive view of institutional engagement, perceived barriers, and development progress. Survey findings were verified through cross-checking with consortium agreements and inter-institutional comparisons to ensure accuracy and coherence. Survey answers were provided by WP4 Coordinators from all partner universities.

### Development Process

Programme development has followed a phased, design-based approach rather than a linear top-down model, allowing for iterative learning and gradual alignment across institutions:

1. Mapping and Scoping: Each partner identified existing programmes and areas with potential for new joint or double degree initiatives.
2. Programme Proposals and Expressions of Interest: Partners submitted structured programme proposals, leading to eleven development initiatives.
3. Consortium Formation and Endorsement: The INGENIUM Alliance Council (IAC) endorsed five INGENIUM Flagship Programmes, formally recognising their strategic importance.
4. Strategic Programme Development: Coordinated working groups advanced curricula, mobility structures, and milestones toward implementation.

### Programme Portfolio

As of this report's submission, INGENIUM's academic portfolio consists of:



- > Four double Master's degrees (each based on signed consortium agreements).
- > Six Joint Programmes under development (one Bachelor's and five Master's programmes).
- > 13 INGENIUM Pathway Programmes to be offered from the 2026/27 academic year.
- > Although the joint Master's degree in Mechatronic Engineering (EU4M) existed before the INGENIUM Alliance, its programme has been updated and the consortium has been adapted and strengthened by incorporating a third alliance member as a consortium partner.

Each initiative represents a distinct collaboration model within the alliance, unified by shared academic and mobility principles.

The INGENIUM Flagship Programmes—endorsed by the IAC—serve as thematic entry points that connect disciplines across partner institutions and embody INGENIUM's educational innovation. Their development is guided by the INGENIUM Joint Programmes Implementation Form, which ensures consistency in objectives, curriculum design, quality assurance, and financial planning.

### **The INGENIUM Pathway Framework**

Complementing the joint programmes, the INGENIUM Pathway Framework enables flexible, interdisciplinary learning within nationally accredited degrees. Students can combine modules from different institutions and integrate both virtual and physical mobility, amounting to approximately 25% of their total ECTS credits in both mobility kinds. The framework operationalises INGENIUM's commitment to inclusivity and scalability—allowing students from all partner universities to benefit from international exposure without needing a fully joint programme structure.

Thirteen pilot programmes, across Bachelor's and Master's levels, are preparing to offer such pathway options by 2026/27. These will expand student choice, increase mobility flows, and strengthen collaboration between teaching teams across Europe.

### **Governance and Quality Assurance**

A structured, transparent governance framework ensures that all academic developments align with European and institutional standards. Programmes undergo evaluation by the IEC-Academic Committee using a points-based system assessing relevance, innovativeness, interdisciplinarity, and transnationality. Successful programmes then move to the IAC for final endorsement.

Quality assurance is embedded through the INGENIUM Joint Programmes Implementation Form, the IEC Faculty Guidebook, and the alignment with INGENIUM's Joint QA Policy. The use of shared templates, repositories, and milestone tracking tools has further enhanced transparency and comparability across institutions.

### **Constraints and Adaptive Solutions**

The report acknowledges several recurring challenges:

- > Legal and Accreditation Diversity: Some national frameworks do not yet permit joint degrees at certain levels. INGENIUM adopted double degree models as a practical interim solution.
- > Academic Workload: Faculty engagement was strengthened through team-based coordination and clearer role definitions.
- > Institutional Timelines and Calendars: Milestones allow each university to progress according to internal procedures while maintaining alliance-level coherence.
- > Financing and Mobility Support: The alliance is developing an INGENIUM Scholarship System to fund flexible student and staff mobility pathways within joint and double degree programmes.

These adaptive strategies have turned challenges into opportunities for innovation, contributing to stronger procedural coherence and shared learning.

## Results and Outlook

By the academic year 2026/27, three newly developed joint programmes are expected to enrol their first students, while additional programmes will complete the INGENIUM Joint Programmes Implementation Form, preparing for accreditation and launch in 2027. The INGENIUM Pathway Programmes and micro-credentials will further enhance accessibility, interdisciplinarity, and innovation in teaching and learning. A new call will be launched to identify other programmes that are ready for accreditation before the end of 2025.

Together, these initiatives form the foundation of the INGENIUM European Campus, where academic mobility, shared curricula, and mutual recognition of achievements become standard practice. The alliance's iterative process—grounded in collaboration, inclusivity, and flexibility—demonstrates a replicable model for sustainable transnational higher education development.

## Conclusion of the Executive Summary

The INGENIUM Joint Programmes Report documents both progress and transformation. It shows how the consortium of ten universities, facing diverse regulatory and structural realities, has built a shared academic ecosystem through deliberate design, mutual trust, and adaptive governance.

While the timelines originally foreseen in the DoA have been extended to reflect the complexity of cross-border programme development, the alliance's collective achievements—established degrees, endorsed Flagship Programmes, the Pathway Framework, and structured QA mechanisms—represent major milestones toward a long-term European vision.

In essence, INGENIUM has moved from concept to implementation: from a vision of European academic integration to a concrete architecture of collaborative programmes, ready to enrol students, deliver innovation, and set a precedent for the European Degree of the future.

## DESCRIPTION, METHODOLOGY AND DISCUSSION OF THE FINAL OUTCOME

This deliverable provides a comprehensive overview of the INGENIUM Joint Programmes developed under Work Package 4 (WP4) of the INGENIUM Alliance. Its main objective, as outlined in the Description of Action (DoA), is to **“list and describe the INGENIUM Joint Programmes that have been established over the course of the project, including detailed participant statistics.”**<sup>2</sup>

**This deliverable reports on the progress achieved in Task 4.3 “Establishing INGENIUM Joint Programmes”, as well as Tasks 4.1 and 4.2 with regards to the role of Joint Programmes in the implementation of the INGENIUM European Campus (IEC) and the link with the Open Degree Framework (known as Pathway Framework).**

Given the complex, multi-institutional nature of programme development, the report focuses on detailed programme descriptions rather than participation statistics, which are not yet available due to the ongoing preparation and recruitment phases. The report includes information on programme objectives, curricula, mobility options, governance structures, and anticipated launch timelines.

The methodology applied for compiling this deliverable is structured, iterative, and collaborative. Data were collected from partner institutions through structured programme proposals and expressions of interest, validated via internal committee review processes, and cross-checked against consortium agreements for joint and double degree programmes. Coordination was ensured through the INGENIUM European Campus Academic Committee (IEC-AC), the INGENIUM Alliance Council (IAC), and work package leadership, using shared templates, and milestones to standardise information collection and ensure consistency across the alliance.

The approach combined both qualitative and process-oriented methods:

- > Qualitative input from programme coordinators and institutional representatives informed the description of programme content, development stages, and institutional commitment.
- > Process-based validation ensured alignment with agreed governance procedures, capturing the current status of programme development and planned next steps.

### Constraints and Mitigation Measures

Several constraints influenced the preparation of this deliverable:

- > Timing and readiness: Many programmes are still under development; some are planned to launch in 2025/26 and are currently preparing for recruitment, the majority of programmes are expected to launch in the academic year 2026/27. Additional programmes require additional time for development and will likely be launched in the academic year 2027/28.

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<sup>2</sup> INGENIUM European University. Description of Action. INGENIUM, 2023, p. 102/221.

- > Participant statistics: As student enrolment has not yet begun, participation data cannot be reported at this stage.
- > Regulatory and institutional challenges: Differences in national accreditation rules, institutional approval procedures, and academic calendars have required adaptive approaches, including the use of double degree models and formal institutional endorsement procedures.

Mitigation measures included structured programme templates, milestone tracking, coordination meetings, and iterative review processes to ensure that, despite these constraints, all programme descriptions accurately reflect ongoing progress and conform to WP4 objectives.

### **Discussion of the Final Outcome**

While participation statistics are not yet available, the deliverable achieves its primary objective of documenting the status, structure, and development of INGENIUM Joint Programmes. Compared to the DoA:

- > Alignment: All activities remain aligned with WP4 objectives, supporting the creation of the INGENIUM European Campus and promoting academic mobility, shared teaching delivery, and joint curriculum development.
- > Deviations: The main deviation concerns the lack of participant statistics, which will become available once enrolment begins. Additionally, the launch timelines for some programmes extend beyond the originally planned time scope of the project due to the sequential nature of multi-institutional programme development.
- > Contingency measures: To address these deviations, the alliance has implemented structured milestone planning, formal institutional endorsement procedures, and iterative coordination mechanisms. In addition, the introduction of thematic areas has enabled the alliance to prioritise specific programmes through established governance structures. This prioritisation, endorsed by the INGENIUM Alliance Council, has ensured that resources and coordination efforts are strategically concentrated on Flagship Programmes considered most relevant to the INGENIUM mission. Together, these measures have secured continued progress toward the launch of joint programmes and maintained full alignment with the DoA objectives.

In conclusion, this deliverable provides a detailed and validated overview of programme development to date, offering a clear picture of the alliance's progress, the governance and methodological frameworks in place, and the expected pathway toward full implementation. It demonstrates that, despite timing and procedural challenges, the alliance remains on track to deliver the INGENIUM Joint Programmes in line with strategic objectives and the vision for a fully integrated European campus.

## 1. Introduction

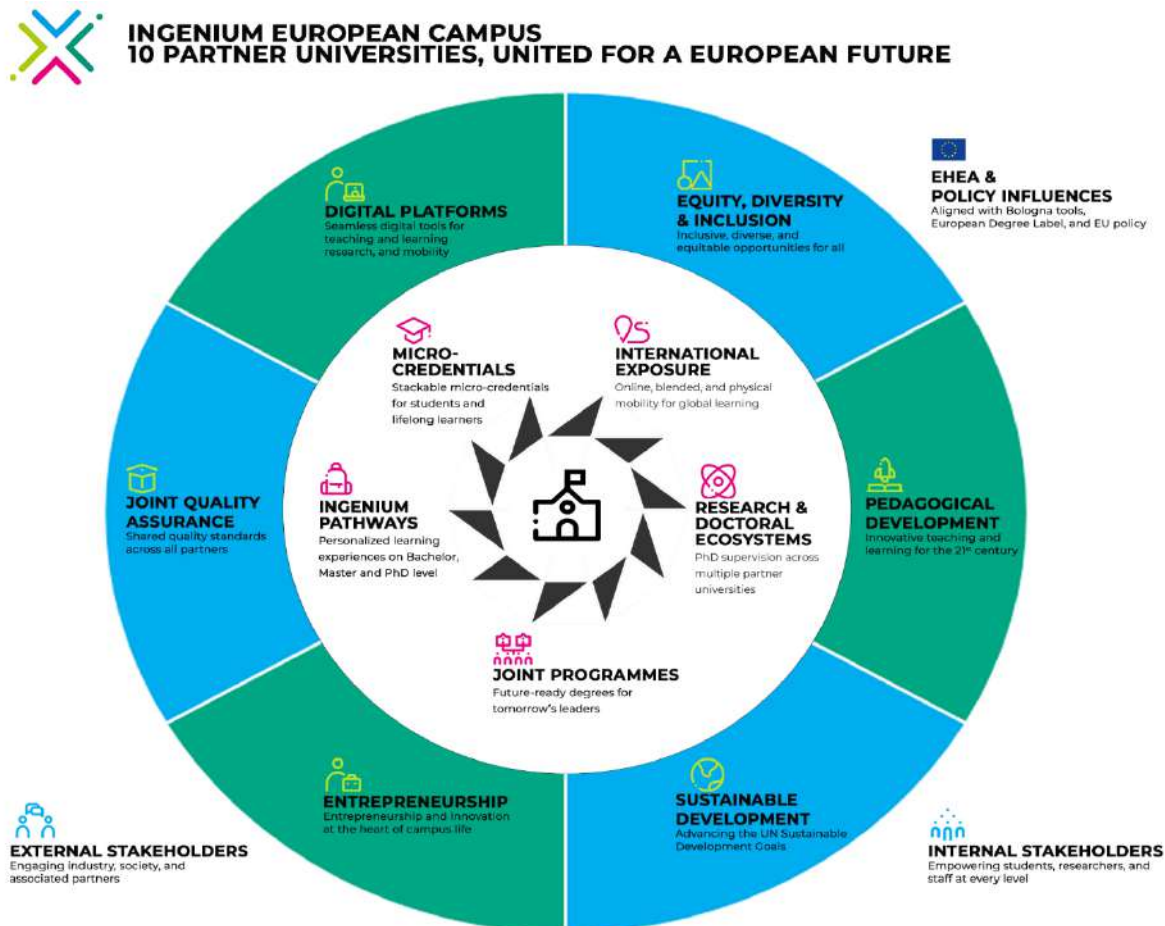
Joint education is at the core of the INGENIUM European Campus (IEC), representing a defining element in the INGENIUM vision for a truly integrated European higher education landscape. Collaborative academic programmes have immense potential not only to shape the present but also to drive the future of higher education in Europe by fostering innovation, mobility, and mutual recognition of academic achievements. Our inter-university campus unites ten partner universities spanning the European Union and it combines all educational opportunities offered by partners involved in the INGENIUM European University (see **Fehler! Verweisquelle konnte nicht gefunden werden.**). INGENIUM's joint programmes equip students and staff with the skills, perspectives, and opportunities needed to succeed in a rapidly changing, interconnected world (see chapter 3 for a detailed definition). It creates international opportunities for its university members and thereby provides different opportunities to participate in transformative internationalisation experiences, adapted to their needs and preferences. As INGENIUM is characterized by an extraordinary degree of diversity, students and staff participating in such joint programmes will be able to experience and compare different modes of teaching and learning not just in terms of national cultural and academic traditions, but also with regard to the specific characteristics of various types of higher education institutions, ranging from traditional comprehensive universities to universities of applied sciences to highly specialized institutions. This contributes to the inclusive dimension of the joint programmes and enables INGENIUM to make progress towards the target of 50% of students in its member universities benefiting from different kinds of international exposure opportunities.

The INGENIUM European Campus is centred around its five key components: graduates of bespoke **INGENIUM Joint Programmes** will develop the INGENIUM core mindset, characterized by multilingualism, multidisciplinary learning, an entrepreneurial approach, and challenge-based education; **INGENIUM Pathway Programmes** give students the opportunity to personalize their learning experiences, while basing their education on their home university programme; **INGENIUM Research and Doctoral Ecosystems** encourage and support PhD supervision and PhD candidate training across partner universities; through stackable **INGENIUM Micro-Credentials** students and life-long learners can expand their knowledge through upskilling, re-skilling or supplementary learning; and finally, through **INGENIUM International Exposure** opportunities students and staff can engage in online, blended and physical opportunities for global learning.

The various components of the INGENIUM European Campus are intentionally interconnected, each shaped by and contributing to the alliance's core commitments to entrepreneurship, equity, diversity and inclusion (EDI), and sustainable development. Key features such as joint quality assurance processes, shared digital platforms, and innovative pedagogical approaches are developed in response to the evolving needs of the academic community, ensuring continuous improvement and relevance. The active involvement of internal and external stakeholders, as well as alignment with the broader objectives of the European Higher Education Area (EHEA), play an essential role in the ongoing creation, refinement, and advancement of the inter-university campus.

With the IEC, the alliance is responding to Europe's and global challenges as stated in the INGENIUM Mission Statement, and in order to reinforce this undertaking, three key thematic

areas have been introduced. Firstly, the thematic area of **Health & Welfare** highlights social and demographic challenges; **Humanities & Business** supports the fight against climate change and the strategy for the decarbonisation of the European economy; and finally **Engineering** supports the technological change driven by digitisation.<sup>3</sup> INGENIUM is developing joint programmes that reflect and advance each of these thematic areas.



**Figure 1.** Visualisation of the INGENIUM European Campus.

## 2. Information Collection and Validation Process

The information presented in this report was collected and validated through a structured process focusing on the INGENIUM Flagship Programmes and the INGENIUM Joint and Double Degrees. Data were collected between mid-August and mid-September 2025, with follow-up clarification questions addressed until mid-October 2025. The same timeframe applied to the collection of programme-related data.

### Partner Survey Design and Objectives

<sup>3</sup> INGENIUM University. "About Us – Mission Statement." INGENIUM University, n.d., <https://ingenium-university.eu/about-us/maria/>.



The primary source of data is a structured institutional self-assessment survey completed by the INGENIUM partners. The survey was completed by the respective WP4 coordinators. The survey combined closed multiple-choice questions with open-ended comment fields, applying a mixed-methods design that allowed both quantitative comparison and qualitative insight.

The survey was organised in four sections:

1. General information (respondent name, institution).
2. Closed-ended checklists of involvement (INGENIUM Flagship Programmes, double degrees, other programme proposals).
3. Barrier identification (predefined list of potential barriers, identical across programmes).
4. Open comment fields ("Other") allowing for detailed contextual feedback.

This structure ensured both comparability across institutions (through pre-coded quantitative data) and flexibility (through qualitative comments). Logic-based routing was used so that respondents were only presented with relevant questions, improving accuracy and relevance. Each institution reported individually, enabling partner-level granularity and analysis.

The survey's underlying goals were to identify the reasons for partner involvement or non-involvement in each programme, to distinguish between different types of barriers—structural, strategic, and operational—and to provide evidence that can inform mitigation strategies for future alliance-level programme development.

### **Validation and Cross-Checking**

Programme-specific survey responses were provided by the WP4 coordinators at each involved partner university and were cross-checked with consortium agreements for the double degree programmes (where available). Additional verification was achieved by comparing partner responses across the alliance to ensure coherence and shared understanding.

The INGENIUM Flagship Programmes (IFP) presented in this report have received official endorsement from the Academic Committee and are therefore included here. The INGENIUM Joint and Double Degree Programmes listed are based on formally signed agreements among the respective partners. The alliance will continue to ensure that these programmes fully adhere to the INGENIUM quality assurance framework and receive endorsement from both the INGENIUM Alliance Council and the IEC-Academic Committee. Furthermore, the alliance will assess opportunities to scale up these initiatives—either by involving additional contributing or degree-awarding partners, or by leveraging future regulatory developments such as the European Degree (Label). It should be noted that other initiatives and programme concepts are currently under development within the INGENIUM Alliance. However, as these have not yet received official endorsement from the relevant INGENIUM committees, they are not included in this report.

All processes and procedures described in this deliverable have been discussed and endorsed by the IEC-Academic Committee and are documented in the respective Terms of Reference.<sup>4</sup>

### 3. INGENIUM Joint Programmes

INGENIUM has already been and continues to be in the process of establishing transregional and interdisciplinary programmes that reinforce innovative learning methodologies, promote student-centred approaches, and create synergies between education, research, innovation, and entrepreneurship across the alliance.<sup>5</sup> The INGENIUM Joint Programmes are defined by a set of common features: they are multilingual, with each programme delivered in at least two languages (the local language and English); they ensure mobility, requiring students to obtain at least 25% of their ECTS credits through international (including physical and virtual) mobility;<sup>6</sup> they integrate internship periods and work-based learning;<sup>7</sup> and they involve a minimum of two partner institutions in their design and delivery.<sup>8</sup> In addition, all programmes must demonstrate strong connections with industry and societal stakeholders, comply with the INGENIUM quality assurance procedure, and receive endorsement from both the INGENIUM Alliance Council and the IEC-Academic Committee.<sup>9</sup>

INGENIUM Joint Programmes are going to be delivered at both the Bachelor's and Master's levels and may lead "to the awarding of different types of official degrees:

- > INGENIUM joint degrees, issued by two or more of the partner HEIs, based on a joint study programme which is accredited and recognised according to the national regulations;
- > Double or multiple degrees, issued by two or more partner HEIs, based on an agreed study programme. In this case, the student will receive two or more separate degrees, which will be accredited and recognised according to the national regulations;
- > National degrees with specific mention of their international or INGENIUM component, awarded by one of the INGENIUM partners and recognised according to the national regulation, with a strong involvement of other INGENIUM partners either through student or staff mobility."<sup>10</sup>

To ensure clarity and alignment with European standards, INGENIUM adopts the definitions established by EQAR. A **joint programme** is "understood as an integrated curriculum coordinated and offered jointly by higher education institutions from EHEA countries, leading to either double/multiple degrees or a joint degree."<sup>11</sup> **Double or multiple degrees** refer to "separate awards issued by the partner institutions attesting successful completion of the

<sup>4</sup> INGENIUM European University. *Terms of Reference: INGENIUM European Campus Academic Committee*. Ingenium Repository, n.d., <https://repo.ingenium-university.eu/index.php/s/Cx2Sg4EKsesC82X>

<sup>5</sup> INGENIUM University. "About Us – Mission Statement." INGENIUM University, n.d., <https://ingenium-university.eu/about-us/maria/>.

<sup>6</sup> INGENIUM European University. *Description of Action*. INGENIUM, 2023, p. 133/221.

<sup>7</sup> Ibid., p. 135/221.

<sup>8</sup> Ibid., p. 136/221.

<sup>9</sup> Ibid., p. 79/221.

<sup>10</sup> Ibid., p. 78/221.

<sup>11</sup> European Quality Assurance Register for Higher Education (EQAR). "Definitions – European Approach for Quality Assurance of Joint Programmes." EQAR, n.d., <https://www.eqar.eu/kb/joint-programmes/definitions/>



programme (with a ‘double degree’ being the case where two institutions each confer a degree).<sup>12</sup> A **joint degree**, in contrast, is “a single qualification issued collectively by participating higher education institutions and nationally acknowledged as the recognised award of the joint programme.”<sup>13</sup>

Currently, the INGENIUM European University is in the process of creating six INGENIUM Flagship Programmes: one at Bachelor’s level and five at Master’s level (see chapters 3.1.1.-3.1.5). In addition, four double degrees have been developed or are in the process to be finalized (see chapters 3.2.1-3.2.5). A joint Master’s degree in Mechatronic Engineering is also part of INGENIUM programme portfolio. However, this programme already existed prior to the formation of the alliance but has been updated by including a new specialization offered by a new consortium partner from within the alliance. Annex 2 provides an overview of all programmes and illustrates how they integrate the INGENIUM joint programme components introduced earlier in this chapter. Annex 3 provides a comparison table for the INGENIUM double and joint degree programmes.

Overall, the alliance is committed to creating an integrated INGENIUM academic offer consisting of ten programmes providing an INGENIUM Pathway option (see below for details), as well as ten joint degrees and micro-credentials. Following guidance from the INGENIUM Alliance Council, it was agreed that the alliance will develop three full study programmes and seven micro-credentials as part of this portfolio by the end of the funding period.<sup>14</sup> *Creating* refers to the complete process of developing a new academic programme—from the initial idea and consortium formation through curriculum design, endorsement, accreditation, and ultimately student enrolment. For three of the joint programmes currently under development, this full creation process is expected to be completed by the start of the academic year 2026/27, when the first student cohorts will be enrolled. For the remaining programmes, development teams from partner universities are expected to complete the INGENIUM Joint Programmes Implementation Form—a key milestone within the INGENIUM quality assurance procedure—by the start of the academic year 2026/27. This step precedes the formalisation of consortium agreements and the submission of newly developed academic programmes to the respective accreditation agencies, thereby laying the groundwork for their launch in 2027.

To ensure a consistent and transparent pathway for implementation, the development of INGENIUM joint programmes follows a structured sequence of nine milestones. These range from the design of programme-level learning outcomes to the enrolment of the first students as the final milestone. This framework not only secures alignment with EHEA-level quality assurance standards but also provides partner institutions with a common roadmap for navigating regulatory differences and administrative complexity. At present, the six programmes under development are at different stages of this process, underlining the alliance’s steady, stepwise progress. Annex 1 shows the timeline for achieving the milestones. The following

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<sup>12</sup> Ibid.

<sup>13</sup> Ibid.

<sup>14</sup> INGENIUM European University. Description of Action. INGENIUM, 2023, p. 125/221.

subchapters provide an overview of each programme, their current development stage, and the value they bring to the INGENIUM academic offer.

### The interaction between Joint Programmes and INGENIUM Pathway Programmes

INGENIUM has further developed its concept of an “open degree” and rebranded it as the INGENIUM Pathway Framework<sup>15</sup> to reflect a more innovative and inclusive vision while avoiding confusion with nationally regulated open degree schemes that may impose legal or structural constraints. The INGENIUM Pathway Framework provides the overarching structure and implementation guidelines for partner universities, enabling them to integrate flexible learning pathways within their existing nationally accredited programmes. Through this framework, students can combine modules from different disciplines and partner institutions—both virtually and physically—while pursuing their regular degree.

Within this framework, INGENIUM Pathway Programmes (IPP) are standard Bachelor’s or Master’s programmes that include the option for students to follow an *INGENIUM Pathway*—that is, a defined combination of transdisciplinary learning components, mobility experiences, and skills-based activities leading to formal recognition in the diploma supplement upon completion.

Together with the INGENIUM Joint Programmes, the INGENIUM Pathway Programmes form another key pillar of the INGENIUM European Campus. While IPP do not involve the same level of joint curriculum design or shared accreditation as full joint programmes, their flexible model allows for wider student and programme participation and faster scalability across the alliance. The two formats are closely interconnected and mutually reinforcing in several ways:

- > **Piloting and Progression:** INGENIUM Pathway Programmes serve as testing grounds for innovative structures and collaboration models that can later evolve into fully-fledged joint programmes.
- > **Complementarity and Inclusion:** They broaden access to international learning opportunities, ensuring that a greater number of students benefit from mobility and cross-disciplinary learning.
- > **Innovation and Alignment:** Flexible academic components piloted within IPP—such as micro-credentials, virtual exchanges, or interdisciplinary modules—can be integrated into joint programmes as they mature.

Both types of programmes rely on the academic and administrative expertise of all partner universities—the backbone of the INGENIUM European Campus. Joint faculty teams collaborate across institutions to design and deliver innovative learning experiences, integrating research-based and work-based learning elements and ensuring that internationalisation and interdisciplinarity remain at the core of the INGENIUM educational offer.

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<sup>15</sup> INGENIUM Alliance. *INGENIUM Pathway Framework*. Jan. 2025, [https://ingenium-university.eu/wp-content/uploads/2025/01/241220\\_INGENIUM-Pathway-Framework\\_final.pdf](https://ingenium-university.eu/wp-content/uploads/2025/01/241220_INGENIUM-Pathway-Framework_final.pdf).

Currently, five partners are piloting the implementation of the INGENIUM Pathway option across thirteen programmes at Bachelor's and Master's level. Implementation involves all ten partner universities, each contributing through physical or virtual mobility and shared academic activities. These thirteen programmes are expected to be available for student selection in the academic year 2026/27. Their introduction will significantly enhance mobility flows within the alliance and expand opportunities for international exposure, allowing students to benefit from the full breadth of the INGENIUM European Campus learning environment.

Programme Title	Programme level	Coordinating Institution
Biomedicine	Bachelor	HIS
Commerce and Marketing	Bachelor	UNIOVI
Molecular Biodesign	Bachelor	HIS
Sciences of Sustainable Habitat	Bachelor	UdA
Social Services	Bachelor	Xamk
Social Work	Bachelor	UNIOVI
Tourism	Bachelor	UNIOVI
Automotive Electronic Control Systems	Master	TUIASI
Biotechnology of Environment and Health	Master	UNIOVI
Electrical Energy Conversion and Power Systems	Master	UNIOVI
Information Technologies for Telecommunications	Master	TUIASI
Machine Learning, Robotics and Control	Master	TUIASI
Modern Languages for Management and International Cooperation	Master	UdA

**Table 1.** Overview of INGENIUM Pathway Programmes Pilots

### 3.1. INGENIUM Flagship Programmes

Highlighting the three key thematic areas (see chapter 4), the INGENIUM Alliance Council (IAC) has reviewed the programme proposals that were submitted from across the alliance and, following a thorough review, selected five programmes which form the foundation of the INGENIUM Flagship Programmes. These joint programmes represent strategic academic offerings that are future-oriented, interdisciplinary, and aligned with both societal needs and institutional strengths across the partner universities. Following this mandate, the alliance

launched a call for the creation of dedicated working groups who are prioritizing the development of these programmes with the institutional support as needed.

During the tender period of the “Call for the Development of Joint Academic Offers”<sup>16</sup>, the University of Rouen, Normandy (URN), University of Oviedo (UNIOVI) and Munster Technological University (MTU) identified the opportunity for an additional Master’s programme in the area of Sustainable Management in Coastal Conservation (SMaCC). Although this specific proposal was not initially endorsed by the IAC, its thematic relevance and alignment with INGENIUM’s broader mission led the IEC-Academic Committee to support its development, reflecting the alliance’s openness to new programme proposals emerging from within the network. Recognizing the cross-cutting importance of sustainability within European higher education and within the INGENIUM vision itself, the Academic Committee recommended the programme be treated with equal priority as the five original INGENIUM Flagship Programmes. The table below provides an overview of INGENIUM Flagship Programmes, partners involved, development status, challenges faced and an overview of its feasibility analysis.

<b>INGENIUM Flagship Programmes – Overview and Feasibility (AY 2026/27)</b>				
Key: ✓ Feasible • ⚠ Partial/Pilot • ✗ Not ready				
<b>Programme</b>	<b>Partners</b>	<b>Status</b>	<b>Challenges</b>	<b>Feasibility AY 2026/27</b>
Bachelor in Entrepreneurship & Innovation	UdA (IT), URN (FR), Xamk (FI), MTU (IE)	Early design; feasibility report pending	Regulatory diversity; roles clarity; capacity; funding clarity	✗ Not ready (likely ≥ AY 2027/28)
Master in Advanced Practice Nursing (Acute Care)	Xamk (FI – lead), MUS (BG), UNIOVI (ES), HIS (SE)	Curriculum set; consortium agreement pending; local degrees	Regulatory limits; differing ECTS; unclear roles	⚠ Partial (national ops at Xamk/MUS)
Master in Artificial Intelligence	TUIASI (RO – lead), UdA (IT), HIS (SE), HKA (DE), UNIOVI (ES), Xamk (FI)	Draft curriculum; TUIASI confirmed as awarding; others TBD	Regulatory misalignment; staff capacity; coordination delays	⚠ Possible pilot under TUIASI; full joint unlikely
Master in Chem. & Biochem. Process Technologies (CBPT)	TUIASI (RO – lead), UNIOVI (ES), URN (FR)	Joint degree agreed; structure finalised; accreditation in progress	Timeline alignment (resolved)	✓ Feasible
Master in Sustainable Development & Circular Economy (SDCE)	TUIASI (RO – lead), HIS (SE) + HKA (DE), MTU (IE), UdA (IT),	Accreditation & agreements due 2025; launch 2026/27	Staff/time (HIS); cross-school governance;	✓ Feasible

<sup>16</sup> INGENIUM European University. “Call for the Development of Joint Academic Offers.” INGENIUM Staff Academy, n.d., <https://ingenium-university.eu/ingenium-staff-academy-call-for-proposals/iec-faculty/call-for-the-development-of-joint-academic-offers/>

	Xamk (FI) (con-tributors)		joint-degree limits	
Master in Sustainable Management in Coastal Conservation (SMaCC)	URN (FR – lead), MTU (IE), UNIOVI (ES)	Structure defined; feasibility confirmed in principle	Early role clarity; coordination timelines	✓ Feasible

**Table 2.** *INGENIUM Flagship Programmes - Overview and Feasibility*

The following subchapters will provide more in-depth information regarding the current development status of each INGENIUM Flagship Programme, outlining their academic focus, institutional partnerships, progress made so far, and the steps ahead.

### 3.1.1. Joint Bachelor Programme in Entrepreneurship and Innovation

Partners	Status	Challenges	Feasibility AY 2026/27
MTU (IE – lead), UdA (IT), URN (FR), Xamk (FI)	Early design; feasibility report pending	Regulatory diversity; roles clarity; capacity; funding clarity	Not ready (estimated for AY 2027/28)

#### Programme Information

The Bachelor in Entrepreneurship and Innovation (EI) is currently under development by a consortium comprising four INGENIUM partners: University ‘G. d’Annunzio’, Chieti-Pescara (UdA), University of Rouen, Normandy (URN), South-Eastern Finland University of Applied Sciences (Xamk), and Munster Technological University (MTU), who serves as the coordinating institution. The programme aims to foster entrepreneurial mindsets, innovation capacity, and transnational collaboration across Europe.

#### Key Facts:

- > Consortium: MTU, UdA, URN, Xamk
- > Coordinating Institution: MTU
- > Degree: joint Bachelor (EQF Level 6)
- > Degree-awarding partners: MTU and others to be determined
- > Duration: 6–8 semesters (180–240 ECTS)
- > Admissions: Once per year; capacity yet to be defined.
- > Mobility: 25% physical and 25% virtual (aligned with INGENIUM framework)
- > Languages of Instruction: English (primary), selected components in French, further components to be determined
- > Accreditation: Overseen by QQI (Ireland, ENQA / EAQR member) and MTU by delegated authority; following the European Approach for Quality Assurance of Joint Programmes
- > Programme launch: Academic design initiated in 2025; estimated for 2027/28 but feasibility report pending

#### Curriculum Highlights:

- > Integration of transversal and entrepreneurial skills such as design thinking, Business Model Canvas, and community service.
- > Mandatory work-based learning through internships, industry projects, and research activities.
- > Development of critical thinking, innovation management, and social impact awareness.
- > Transnational and interdisciplinary approach combining business, creativity, and technology.

### **INGENIUM Added Value**

- > Strengthened collaboration among multiple partner universities through shared programme design.
- > Integration of mobility and virtual learning within a unified INGENIUM framework.
- > Creation of a pilot model for future joint Bachelor programmes across the alliance.
- > Fostering European citizenship, innovation culture, and entrepreneurial ecosystems within INGENIUM.

### **Partner Involvement**

The following institutions are actively involved because:

- > MTU: Fills a portfolio gap, drives innovation through a joint European degree, and leads the Entrepreneurial INGENIUM WP.
- > UdA: Aims to raise international profile and access European funding opportunities.
- > URN: Responds to faculty and student demand for internationalised and interdisciplinary programmes.
- > Xamk: Emphasises efficient use of existing teaching resources and staff support for internationalisation.

Non-participating institutions and reasons:

- > HKA: Regulatory and staffing constraints; lack of leadership and shifting priorities.
- > UoC: Legal barriers prevent joint bachelor participation.
- > HIS: Limited capacity and misalignment with national regulations.
- > TUIASI: Coordination and timing challenges; unclear roles in early stage.
- > UNIOVI: Faculty declined participation.
- > MUS: Misalignment with national regulations; lack of institutional support.

### **Barriers, Challenges and Mitigation Measures**

Main challenges identified:

- > Coordination delays and unclear roles after HKA's withdrawal as initial lead.
- > Regulatory differences and variation in Bachelor programme lengths.
- > Staff capacity limits, especially at UdA due to full teaching loads.
- > Communication inefficiencies and funding uncertainty during early stages.
- > Scope of institutional commitment still to be consolidated.

Mitigation measures implemented or planned:

- > MTU appointed as new coordinator, restoring leadership and stability.
- > Clear institutional roles and communication channels now established.
- > Flagship status by INGENIUM Alliance Council increased visibility and support.
- > Xamk resolved internal coordination issues through resource allocation.
- > Further progress expected following completion of feasibility and funding plans.

### Feasibility Assessment for Programme Launch in Academic Year 2026/27

The Bachelor in Entrepreneurship and Innovation remains in the conceptual development stage, with key academic, financial, and regulatory components still under preparation. As a result, the programme is not expected to be operational in the academic year 2026/27, with its launch now anticipated for the academic year 2027/28 or thereafter.

### 3.1.2. Joint Master Programme in Advanced Practice Nursing in Acute Care

Partners	Status	Challenges	Feasibility AY 2026/27
Xamk (FI – lead), MUS (BG), UNIOVI (ES), HIS (SE)	Curriculum set; consortium agreement pending; local degrees	Regulatory limits; differing ECTS; unclear roles	Partial (launch at Xamk/MUS)

### Programme Information

The Master in Advanced Practice Nursing (APN) in Acute Care is being developed within a consortium of four universities: South-Eastern Finland University of Applied Sciences (Xamk) as the coordinating and degree-awarding institution and Medical University - Sofia (MUS) as another degree awarding institution. University of Oviedo (UNIOVI) and University of Skövde (HIS) have recently joined the consortium through the Call for the Development of Joint Academic Offers and are currently elaborating how for further expand and strengthen the programme which integrates clinical expertise, management and research in acute care nursing.

#### Key Facts:

- > Consortium: Xamk, MUS, UNIOVI, HIS
- > Coordinating Institution: Xamk
- > Degree: double Master (EQF Level 7)
- > Degree-awarding partners: Xamk and MUS; the roles of HIS and UNIOVI to be determined
- > Duration: 4 semesters (Xamk: 90 ECTS credits, part-time; MUS: 120 ECTS credits full-time)
- > Admissions: Every second year; 60 students (30 per institution) per cohort
- > Mobility: Short-term intensive mobilities in Kotka (FI) and Sofia (BG)
- > Languages of Instruction: English (primary), complementary studies are available for students also in local language
- > Accreditation: National frameworks (joint degree not possible due to nursing regulation)
- > Programme launch: Programme is ready to start AY 2026/27 at Xamk, MUS remains unclear.

#### Curriculum Highlights:

- > Three core areas: clinical, developmental, and management aspects of acute care nursing.



- > Work-based learning integrated with students' professional contexts.
- > Transversal competencies: critical thinking, intercultural communication, leadership.
- > Strong alignment with International Council of Nurses APN competencies.

### INGENIUM Added Value

- > Harmonises nursing competencies across Europe.
- > Strengthens transnational learning in regulated professions.
- > Contributes to improved patient care and healthcare innovation.

### Partner Involvement

Active Partners:

- > Xamk: Lead coordinator; institutional support and faculty engagement.
- > MUS: Degree-awarding partner; enhances visibility and interdisciplinarity.
- > UNIOVI: Exploring participation; links with Erasmus Mundus initiatives.
- > HIS: Recent partner; strong academic interest and leadership backing.

Non-participating: HKA, TUIASI, UoC, MTU, URN, UdA (lack of departments or regulatory fit).

### Barriers, Challenges and Mitigation

Challenges

- > Regulatory differences (degree length, accreditation).
- > Unclear partner roles and coordination structure.
- > Language and administrative barriers.

Mitigation

- > Flexible modular design respecting national accreditation.
- > Institutional templates and task force guidance under preparation.
- > Ongoing dialogue with national authorities for future joint possibilities.

### Feasibility Assessment for Programme Launch in Academic Year 2026/27

The programme is currently partially feasible, operating as separate national degrees at Xamk and MUS while maintaining strong integration within the INGENIUM framework. A transition to a full joint degree will be possible once Bulgarian regulations permit such implementation. Further development is planned with HIS and UNIOVI joining the consortium, with this expanded collaboration expected to begin in the academic year 2027/28.

#### 3.1.3. Joint Master Programme in Artificial Intelligence

Partners	Status	Challenges	Feasibility AY 2026/27
TUIASI (RO – lead), UdA (IT), HIS (SE), HKA (DE), UNIOVI (ES), Xamk (FI)	Draft curriculum; TUIASI confirmed as awarding; others TBD	Regulatory misalignment; staff capacity; coordination delays	Not ready (estimated for AY 2027/28)

### Programme Information



The Master in Artificial Intelligence (AI) is being developed within a consortium of six partner universities: 'Gheorghe Asachi' Technical University of Iasi (TUIASI), University 'G. d'Annunzio', Chieti-Pescara (UdA), University of Skövde (HIS), Karlsruhe University of Applied Sciences (HKA), University of Oviedo (UNIOVI), and South-Eastern Finland University of Applied Sciences (Xamk). It aims at developing specialists in advanced AI systems, combining research, ethics, and application-oriented innovation.

#### Key Facts:

- > Consortium: TUIASI, UdA, HIS, HKA, UNIOVI, Xamk
- > Coordinating Institution: TUIASI
- > Degree: joint Master (EQF Level 7)
- > Degree-awarding partners: TUIASI and others to be determined
- > Duration: 4 semesters (120 ECTS credits)
- > Admissions: Once per year; 10-30 students per cohort
- > Mobility: Mandatory; hosted across partner universities
- > Structure (current state of development):
  - > Year 1: Core AI foundations (TUIASI)
  - > Year 2: Thematic tracks (UdA, HIS, Xamk, HKA) + Dissertation
- > Languages of Instruction: English (primary) with language learning opportunities at involved partner universities
- > Accreditation: Overseen by ARACIS (Romania, ENQA/EQAR member)
- > Programme launch: Academic design initiated in 2025; estimated for 2027/28 but feasibility report pending

#### Curriculum Highlights:

- > Focus on Innovative AI System Design.
- > Modules on ethics, research, and responsible AI practices.
- > Tracks in robotics, healthcare AI, production systems, and sustainable AI.
- > Work-based learning through research labs and industrial placements.

#### INGENIUM Added Value

- > Interdisciplinary, transnational collaboration in cutting-edge AI.
- > Strengthens industry partnerships and research integration.
- > Builds capacity for innovation leadership and responsible AI development.

#### Partner Involvement

- > HIS: Expands international mobility, accesses European funding, and fills a portfolio gap.
- > TUIASI: Raises its European profile, meets student demand for international study, and optimises teaching capacity.
- > HKA: Strengthens academic collaboration and makes efficient use of faculty expertise.
- > Xamk: Advances curriculum innovation and supports staff interest in joint degree development.
- > UdA: Expands mobility opportunities and access to EU funding while addressing portfolio needs.

- > UNIOVI: Develops an official Master's aligned with INGENIUM goals, enhancing student mobility and international exposure.
- > URN, UoC, MTU: Not participating due to priorities or lack of alignment.

### Barriers, Challenges and Mitigation

#### Challenges:

- > Misaligned national regulations.
- > Limited staff capacity and unclear coordination.
- > Regulatory barriers for master-level participation (Germany, Italy).

#### Mitigation:

- > Peer exchange, templates, and national guidance to be developed.
- > Regional-level regulatory dialogue initiated by HKA.

### Feasibility Assessment for Programme Launch in Academic Year 2026/27

The Master in Artificial Intelligence remains in the preparatory phase, with consortium coordination and programme design still under development. Joint implementation of the programme is expected in the academic year 2027/28.

#### 3.1.4. Joint Master Programme in Chemical and Biochemical Process Technologies

Partners	Status	Challenges	Feasibility AY 2026/27
TUIASI (RO – lead), UNIOVI (ES), URN (FR)	Joint degree agreed; structure finalised; accreditation in progress	Timeline alignment (resolved)	Feasible

### Programme Information

The Master in Chemical and Biochemical Process Technologies (CBPT) integrates engineering and biotechnology to equip graduates for innovation in sustainable chemical processes. The programme is coordinated by 'Gheorghe Asachi' Technical University of Iasi (TUIASI), in collaboration with the University of Oviedo (UNIOVI) and the University of Rouen, Normandy (URN).

#### Key Facts:

- > Consortium: TUIASI, UNIOVI, URN
- > Coordinating Institution: TUIASI
- > Degree: joint Master (EQF Level 7)
- > Degree-awarding partners: TUIASI, UNIOVI, URN
- > Duration: 4 semesters (120 ECTS credits)
- > Admissions: Once per year; 10-30 students per cohort
- > Mobility: Mandatory; hosted across partner universities
- > Structure:
  - > Semester 1: TUIASI

- > Semester 2: UNIOVI
- > Semester 3: URN
- > Semester 4: Dissertation at any partner institution
- > Languages of Instruction: English (primary) with language learning opportunities at involved partner universities
- > Accreditation: Overseen by ARACIS (Romania, ENQA/EQAR member)
- > Programme launch: Programme will be launched in the academic year 2026/27.

#### Curriculum Highlights:

- > Focus on modern process technologies and biochemical innovation.
- > Interdisciplinary modules: ethics, project management, and industrial communication.
- > Embedded research in plant, enzyme, and microbial biotechnology.
- > Industry collaboration and laboratory-based learning.

#### INGENIUM Added Value

- > Jointly designed and awarded by three INGENIUM universities.
- > Enhances transnational research collaboration.
- > Links industry and academia through shared innovation projects.

#### Partner Involvement

Active: TUIASI, UNIOVI, URN – strong institutional leadership and alignment.

Not involved:

- > UoC: lack of faculty interest
- > HKA: misalignment with its strategic priorities, incompatibility with national regulations, and obstacles linked to internal approval processes
- > HIS, Xamk, UdA, MTU, MUS (no relevant departments).

#### Barriers, Challenges and Mitigation

Challenge: Timeline alignment among partners (resolved).

Mitigation: Frequent coordination and joint decisions reached in May 2025.

#### Feasibility Assessment for Programme Launch in Academic Year 2026/27

The programme has been assessed as fully feasible, with accreditation procedures expected to be completed by late 2025. The first student intake is planned for the academic year 2026/27.

### 3.1.5. Joint Master Programme in Sustainable Development and Circular Economy

Partners	Status	Challenges	Feasibility AY 2026/27

TUIASI (RO – lead), HIS (SE), with contributions from HKA (DE), MTU (IE), UdA (IT), Xamk (FI)	Structure defined; feasibility confirmed in principle	Early role clarity; coordination timelines	Feasible
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### Programme Information

The Master in Sustainable Development and Circular Economy (SDCE) brings together technical, environmental, and managerial expertise to train future professionals capable of leading sustainability transitions. The programme is coordinated by ‘Gheorghe Asachi’ Technical University of Iasi (TUIASI), in partnership with the University of Skövde (HIS), the programme is further supported by contributing partners: Karlsruhe University of Applied Sciences (HKA), University ‘G. d’Annunzio’, Chieti-Pescara (UdA), Munster Technological University (MTU), and South-Eastern Finland University of Applied Sciences (Xamk).

#### Key Facts:

- > Consortium: TUIASI, HIS, HKA, MTU, UdA, Xamk
- > Coordinating Institution: TUIASI
- > Degree: double master degree (EQF Level 7)
- > Degree-awarding partners: TUIASI and HIS
- > Contributing partners: HKA, MTU, UdA, Xamk
- > Duration: 4 semesters (120 ECTS credits)
- > Admissions: Once per year; 10-30 students per cohort
- > Mobility: Mandatory; hosted across partner universities
- > Structure:
  - > Year 1: TUIASI in a hybrid model
  - > Year 2: HIS
  - > Optional physical and virtual mobility contributed by partners
- > Languages of Instruction: English (primary) with language learning opportunities at involved partner universities
- > Accreditation: Conducted by ARACIS (Romania, ENQA/EQAR member); recognised by Swedish partner HIS
- > Programme launch: Programme is ready to start AY 2026/27

#### Curriculum Highlights:

- > Comprehensive training in sustainability, circular economy, and innovation systems
- > Modules on lifecycle assessment, material flow analysis, and EU policy frameworks (SDGs, European Green Deal)
- > Work-based learning through research projects and industry-linked case studies
- > Transversal skills training in scientific English, ethics, management, and communication
- > Integration of social, technological, and policy perspectives for interdisciplinary learning

### INGENIUM Added Value

- > Combines regional contexts: Romania’s transition economy and Sweden’s environmental leadership.

- > Interdisciplinary approach linking engineering, environmental sciences, and economics.
- > Mobility across Europe supported by the INGENIUM scholarship model.
- > Enhances employability through double degree certification and transnational learning.

## Partner Involvement

Active partners:

- > TUIASI: Leads coordination; strong faculty and leadership support
- > HIS: Institutional alignment with sustainability and innovation strategies
- > HKA: Contributing partner on sustainability engineering modules
- > MTU: Provides expertise on business and circular models
- > UdA: Contributes to interdisciplinary design and innovation modules
- > Xamk: Participates with teaching input on applied sustainability

Non-participating partners:

- > UoC: Limited faculty interest and long-term commitment required
- > URN: Focused on other INGENIUM Flagship Programmes
- > UNIOVI: Prioritised other initiatives; overlapping academic field
- > MUS: No feedback provided

## Barriers, Challenges and Mitigation Measures

Main challenges:

- > Limited staff capacity and time constraints at HIS
- > Complexity of cross-departmental governance and leadership
- > Resource and funding limitations for interdisciplinary modules
- > Regulatory restrictions on joint degrees in Sweden

Mitigation measures:

- > HIS benchmarked practices from other Swedish universities to navigate constraints regarding joint degrees, however, national assistance is still required.
- > Regular online coordination meetings established to align curricula
- > Templates and shared tools under development via INGENIUM task force
- > Ongoing institutional discussions to allocate stable resources

## Feasibility Assessment for Programme Launch in Academic Year 2026/27

The programme has been confirmed as feasible and remains on track for launch in the academic year 2026/27. Accreditation is expected to be finalised within 2025, ensuring double degree delivery through ARACIS accreditation and formal recognition by the University of Skövde (HIS).

### 3.1.6. Joint Master Programme in Sustainable Management in Coastal Conservation

Partners	Status	Challenges	Feasibility AY 2026/27
URN (FR – lead), MTU (IE), UNIOVI (ES)	Accreditation & agreements due 2025; launch 2026/27	Staff/time (HIS); cross-school governance; joint-degree limits	Feasible

#### Programme Information

The Master in Sustainable Management in Coastal Conservation (SMaCC) addresses the pressing environmental, ecological, and socio-economic challenges affecting Europe's coastal regions. It integrates scientific knowledge, sustainability management, and policy innovation to train future experts in coastal and marine conservation. The programme is coordinated by the University of Rouen, Normandy (URN), in collaboration with Munster Technological University (MTU) and the University of Oviedo (UNIOVI).

#### Key Facts:

- > Consortium: URN, MTU, UNIOVI
- > Coordinating Institution: URN
- > Degree: joint Master (EQF Level 7)
- > Degree-awarding partners: URN, MTU, UNIOVI
- > Duration: 4 semesters (120 ECTS credits)
- > Admissions: Once per year; approx. 15 students per cohort
- > Mobility: Mandatory; hosted across partner universities
- > Structure:
  - > Semester 1: UNIOVI
  - > Semester 2: MTU
  - > Semester 3: URN
  - > Semester 4: Research internship at any partner institution
- > Languages of Instruction: English (primary) with language learning opportunities at involved partner universities
- > Accreditation: Overseen by HCERES (France, ENQA / EAQR member); following the European Approach for Quality Assurance of Joint Programmes
- > Programme launch: Programme is ready to start AY 2026/27

#### Curriculum Highlights

- > Interdisciplinary curriculum combining natural sciences, sustainability, and management
- > Courses in environmental impact assessment, renewable resource management, ecosystem conservation, and AI-based modelling
- > Research internships in each partner country, integrated with real-world conservation projects
- > Development of transversal skills in environmental communication, teamwork, and ethics

## INGENIUM Added Value

- > Strengthens European collaboration in marine and coastal sustainability
- > Connects scientific, policy, and engineering expertise within INGENIUM
- > Enhances employability through transnational exposure and practical experience
- > Builds a model for joint environmental master programmes under INGENIUM

## Partner Involvement

Active partners:

- > URN: Lead coordinator; enhances innovation and student mobility
- > MTU: Expands academic portfolio and EHEA visibility
- > UNIOVI: Builds continuity with existing Erasmus Mundus programme since 2017

Non-participating partners:

- > HIS, HKA: Not involved due to late communication and staffing limits
- > Xamk, UdA, TUIASI, UoC: No relevant academic faculty
- > MUS: Limited staff capacity and misalignment with national regulations

## Barriers, Challenges and Mitigation Measures

Main challenges:

- > Early-stage delays due to unclear institutional roles and communication gaps
- > Misaligned timelines across partners
- > Limited leadership at some institutions

Mitigation measures:

- > URN clarified communication channels and designated contact persons
- > UNIOVI appointed a local coordinator to improve responsiveness
- > Increased frequency of coordination meetings ensuring steady progress
- > Additional time identified as the main requirement for consolidation

## Feasibility Assessment for Programme Launch in Academic Year 2026/27

Programme development is progressing according to plan, with feasibility already confirmed in principle. Accreditation is expected to be completed by 2025 under the European Approach, and the programme is scheduled to launch in the academic year 2026/27 with strong commitment from all participating partners.

## 3.2. INGENIUM's Joint Study Programmes

The development of joint academic offers is a central ambition of the INGENIUM European University. While the long-term objective is to expand the portfolio of fully integrated joint degrees with the addition of the European Degree Label, the alliance has strategically initiated this process through the creation of double degree programmes. These are not mere combinations of existing curricula but carefully designed complementarities that enrich students' academic pathways and strengthen interdisciplinarity. Double degrees also serve



as a foundation for building trust and aligning institutional structures, providing a pragmatic response to current national regulatory limitations that in some cases restrict the immediate awarding of joint degrees. This stepwise approach reflects the alliance's objectives to deliver various types of degrees and has already led to the launch of a number of successful programmes. Seven of the ten partner universities are currently involved in this academic offer, with Munster Technological University (MTU), University of Crete (UoC), and South-Eastern Finland University of Applied Sciences (Xamk) not yet participating. The following subchapters present both the joint and double degree programmes developed so far, illustrating how they contribute to a coherent and increasingly integrated INGENIUM academic offer. The table below provides an overview of the programmes developed which will be expanded in more depth in the following subchapters.

<b>INGENIUM Double and Joint Degree Programmes</b> <b>Overview &amp; Feasibility (AY 2026/27)</b> Key: ✓ Feasible • ⚠ Partial/Pilot • ✗ Not ready				
Programme	Partners	Status	Challenges	Feasibility AY 2026/27
Double Master in Legal Sciences for Internationalisation and Business Innovation and International Law	UdA (IT), URN (FR)	Approved 2024; launch AY 2025/26; institutional and legal frameworks completed	Calendar misalignments; admin & language issues (resolved)	✓ Feasible – operational from AY 2025/26
Double Master in Health Professions of Rehabilitation Sciences & Rehabilitation & Balneology	MUS (BG), UdA (IT)	UdA accredited; MUS pending signature; national legal clearance required	Regulatory differences in health professions (BG)	⚠ Partial (UdA operational; MUS pending approval)
Double Master in Civil Engineering	TUIASI (RO), UdA (IT)	Developed & approved 2025; applications open AY 2025/26	ECTS & calendar alignment (resolved via cooperation agreement)	✓ Feasible – launch confirmed AY 2025/26
Double Master in Chemistry	UNIOVI (ES), URN (FR)	Approved; URN launch AY 2025/26; UNIOVI start AY 2026/27	Different master cycles & ECTS misalignment (managed)	✓ Feasible – full operation by AY 2026/27
Joint Master in Mechatronic Engineering (EU4M – Erasmus Mundus)	UNIOVI (ES – lead), HKA (DE), HIS (SE), ENSMM (FR)	Launched AY 2025/26; Erasmus Mundus renewed; 30 students per cohort	National accreditation and legal differences (resolved)	✓ Operational since AY 2025/26

**Table 3.** Overview INGENIUM Double and Joint Degree Programmes - Overview and Feasibility

MTU, Xamk, and UoC are not yet involved in the double degree portfolio, largely due to institutional or regulatory factors rather than a lack of interest. MTU reported difficulties in aligning the existing curriculum and degree structures with double degree formats, alongside



the prioritisation of other strategic partnerships and uncertainties regarding the added value for students and the institution. Xamk explained that no relevant academic faculty or department is presently in a position to contribute, though it expressed openness to future participation. UoC pointed to administrative and legal obstacles, such as recognition and national regulatory issues, as well as limited staff capacity, which currently prevent engagement. All three institutions have indicated interest in being involved in future joint or double degrees and emphasised that additional support would facilitate this, particularly in the form of administrative and legal guidance, templates, greater institutional leadership, better curricular alignment, and dedicated coordination or facilitation through INGENIUM. To prevent redundancy, the reasons for these institutions' current non-participation will not be repeated in the individual programme descriptions below.

### 3.2.1. Double Master's Degree Programme in Legal Sciences for Internationalisation and Business Innovation and International Law

Partners	Status	Challenges	Feasibility AY 2026/27
UdA (IT – lead), URN (FR)	Accredited; first intake AY 2025/26	Calendar alignment; language barriers; administration	Feasible

#### Programme Information

The double Master's degree Programme in Legal Sciences for Internationalisation and Business Innovation and International Law demonstrates INGENIUM's capacity to connect legal expertise across Europe. Developed by University 'G. d'Annunzio', Chieti-Pescara (UdA) and University of Rouen, Normandy (URN), it provides advanced knowledge in transport law and EU law, supporting European legal harmonisation.

#### Key Facts:

- > Consortium: URN, UdA
- > Coordinating Institution: UdA
- > Degree: double master degree (EQF Level 7)
- > Degree-awarding partners: URN, UdA
- > Duration: 4 semesters (120 ECTS credits)
- > Admissions: Once per year; 10 students (5 per university) per cohort
- > Mobility: Mandatory; hosted across partner universities
- > Structure:
  - > Semester 2: URN students move to UdA
  - > Semester 3: UdA students move to URN
- > Languages of Instruction: English (primary) with language learning opportunities at involved partner universities
- > Accreditation status: completed
- > Programme launch: Academic year 2026/27

#### Curriculum Highlights:

- > Focus on transport and European Union law.
- > Comparative legal systems and cross-border regulation.

- > Structured mobility ensuring joint study and cultural immersion.
- > Joint research and multi-campus learning experiences.

### INGENIUM Added Value

- > Supports European legal integration and mobility.
- > Encourages joint curriculum innovation across legal faculties.
- > Lays the foundation for future European Degree Label application.

### Partner Involvement

Active Partners:

- > URN: Strategic alignment with internationalisation strategy; faculty-driven initiative.
- > UdA: Strong institutional support; enhances employability and academic complementarity.

Non-participating Partners:

HIS, UNIOVI, TUIASI, HKA, MUS – no relevant faculties or priorities in this field.

### Barriers, Challenges and Mitigation Measures

Challenges:

- > Academic calendar misalignments.
- > Administrative and linguistic complexity.

Mitigation:

- > English-taught delivery; alignment through Erasmus+ frameworks.
- > Close collaboration and translation support for joint teaching.

### Feasibility Assessment for Programme Launch in Academic Year 2026/27

The programme has been confirmed as fully feasible, with the first student intake scheduled for the academic year 2025/26.

### 3.2.2. Double Master Degree in Health Professions of Rehabilitation Sciences and Rehabilitation & Balneology

Partners	Status	Challenges	Feasibility AY 2026/27
UdA (IT), MUS (BG)	Accredited at UdA; awaiting final signature from MUS on consortium agreement	National accreditation differences	Pending (launch expected post-2026)

### Programme Information

The double Master degree in Health Professions of Rehabilitation Sciences and Rehabilitation & Balneology reflects INGENIUM's commitment to health and wellbeing. Jointly designed by Medical University - Sofia (MUS) and University 'G. d'Annunzio', Chieti-Pescara (UdA), the programme combines expertise in physiotherapy, rehabilitation, and balneology with

advanced research in areas such as neurorehabilitation, orthopaedic rehabilitation, and neurorobotics.

#### Key Facts:

- > Consortium: UdA, MUS
- > Coordinating Institution: UdA
- > Degree: double Master (EQF Level 7)
- > Degree-awarding partners: UdA, MUS
- > Duration: 4 semesters (120 ECTS credits)
- > Admissions: Once per year; 10 students (5 per university) per cohort
- > Mobility: Mandatory; hosted across partner universities
- > Structure:
  - > Semester 3: Mobility for all students, UdA students move to MUS and vice versa
- > Languages of Instruction: English (primary) with language learning opportunities at involved partner universities
- > Accreditation status: completed
- > Programme launch: Programme is ready to start AY 2026/27

#### Curriculum Highlights:

- > Interdisciplinary modules in neurorehabilitation, orthopaedics, and balneology.
- > Joint dissertation supervision by faculty at both institutions.
- > Integration of clinical internships, joint teaching, and language training.
- > Opportunities for joint research and international exposure.

#### INGENIUM Added Value

- > Strengthens INGENIUM's health and wellbeing focus.
- > Promotes interdisciplinary cooperation in medical sciences.
- > Enhances intercultural and clinical competencies of graduates.

#### Partner Involvement

##### Active Partners:

- > UdA, MUS: Full institutional support and alignment with internationalisation goals.

##### Non-participating Partners:

- > URN, HKA, TUIASI, UNIOVI – no relevant faculties or strategic fit.

#### Barriers, Challenges and Mitigation Measures

##### Challenges:

- > National regulatory restrictions in Bulgaria.
- > Incomplete agreement signature delaying implementation.

##### Mitigation:

- > Ongoing dialogue with national authorities.
- > Bilateral collaboration continuing at academic level.

### Feasibility Assessment for Programme Launch in Academic Year 2026/27

The programme has been determined as partially feasible. The consortium agreement is pending the MUS signature, launch of the programme is therefore expected after 2026.

#### 3.2.3. Double Master Degree in Civil Engineering

Partners	Status	Challenges	Feasibility AY 2026/27
TUIASI (RO – lead), UdA (IT)	Accredited; first intake AY 2025/26	Calendar alignment; accreditation differences	Feasible

### Programme Information

The double Master degree in Civil Engineering promotes European collaboration in engineering education through a strong partnership between ‘Gheorghe Asachi’ Technical University of Iași (TUIASI) and University ‘G. d’Annunzio’, Chieti-Pescara (UdA).

Key Facts:

- > Consortium: UdA, TUIASI
- > Coordinating Institution: TUIASI
- > Degree: double Master (EQF Level 7)
- > Degree-awarding partners: UdA, TUIASI
- > Duration: 4 semesters (120 ECTS credits)
- > Admissions: Once per year; 10 students (5 per university) per cohort
- > Mobility: Mandatory; hosted across partner universities
- > Structure:
  - > Semester 2: TUIASI students move to UdA
  - > Semester 3: UdA students move to TUIASI
- > Languages of Instruction: English (primary) with language learning opportunities at involved partner universities
- > Accreditation status: completed
- > Programme launch: Academic year 2025/26

Curriculum Highlights:

- > Focus on structural and geotechnical engineering, heritage rehabilitation, and diagnostics.
- > Multidisciplinary approach including energy efficiency and conservation.
- > Joint dissertation supervision and shared facilities for teaching and research.

### INGENIUM Added Value

- > Strengthens INGENIUM’s engineering dimension.
- > Expands employability and intercultural training.
- > Encourages joint supervision and co-teaching between partners.

## Partner Involvement

### Active Partners

- > TUIASI: Lead partner; curriculum and coordination leadership.
- > UdA: Co-developer; internationalisation priority.

### Non-participating Partners

HKA, URN, UNIOVI, MUS – not involved due to field or timing.

## Barriers, Challenges and Mitigation Measures

### Challenges

- > Academic calendar alignment.
- > Administrative complexity.

### Mitigation

- > Clear framework through Academic Cooperation Agreement.
- > Streamlined mobility and recognition mechanisms.

## Feasibility Assessment for Programme Launch in Academic Year 2026/27

The programme has been confirmed as fully feasible, with the first student intake scheduled for the academic year 2025/26.

### 3.2.4. Double Master Degree in Chemistry

Partners	Status	Challenges	Feasibility AY 2026/27
URN (FR – lead), UNIOVI (ES)	Accredited; launch at URN in 2025/26, UNIOVI in 2026/27	Degree cycle differences (FR/ES)	Feasible

## Programme Information

The double Master degree in Chemistry strengthens collaboration between University of Oviedo (UNIOVI) and University of Rouen, Normandy (URN), building on their complementary expertise in organic and inorganic chemistry.

### Key Facts:

- > Consortium: URN, UNIOVI
- > Coordinating Institution: URN
- > Degree: double Master (EQF Level 7)
- > Degree-awarding partners: URN, UNIOVI
- > Duration:
  - > URN: 4 semesters (120 ECTS credits)
  - > UNIOVI: 2 semesters (60 ECTS)
- > Admissions: 10 students (5 per university) per cohort
  - > URN: Once per year
  - > UNIOVI: Twice a year
- > Mobility: Mandatory; Reciprocal semester exchanges between partners

- > Languages of instruction: Spanish, French, and English
- > Accreditation status: completed
- > Programme launch:
  - > URN Academic year 2025/26
  - > UNIOVI: Academic year 2026/27

#### Curriculum Highlights:

- > Advanced modules in organic, inorganic, and analytical chemistry.
- > Joint dissertation supervision and multi-campus research opportunities.
- > Linguistic and cultural immersion across France and Spain.
- > Active involvement of 15–21 academic staff in shared teaching and research.

#### INGENIUM Added Value

- > Reinforces cross-border scientific collaboration.
- > Expands student employability and research networks.
- > Contributes to the European Degree Label readiness framework.

#### Partner Involvement

##### Active Partners:

- > URN: Strong leadership and institutional alignment; curriculum compatibility.
- > UNIOVI: Builds on long-standing collaboration in chemistry, and strong strategic alignment.

##### Non-participating Partners:

HKA, UdA, TUIASI, MUS – not involved due to academic scope.

#### Barriers, Challenges and Mitigation Measures

##### Challenges:

- > Misalignment between national degree cycles.
- > Accreditation adjustments required for equivalence.

##### Mitigation:

- > Adapted mobility schedules and English-taught modules.
- > Programme launch scheduled for consecutive academic years.
- > Institutional coordination to ensure smooth mutual recognition.

#### Feasibility Assessment for Programme Launch in Academic Year 2026/27

The programme has been confirmed as fully feasible, with a staggered implementation planned across partner institutions. The first launch is scheduled at URN in the academic year 2025/26, followed by UNIOVI in 2026/27.

### 3.2.5. Joint Master Degree in Mechatronic Engineering (Erasmus Mundus)

Partners	Status	Challenges	Feasibility AY 2026/27
UNIOVI (ES – lead), HKA (DE), HIS (SE), ENSMM (FR)	Accredited; launched AY 2025/26	Accreditation differences; national legal systems	Feasible

#### Programme Information

The joint Master degree in Mechatronic Engineering (EU4M), coordinated by the University of Oviedo (UNIOVI) under the Erasmus Mundus framework, exemplifies INGENIUM's commitment to high-quality, transnational education. This integrated two-year (120 ECTS credits) programme brings together UNIOVI, Karlsruhe University of Applied Sciences (HKA), University of Skövde (HIS), and École Nationale Supérieure de Mécanique et des Microtechniques (ENSMM). Its multilingual model—with instruction in Spanish, German, French, and English—broadens international reach and reflects the alliance's diversity.

#### Key Facts:

- > Consortium: UNIOVI, HKA, HIS, ENSMM
- > Coordinating Institution: UNIOVI
- > Degree: joint Master (Erasmus Mundus, EQF Level 7)
- > Degree-awarding partners: UNIOVI, HKA, HIS, ENSMM
- > Duration: 4 semesters (120 ECTS credits)
- > Admissions: Once per year; 30 students per cohort
- > Mobility: Mandatory; at least two study periods (≥30 ECTS credits each) in two different countries hosted across partner universities
- > Languages of Instruction: Spanish, German, French, and English
- > Accreditation status: completed
- > Programme launch: Academic year 2025/26

#### Curriculum Highlights:

- > Different specialisation tracks at each partner institution.
- > Integrated approach to mechatronic design, product development, and project management.
- > Mandatory international mobility and optional third-institution semester.
- > Joint dissertation and internship opportunities across partner and associated institutions.
- > Emphasis on employability, intercultural competencies, and research exposure.

#### INGENIUM Added Value

- > Reinforces transnational collaboration in engineering education.
- > Promotes multilingual and multicultural academic environments.
- > Strengthens institutional research partnerships and staff mobility.
- > Builds on 20 years of Erasmus Mundus experience, renewed through INGENIUM support.

## Partner Involvement

Active Partners:

- > UNIOVI: Programme coordinator; leads academic renewal and Erasmus Mundus management.
- > HKA: Founding partner; strong engineering expertise and institutional alignment.
- > HIS: Joined consortium with INGENIUM support; ensures continuity and expansion.
- > ENSMM: Adds high-level specialisation and complementary engineering skills.

## Barriers, Challenges and Mitigation Measures

Challenges:

- > Divergent accreditation requirements and national legal systems.
- > Administrative delays in agreement finalisation.

Mitigation:

- > Sustained dialogue and legal consultation among partners.
- > Coordination and trust-building facilitated by UNIOVI's leadership.

## Feasibility Assessment for Programme Launch in Academic Year 2026/27

Fully feasible and already operational under the Erasmus Mundus framework.

## 4. Key Thematic Areas

The INGENIUM European Campus is structured around three strategic thematic areas—Health & Welfare, Engineering, and Humanities & Business—that are deeply aligned with the alliance's mission and vision. These areas reflect both the academic strengths of INGENIUM partners and their collective commitment to addressing Europe's and the world's most pressing challenges.

The thematic focus on **Health and Welfare** emerges from INGENIUM's mission to respond to societal and demographic changes such as aging populations, migration, and health inequalities. By prioritizing health and welfare, the alliance aims to develop innovative solutions that improve public health outcomes and foster social cohesion, particularly in peripheral regions where many INGENIUM partners are based. This area directly supports the United Nations Sustainable Development Goals, especially SDG 3 (Good Health and Well-being)<sup>17</sup> and SDG 10 (Reduced Inequalities)<sup>18</sup>, underscoring INGENIUM's commitment to global sustainability and social justice.

**Engineering** is central to INGENIUM's strategy for driving technological change and sustainability. The alliance recognizes the urgent need for adaptation to rapid technological advancements, digitalization, and the European Green Deal. Through engineering, INGENIUM

<sup>17</sup> United Nations Regional Information Centre for Western Europe (UNRIC). *Goal 3: Good Health and Well-being*. n.d., <https://unric.org/en/sdg-3/>.

<sup>18</sup> United Nations Regional Information Centre for Western Europe (UNRIC). *Goal 10: Reduced Inequalities*. n.d., <https://unric.org/en/sdg-10/>.



fosters innovation in areas such as energy, infrastructure, climate action, and digital transformation. This thematic area also cultivates a culture of interdisciplinary research and rapid technology transfer, essential for economic and societal progress. By equipping students with future-oriented skills and preparing them for the evolving labour market, engineering aligns with INGENIUM's dedication to life-long learning and employability.

The **Humanities and Business** thematic area supports INGENIUM's mission to promote European values, democracy, social inclusion, and active citizenship. Humanities disciplines empower students with critical thinking, intercultural understanding, and ethical reasoning—skills fundamental for sustaining open and inclusive societies. Business education is vital for fostering entrepreneurship, innovation, and regional engagement, preparing graduates to interact with external stakeholders and drive local economic growth. The integration of Humanities and Business with Health and Welfare as well as Engineering embodies the alliance's belief in the power of diversity and interdisciplinarity to address complex global challenges.

### **The links between thematic areas and the INGENIUM Flagship programmes**

The INGENIUM European Campus's three thematic areas also provide the academic foundation for the alliance's six INGENIUM Flagship Programmes (IFP) as explained above. Each IFP is being strategically developed within these pillars to maximize both disciplinary excellence and interdisciplinary collaboration.

- > The joint Bachelor programme in Entrepreneurship and Innovation is rooted in the Humanities and Business thematic area, emphasizing entrepreneurial skills, innovation, and sustainable economic practices.
- > The joint Master programme in Advanced Practice Nursing in Acute Care is firmly situated within Health and Welfare, addressing urgent needs in healthcare and advanced nursing practice.
- > The joint Master programmes in Artificial Intelligence, Chemical and Biochemical Process Technology, Sustainable Development and Circular Economy and Sustainable Management in Coastal Conservation are anchored in the Engineering thematic area, driving forward technological innovation, digital transformation, and scientific advancement.

By aligning the INGENIUM Flagship Programmes with these three thematic areas, INGENIUM ensures that its most ambitious academic initiatives are directly connected to its mission, address societal and economic challenges, and foster the kind of interdisciplinary and transnational education that defines the INGENIUM European Campus.

### **Research-based education in INGENIUM and the thematic areas**

These thematic areas are strongly connected to INGENIUM's efforts towards its doctoral research strategy, particularly through the work of INGENIUM for Research (WP6). It coordinates the alliance's efforts to boost inter-university research collaboration, professional development with a special focus on early-career researchers, and international partnerships.

Central to this is the INGENIUM Research School Board (IRSB)<sup>19</sup>, which provides structured governance, guidance, and quality assurance for joint PhD and research programmes across the alliance.

The IRSB's doctoral ecosystems are established in key interdisciplinary areas that complement and extend the thematic areas: Artificial Intelligence, Sustainable Development, Intercultural Studies, Natural Sciences, and Health, Technology and Well-being. By integrating research and doctoral education in these thematic areas, INGENIUM ensures that its academic thematic areas are not only reflected in teaching and learning, but are also at the forefront of research and innovation across the alliance.

## 5. Governance and Operational Frameworks for Joint Programmes

### Governance

The INGENIUM European Campus governance is structured around a multi-layered system of strategic, operational, academic, and advisory bodies, ensuring both institutional leadership and academic communities are fully engaged (see Figure 2).

At the top of the structure is the INGENIUM Alliance Council (IAC), composed of senior representatives (rectors or presidents) of each partner university. It is the strategic decision-making body, responsible for defining the long-term vision, institutional commitments, and major directions of the alliance. It has defined the key thematic areas and has thereby reinforced INGENIUM's mission statement to be reflected in the INGENIUM Flagship Programmes. With this strategic reinforcement, we are strengthening the combination of bottom-up and top-down approaches as the basis for the decision making by the IAC has been brought forward by the engaged IEC Faculty, which is represented by the IEC-Academic Committee.

Supporting the IAC is the INGENIUM Steering Committee (ISC), which has an operational and managerial role. It ensures that the alliance remains aligned with its project objectives and complies with funding rules. The ISC also oversees the distribution of resources across partners and coordinates implementation of the IAC's strategic priorities.

The IEC-Academic Committee operates under the ISC and plays a central role in shaping the academic content and delivery of the alliance. Guided by its Terms of Reference<sup>20</sup>, it oversees the design, coordination, and alliance-wide endorsement of joint programmes, mobility schemes, and degree structures. For the development of joint programmes at Bachelor's and Master's level, the IEC-AC integrates input from additional bodies, which in this specific

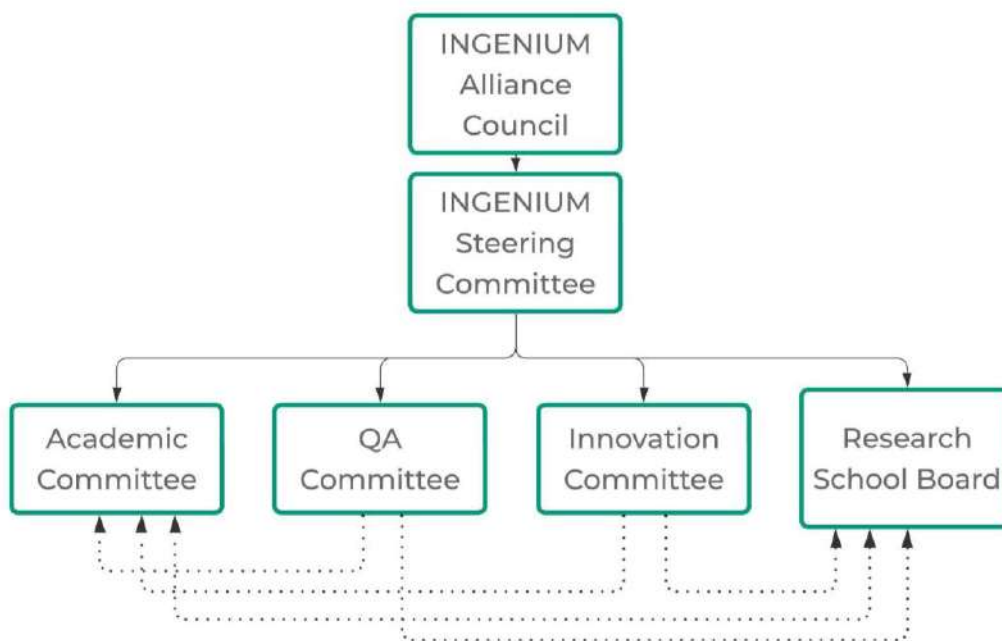
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<sup>19</sup> INGENIUM European University. *Regulations for the INGENIUM Research School*. March 2025, <https://ingenium-university.eu/wp-content/uploads/2025/03/D6.1-Regulations-for-the-INGENIUM-Research-School.pdf>.

<sup>20</sup> INGENIUM European University. *Terms of Reference: INGENIUM European Campus Academic Committee*. n.d., <https://repo.ingenium-university.eu/index.php/s/Cx2Sq4EKSesC82X>

context take on an advisory role, to ensure that programmes are both innovative and of high quality as well as support the decision-making process:

- > The Quality Assurance (QA) Committee provides independent evaluation and advice on quality assurance processes. It monitors compliance with the ESG and relevant national frameworks. While it does not have formal decision-making authority, its reports and recommendations feed directly into the IEC-AC and IRSB, the ISC and IAC, ensuring quality considerations are systematically embedded in governance.
- > The Innovation Committee acts as an advisory body on pedagogy and teaching methods. It proposes and evaluates innovative approaches (e.g., digital learning, challenge-based education, co-creation models) for integration into joint programmes. Its recommendations are primarily directed to the IEC-Academic Committee, often in consultation with the QA Committee.
- > The INGENIUM Research School Board provides specialised advice on doctoral education and research training. While its main responsibility is the development of joint PhD programmes and doctoral ecosystems, it also advises the IEC-AC to ensure that joint programmes at Bachelor's and Master's level incorporate a strong research dimension. In this way, students are equipped with the skills needed to pursue doctoral studies, including entry into INGENIUM's joint PhD programmes, or to apply their research competencies in professional contexts.



**Figure 2.** Governance Structure of the INGENIUM European Campus.

The governance structure of the INGENIUM European Campus not only provides leadership and accountability but also actively guides the creation of new joint education offers. The process begins at faculty level: the IEC Faculty generates proposals for new study programmes, modules, and pathways, reflecting both disciplinary expertise and the alliance's strategic priorities. These proposals are usually collected through dedicated calls, such as the "Call for the Development of Joint Academic Offers" as mentioned before or future targeted initiatives. Once a proposal gains initial traction, it is reviewed by the IEC-AC for academic

coherence and strategic relevance. Following this support, the INGENIUM Steering Committee allocates the necessary resources to enable further development. At this stage, the INGENIUM Joint Programmes Implementation Form<sup>21</sup> becomes a vital tool, ensuring that all essential elements are defined and documented prior to completing the consortium agreement. In parallel, the INGENIUM Faculty Guidebook (currently under development) provides academic teams with guidance for re-defining their study programmes, embedding international, interdisciplinary, and flexible components into the design. Together, these processes ensure that proposals are not only innovative but also sustainable and fully aligned with the alliance's mission (see Figure 3).

Once a proposal is developed to this stage, it enters a structured review process within the governance framework. The IEC-AC evaluates the curriculum design, integration of mobility, and overall academic quality. This evaluation follows a structured, points-based process that provides transparent criteria for assessing proposals. Depending on the outcome, programmes may be returned to the IEC Faculty for revision and resubmission, or, if they meet the required standards, advanced to the INGENIUM Alliance Council for final endorsement and institutional commitment at the highest level. Throughout this process, the IEC-Academic Committee works in close consultation with the QA Committee, which ensures that the proposal meets European and national quality assurance standards, and with the Innovation Committee, which contributes recommendations on digitalisation, micro-credentials, and innovative pedagogy. The IEC-AC also collaborates with the INGENIUM Research School Board, ensuring that the programmes enable students to pursue further doctoral studies.

Operational and financial aspects are reviewed by the ISC, which ensures that the proposed programmes are feasible within the alliance's funding and resource frameworks. Through this stepwise process, INGENIUM transforms faculty-driven ideas into fully supported, strategically relevant joint education offers that combine innovation, inclusivity, and excellence.

## Processes and procedures

The INGENIUM European University has established structured, collaborative procedures to support the conception, development, and implementation of joint academic programmes across its partner institutions. These processes ensure alignment with the alliance's strategic goals, promote innovation, and maximize the collective strengths of the consortium. The development of a new programme typically progresses through a sequence of interconnected stages, from initial idea generation to student recruitment.

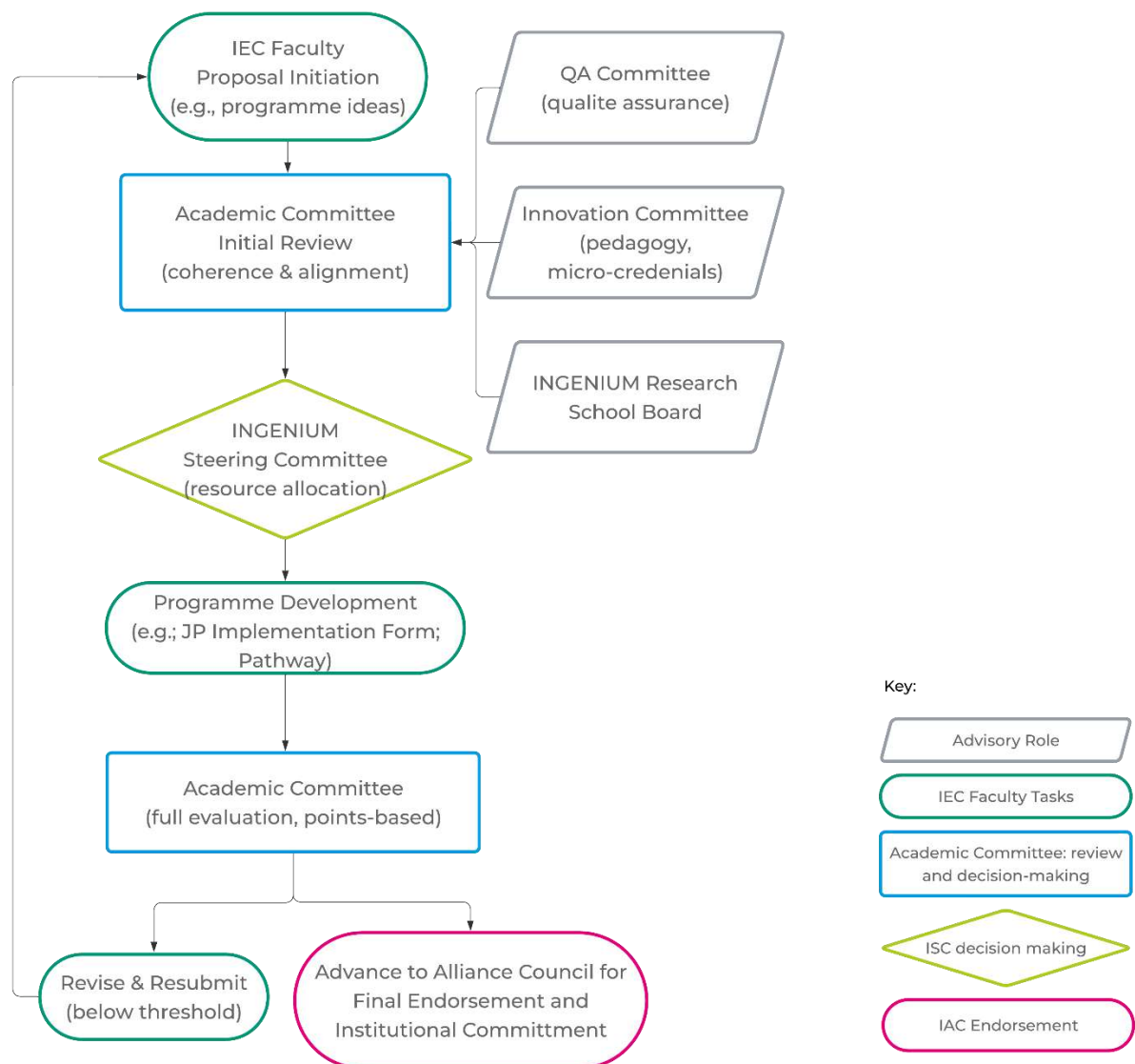
### 1. Idea Generation and Partner Recruitment

Programme development begins with the initiation of a programme proposal and assessment of possible consortia for programme development. These programme proposals have been issued irregularly whenever it suited a partner, but have since been structured through the dedicated "Call for the Development of Joint Academic Offer". The INGENIUM

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<sup>21</sup> INGENIUM European University. *INGENIUM Joint Programmes Implementation Form*. n.d., <https://repo.ingenium-university.eu/index.php/s/KEkiW5qT35ZyTop>

European University is preparing an additional call for winter 2025. These calls invite partner institutions to propose new initiatives or participate in existing concepts, encouraging both top-down and bottom-up approaches. Top-down selection of programmes by the IAC, focus on strategically prioritized programmes such as, the aforementioned INGENIUM Flagship Programmes. Bottom-up initiatives emerge from staff, faculties, or bilateral collaborations, fostering innovation from across the alliance. Such calls are coordinated by designated work package leaders and representatives at each partner institution to ensure visibility, guidance, and grassroots engagement.



**Figure 3.** Workflow for developing and evaluating INGENIUM Joint Programmes, from faculty proposal to INGENIUM Alliance Council endorsement with revision loop.

## 2. Formation of Consortia for Programme Development

Once proposals are submitted, interested partners form a dedicated consortium. These working groups, composed of academic and administrative staff from multiple universities,

are tasked with designing the curriculum, integrating mobility and interdisciplinary components, and ensuring the programme reflects INGENIUM's core principles of relevance, innovativeness, interdisciplinarity, and transnationality.

### 3. Programme Design and the Implementation Form

Working groups develop programmes using the INGENIUM Joint Programmes Implementation Form as a structured guide throughout the design process. The form serves to collect all relevant information required for drafting the consortium agreement in the subsequent stage. It supports programme teams in ensuring that all academic, administrative, and quality assurance criteria are met, while also promoting coherence across institutional contexts. Furthermore, it provides a framework for documenting key elements such as objectives, curriculum design, admission criteria, mobility formats, financial planning, and quality assurance measures. The form thus plays a pivotal role in ensuring methodological consistency and readiness for evaluation.

### 4. Evaluation and Quality Assurance

Proposals undergo comprehensive evaluation based on the INGENIUM Joint Programmes Implementation Form by the IEC-Academic Committee using a points-based system. Each programme is assessed against four criteria: relevance, innovativeness, interdisciplinarity, and transnationality, with each criterion scored from 0–10 points. A minimum overall score and threshold per criterion are required for endorsement. Panels include academic representatives and students from partner institutions, excluding members from directly involved universities to ensure impartiality. Evaluators provide detailed feedback to support iterative improvement and alignment with alliance-wide objectives, including mobility, interdisciplinary integration, and societal impact. Programmes endorsed by the IEC-AC subsequently proceed to the INGENIUM Alliance Council (IAC) for strategic endorsement, unless they have already been prioritised by the IAC at an earlier stage. In such cases, the IAC is regularly informed of the programme's progress to ensure coherence with overall alliance priorities and timelines.

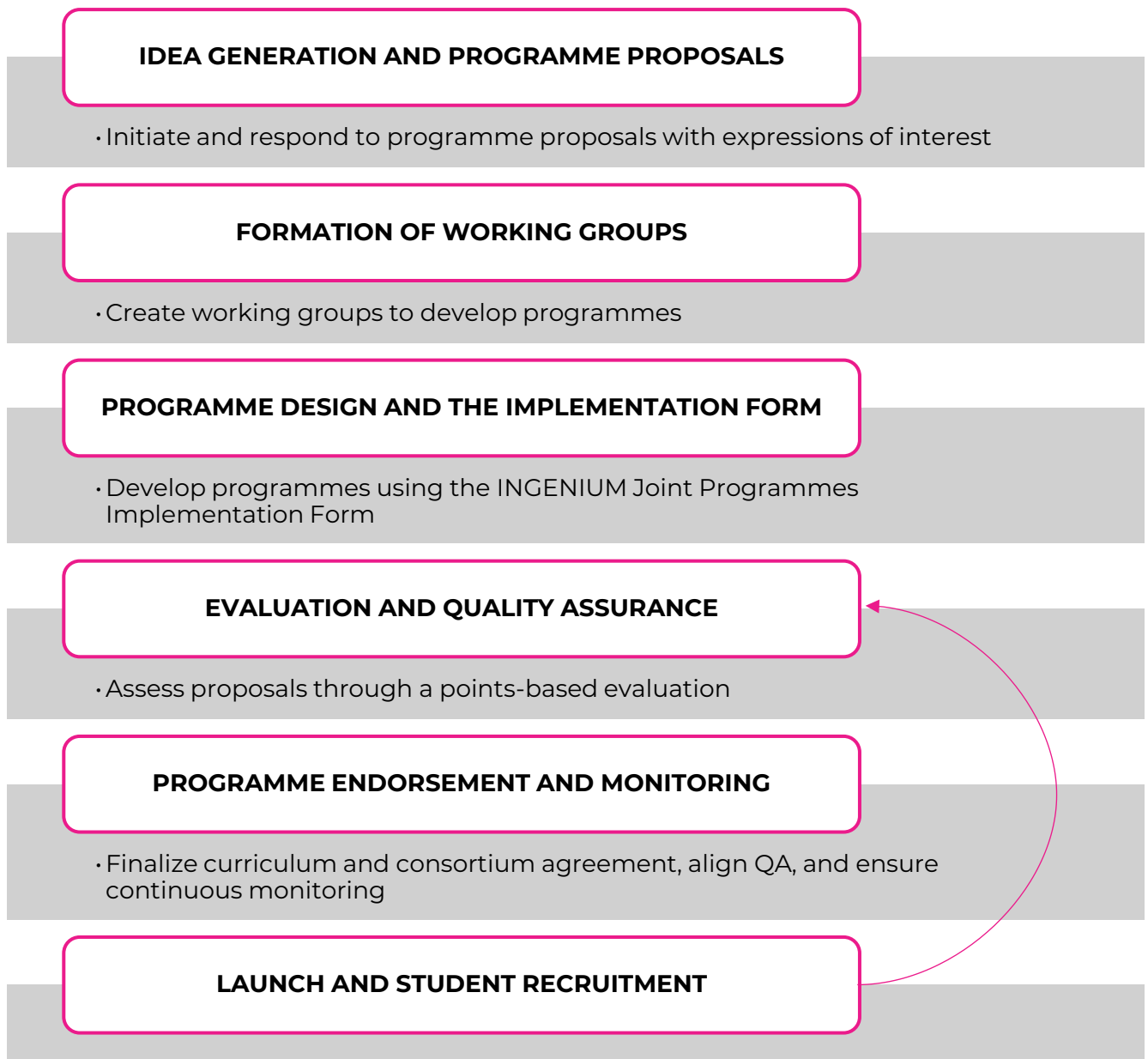
### 5. Programme Endorsement and Monitoring

Endorsed programmes proceed to formal implementation, including curriculum finalization, consortium agreements, and quality assurance alignment. Ongoing monitoring and periodic reviews ensure programmes maintain high academic standards, comparability across institutions, and relevance to strategic priorities.

### 6. Launch and Student Recruitment

Following approval, joint programmes are launched with coordinated recruitment efforts across partner institutions. The structured process—from call to working group formation, evaluation, and monitoring—ensures that students enrol in academically robust, innovative, and transnational programmes that fully leverage the collaborative infrastructure of the INGENIUM European University. Once launched, each programme undergoes regular review and continuous monitoring to ensure sustained quality, relevance, and alignment with alliance-wide academic standards.





**Figure 4.** Flow diagram of the INGENIUM programme proposal process, from idea sharing to partner review and final outcome.

## 6. From Planning to Progress: Building the Foundations of the INGENIUM European Campus

The development of the INGENIUM Joint Programmes has evolved through an iterative, multi-phase process designed to establish a sustainable framework for joint education across the alliance. While the timelines outlined in the Description of Action (DoA) proved ambitious relative to the inherent complexity of transnational programme development, the work



conducted under Work Package 4 (WP4) has remained fully aligned with its strategic objectives and the overarching goal of establishing the INGENIUM European Campus.

### **Alignment with Objectives and Scope**

According to the DoA, the task “Establishing INGENIUM Joint Programmes” was scheduled to be completed within twelve months in 2024, with the Deliverable D4.1 due in June 2025. In practice, the process required more extensive groundwork — including the creation of governance structures, procedures for institutional endorsement, and quality assurance mechanisms — before curricula could be jointly developed and accredited. The programmes outlined in this report reflect tangible progress: those listed in Chapter 3.2 are commencing in 2025/26, while most of the programmes under development (Chapter 3.1) are projected for launch in 2026/27, pending national and institutional approvals.

All activities have remained consistent with WP4’s initial objectives outlined in the DoA: creating the framework and structures for “seamless academic mobility”<sup>22</sup> and collaborative programme delivery. Each initiative is developed under the oversight of the IEC Faculty and Academic Committee, embedding programme design within INGENIUM’s governance and quality assurance structures. The close interplay between the INGENIUM Pathway Framework and the emerging joint programmes in strategic key thematic areas demonstrates how structural innovation and programme design reinforce each other in shaping the INGENIUM European Campus.

### **Process Design and Phased Development**

The alliance adopted an iterative, design-based process rather than a linear implementation model, allowing for adaptation and reflection at each stage. Initial mapping at partner institutions (November 2023) identified areas of potential for collaboration, followed by programme proposals circulated to all partners to gather expressions of interest. Eleven initiatives were launched through this participatory approach, leading to a mix of outcomes — several becoming Flagship Programmes, others evolving into Double Degrees, and some remaining exploratory.

Recognising the need for stronger institutional commitment, the *Call for the Development of Joint Academic Offers* (March–May 2025) introduced a formal endorsement process, ensuring that university leadership explicitly supported participation. This refinement improved both accountability and sustainability. INGENIUM Flagship Programme development subsequently proceeded under defined milestones (Annex 1), guiding progress from curriculum alignment to formal endorsement by the IEC-Academic Committee and INGENIUM Alliance Council.

### **Stakeholder Coordination and Governance**

From the outset, stakeholder engagement has been broad and structured. WP4 and WP2 (Building a cohesive cooperation framework) have collaborated closely to align programme development with quality assurance procedures. Joint in-person WP meetings in October 2023 and February 2024 created a shared working platform, ensuring coherence in definitions, procedures, and evaluation mechanisms. A key coordination milestone was the

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<sup>22</sup> INGENIUM European University. Description of Action. INGENIUM, 2023, p. 77/221.

joint meeting of the Academic and Innovation Committees in Iași (May 2024), which ensured that innovative teaching and digital methodologies were embedded early in the programme design.

### **Constraints and Adaptive Solutions**

The transnational nature of INGENIUM posed significant challenges, including diverse legal and accreditation systems, limited staff availability, misaligned academic calendars, and varying institutional decision-making speeds. In response, the alliance implemented pragmatic mitigation strategies:

- > Legal and accreditation barriers were addressed through the adoption of double degree models, maintaining joint curriculum design while respecting national limitations;
- > Academic workload pressures were mitigated through team-based coordination and the development of the IEC Faculty Guidebook (which is still currently ongoing) to clarify roles and recognition;
- > Scheduling misalignments were managed via asynchronous pilot phases and shared milestone tracking;
- > Institutional engagement gaps were resolved through the 2025 Call, which formalised participation through leadership endorsement;
- > Financial sustainability, particularly the funding of staff and student mobilities within joint programmes, remains a recurring challenge. To address this, the alliance is developing an INGENIUM scholarship system designed to support flexible and inclusive mobility pathways across partner institutions (see below).

These adaptations have collectively strengthened the alliance's procedural and institutional foundations.

### **Lessons Learned and Forward Path**

The experience has yielded several key insights that now guide the alliance's trajectory. The introduction of INGENIUM Flagship Programmes as thematic rather than disciplinary entry points has proven particularly effective, promoting interdisciplinary collaboration and alignment with INGENIUM's societal missions. The early integration of quality assurance through WP2 collaboration has likewise ensured compliance with the ESG.

The alliance has learned that creativity in early stages must be balanced with structure and institutional anchoring. Linking programme development to formal commitments has enhanced governance coherence and accountability. Improved documentation, shared repositories, and common templates have increased transparency and comparability across partners.

Looking ahead, the alliance's focus for 2025–2026 will be on:

- > Programme Consolidation and Approval: Finalising curricula, learning outcomes, and mobility structures for internal approval and pilot implementation in 2026/27.
- > Quality Assurance and Recognition: Completing procedures for evaluation and credit transfer within the IEC Faculty Guidebook.
- > Operationalisation of the INGENIUM European Campus: Advancing the Pathway Framework as the structural foundation for future joint educational initiatives.

## **Integrating INGENIUM Joint Programmes in the Partner's Academic Offers**

As the alliance transitions from development to implementation, a key milestone in consolidating the INGENIUM European Campus is the full integration of INGENIUM Joint Programmes into the academic offers of all partner universities. The INGENIUM Alliance Council (IAC) reaffirmed this objective at its October 2025 meeting, committing to present all new programmes developed within the consortium as fully INGENIUM programmes across the alliance. This shared approach underscores the collective ambition to create a unified and recognisable European academic offer that strengthens the identity of the INGENIUM European Campus and establishes joint education as a defining element of the alliance's collaborative excellence. Starting with the academic year 2026/27, all INGENIUM Joint Programmes enrolling students will be featured as part of each university's official catalogue, thereby ensuring consistent visibility and accessibility for students across the alliance. Coordination of this process is being carried out jointly by the IEC-Academic Committee, the INGENIUM Steering Committee, and the Communication Working Group to maintain coherence between academic, administrative, and communication dimensions. Recognising the regulatory diversity among partners, the IAC agreed that institutions able to implement this integration immediately should do so, while others will progress according to their national and institutional frameworks. To address challenges linked to student accounting in funding models—particularly in systems where institutional budgets depend on enrolment figures—the alliance will engage with relevant ministries and funding bodies to ensure that all INGENIUM students are appropriately recognised within these mechanisms. The integration process will also be supported by the forthcoming INGENIUM Scholarship System (see below), designed to enhance equitable access and promote student mobility across the alliance. Complementary in-kind support models, such as housing assistance and logistical aid, are also being explored. These measures, to be finalised by the IAC in early 2026, represent a significant step towards embedding the INGENIUM academic offer within institutional structures and ensuring that the European Campus is both academically robust and socially inclusive.

### **INGENIUM Scholarship System**

The INGENIUM Scholarship System will serve as a central mechanism to support the joint academic programmes endorsed by both the IEC-Academic Committee and the INGENIUM Alliance Council (IAC), reinforcing the alliance's commitment to equitable access, inclusion, and mobility across the INGENIUM European Campus. Building on the framework set out in the Description of Action, the system will mobilise INGENIUM project funds, complemented by institutional contributions and additional funding sources, to ensure sustainable support for student and staff participation in joint educational initiatives. Covering all programme types included in the INGENIUM academic portfolio—Bachelor's, Master's, and Doctoral degrees, micro-credentials, and INGENIUM Pathway Pro-grammes—the scholarship system is being designed in parallel with the launch of the first INGENIUM Joint Programmes in the academic year 2026/27.

The framework was first presented to the INGENIUM Alliance Council in October 2025, with its detailed structure and administrative procedures to be finalised during the January 2026 IAC meeting, ensuring readiness for the pilot implementation alongside the initial

programme intakes in September 2026. The pilot phase will be monitored closely, with results feeding into the refinement and long-term sustainability of the system.

As agreed by the INGENIUM Alliance Council, the scholarship system will be guided by four core principles:

- > Equitable participation of all partner universities, recognising their distinct institutional profiles and administrative frameworks.
- > Flexibility and learner-centred design, ensuring the system adapts to the needs of diverse programmes and student realities while minimising administrative burden.
- > Balance between excellence, inclusion, and equity, enabling INGENIUM programmes to reach a broad and diverse group of learners.
- > Joint governance and shared ownership, fostering collective responsibility for the scholarship system and strengthening its visibility and impact across all ten INGENIUM partner institutions.

Together, these principles will ensure that the INGENIUM Scholarship System becomes a cornerstone of the alliance's long-term strategy—supporting mobility, inclusion, and the full realisation of the INGENIUM European Campus vision.

### **Next Steps Toward Implementation**

Together, the integration of INGENIUM Joint Programmes into partner universities' academic offers and the establishment of the INGENIUM Scholarship System mark a decisive step from development to implementation. These initiatives translate the alliance's shared vision into tangible structures that will sustain joint education, mobility, and inclusion across the INGENIUM European Campus.

By embedding programmes within institutional frameworks and supporting them through coordinated funding and mobility mechanisms, INGENIUM ensures both sustainability and accessibility. This progress establishes a solid foundation for a connected European learning environment in which students and staff co-create innovative educational experiences.

As the alliance advances toward full implementation, the joint programmes and scholarship system stand as key enablers of the INGENIUM vision—transforming collaboration into lasting educational impact across Europe.

## CONCLUSION

The development of the INGENIUM Joint Programmes represents a major step toward achieving the alliance's vision of a truly integrated INGENIUM European Campus. This deliverable has documented both the tangible outcomes and the structural groundwork established to sustain long-term academic cooperation across the ten partner institutions. Despite the ambitious timeline set in the Description of Action, the alliance has successfully transformed initial conceptual frameworks into operational processes and concrete programme developments.

The work undertaken demonstrates the alliance's capacity to combine institutional diversity with shared strategic direction. The creation of the INGENIUM Pathway Framework, the establishment of INGENIUM Flagship Programmes, and the implementation of transparent evaluation and quality assurance mechanisms have provided a solid foundation for future growth. The experiences collected over the past two years underscore both the complexity and transformative potential of transnational higher education collaboration. The need to reconcile differing national regulations, accreditation systems, and institutional priorities has required flexibility, persistence, and mutual understanding. Yet, these challenges have led to stronger governance structures, improved communication mechanisms, and a clearer distribution of roles and responsibilities. The iterative approach adopted by INGENIUM has allowed for continuous learning and adaptation — qualities essential for a sustainable European University Alliance.

At the same time, the report highlights how quality assurance, academic innovation, and mobility can be jointly pursued when underpinned by shared frameworks and transparent procedures. The development of the INGENIUM Joint Programmes Implementation Form and the IEC Faculty Guidebook has been particularly instrumental in creating a coherent methodological basis for collaboration. These instruments not only safeguard academic standards but also ensure comparability and recognition across institutions — a precondition for the eventual award of European Degrees. Looking ahead, the alliance's immediate focus lies on completing the development and internal approval of the six joint programmes currently in progress, while preparing the first three for student enrolment in 2026/27. The ongoing work on an INGENIUM Scholarship System will further enhance mobility and accessibility, ensuring that financial and logistical barriers do not limit student and staff participation.

Ultimately, the INGENIUM Joint Programmes initiative serves as both a milestone and a model. It demonstrates how a consortium can evolve from conceptual alignment to practical implementation through shared commitment, structured collaboration, and a common European vision. The lessons learned — particularly in governance, coordination, and adaptation — will inform the next stages of the alliance's development and serve as valuable input for the broader European Universities initiative. By the end of the current funding period in December 2026, INGENIUM aims not only to have launched its first generation of joint and double degree programmes but also to have established a lasting academic ecosystem that continues to grow beyond the project's lifetime. The work completed so far confirms that INGENIUM is on a credible and sustainable path toward realising the promise of a European inter-university campus, where education, mobility, and innovation are shared across borders and built for the future of Europe's higher education landscape.

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## Annex 1. Implementation Timeline for INGENIUM Joint Programmes

The following table shows the timelines for all INGENIUM Flagship Programmes currently under development. The table refers to the programmes using abbreviations, the full (tentative) programme names are: Bachelor in Entrepreneurship and Innovation (E&I); Master in Advanced Practices Nursing in Acute Care (APN in Acute Care); Master in Artificial Intelligence (AI); Master in Chemical and Biochemical Process Technologies (CBPT); Master in Sustainable Development and Circular Economy (SDCE); Master in Sustainable Management and Coastal Conservation (SMaCC).

<b>Programme / Milestone</b>	<b>Bachelor E&amp;I</b>	<b>Master APN in Acute Care</b>	<b>Master AI</b>	<b>Master CBPT</b>	<b>Master SDCE</b>	<b>Master SMaCC</b>
Design of Learning outcomes on programme level	January 2026	March 2025	Already done, but can be adjusted depending on the partner confirmation	July 2025	September 2024	December 2025
Assignment of learning outcomes to a set of modules	January 2027	March 2025	December 2025	September 2025	March 2025	October 2025
Division of responsibilities for modules between partners			December 2025	July 2025		
Design of learning content	March 2026 (Add-on Final Year)	March 2025	February 2026	October 2025	September 2025	October 2025
Design of learning activities			April 2026			
Design of assessment policy			May 2026			
INGENIUM Joint Programmes Implementation Form submitted	March 2026	October 2025	June 2026	November 2025	November 2025	April 2026



<b>Programme / Milestone</b>	<b>Bachelor E&amp;I</b>	<b>Master APN in Acute Care</b>	<b>Master AI</b>	<b>Master CBPT</b>	<b>Master SDCE</b>	<b>Master SMaCC</b>
Evaluation and endorsement by INGENIUM Academic Committee	March 2026	October-December 2025	June 2026	November 2025	November 2025	February 2026
Endorsement received by INGENIUM Alliance Council	April 2026	January-February 2026	October 2024	October 2024	October 2024	February 2026
Consortium agreement signed	March 2026	May 2026	July 2026	October 2025	October 2025	July 2026
Programme Accreditation	Possibly May / June 2026 for the add-on final year  May / June 2027 for the full programme	MUS: Valid accreditation of the faculty and of the scientific area (Nursing care) by the National accreditation agency.  Xamk: Programme accreditation is not required.	October/ November 2026	June 2026	June 2026	March 2026

Programme / Milestone	Bachelor E&I	Master APN in Acute Care	Master AI	Master CBPT	Master SDCE	Master SMaCC
Students enrolled	Possibly September 2026 for the add-on final year  September 2027 for the full programme.	August 2026	September 2027	October 2026	September 2026	Between April and May 2026

## Annex 2. Overview of Achieved Requirements for INGENIUM Joint Programmes

The following table lists the individual criteria for an INGENIUM study programme. It lists all INGENIUM Flagship Programmes currently under development as well as the implemented double and joint degrees. The table refers to the programmes using abbreviations, the full (tentative) Flagship programme names are: Bachelor in Entrepreneurship and Innovation (E&I); Master in Advanced Practices Nursing in Acute Care (APN in Acute Care); Master in Artificial Intelligence (AI); Master in Chemical and Biochemical Process Technologies (CBPT); Master in Sustainable Development and Circular Economy (SDCE); Master in Sustainable Management and Coastal Conservation (SMaCC).

Requirements / Programme	Multi-lingualism	Mobility	Work-based learning	Partnership	Industry & Society Links	Quality Assurance	Governance
Bachelor E&I	Programme delivered in at least two languages (local + English)	At least 25% of ECTS obtained through international (including virtual) mobility	Integration of internship periods and work-based learning	Minimum of two partner institutions involved in design and delivery	Strong connections with industry and societal stakeholders	Compliance with the INGENIUM quality assurance procedure	Endorsement from the INGENIUM Alliance Council and the Academic Committee
	🕒	🕒	🕒	✓	🕒	🕒	✓

Requirements / Programme	Multi-lingualism	Mobility	Work-based learning	Partnership	Industry & Society Links	Quality Assurance	Governance
Master APN in Acute Care	●	✓	✓	✓	⌚	●	✓
Master AI	⌚	⌚	⌚	✓	⌚	●	✓
Master CBPT	●	✓	⌚	✓	⌚	●	✓
Master SDCE	⌚	✓	⌚	✓	⌚	●	✓
Master SMaCC	⌚	⌚	⌚	✓	⌚	●	●
Master Civil Engineering	●	✓	x	✓	x	x	x
Master Legal Sciences for Internationalisation and Business Innovation and International Law	✓	✓	x	✓	x	x	x
Master Chemistry	✓	✓	✓	✓	●	x	x
Master Health Professions	✓	✓	●	✓	x	x	x
Master Mechatronic Engineering (EU4M)	✓	✓	●	✓	●	x	x

Key: ⌚ in development; ✓ achieved; ● partially achieved; x not yet achieved

### Annex 3. Comparison Table for INGENIUM Double and Joint Degree Programmes

Category	Master in Civil Engineering	Master in Legal Sciences for Internationalisation and Business Innovation and International Law	Master in Chemistry	Master in Health Professions	Master in Mechatronic Engineering (Erasmus Mundus)
Partner universities involved	UdA, TUIASI	URN, UdA	URN, UNIOVI	UdA, MUS	UNIOVI (Lead), HIS, HKA
Fields of Study	Rehabilitation, consolidation and management of existing constructions including cultural heritage structures, structural engineering, geotechnical engineering, monitoring, diagnostic, computational analysis, acoustic and lighting, energy rehabilitation	Transport Law, EU Law	Organic and inorganic chemistry	Physiotherapy, Rehabilitation, Balneology, Soft tissue techniques, Neurorehabilitation, Orthopaedical rehabilitation	<p>Mechatronic design engineer, technological designer/developer for products, industrial project manager</p> <p>System Analysis / Mechatronics in Production Development</p> <p>Microtechnology / Energy Efficiency</p> <p>Mechatronics and Robotics / Micro-mechatronics</p> <p>Virtual Product Realization</p>

Category	Master in Civil Engineering	Master in Legal Sciences	Master in Chemistry	Master in Health Professions	Master in Mechatronic Engineering
Programme Type	Double Degree	Double Degree	Double Degree	Double Degree	Joint Degree
Duration (ECTS)	120	120	UNIOVI: 60 URN: 120	120	120
Accreditation Status	Completed	Completed	Completed	Completed	completed
Cooperation Agreement Status	Signed	Signed	Signed	UdA signed, MUS not signed	Signed
Launch Year	Academic Year 2025/2026	Academic Year 2025/2026	Academic Year 2026/2027 for UNIOVI, Academic Year 2025/2026 for URN	TBC, pending the signed cooperation agreement	Academic Year 2025/2026
Admitting Universities	UdA, TUIASI	URN, UdA	URN, UNIOVI	UdA, MUS	UNIOVI, HIS, HKA
Admission Cycle	Every fall/winter term /once per year	Every fall/winter term / once per year	Every fall/winter term/once per year	Every fall/winter term /once per year	Every fall/winter term/once per year
Admission Capacity (in total)	10	10	10	10	30
Language(s) of Instruction	English with language courses in Italian and Romanian	English	Spanish and French; English	English with language courses in Italian and Bulgarian	Spanish, English, German and French

Category	Master in Civil Engineering	Master in Legal Sciences	Master in Chemistry	Master in Health Professions	Master in Mechatronic Engineering
<b>Participant Statistics</b>					
Students Enrolled (overall, per year)	N/A	10	10 (planned)	10 (planned)	30
Students Enrolled (per partner & year)	N/A	5	5 (planned)	5 (planned)	8 (HKA)
<b>Staff Participation</b>					
Involved Lecturers/ Researchers	5-7 per partner	3-8 per partner	15-20 per partner	8-10 per partner	10-20 per partner
Disciplines Involved	Structural Engineering, Geotechnical Engineering, Topography, Building Design	Transport Law, EU Law,	Organic and inorganic chemistry	Neurorehabilitation, orthopaedic rehabilitation, neurorobotics, rheumatologic rehabilitation	Mechanical engineering, continuous mechanics, manufacturing process engineering,
Staff Mobility	Guest lectures, joint supervision and research collaboration	Teaching exchanges and research collaboration	Guest lectures, joint supervision and research collaboration	Guest lectures, teaching exchanges, joint supervision and research collaboration	Guest lectures and joint supervision

Category	Master in Civil Engineering	Master in Legal Sciences	Master in Chemistry	Master in Health Professions	Master in Mechatronic Engineering
<b>Added Value and Benefits</b>					
Benefits for Students (average rating)	Major added value for students is seen in multi-campus study, language acquisition and exposure to different academic traditions, slightly less added value but still significant is seen in the acquisition of intercultural skills.	Major added value, especially in multi-campus study, intercultural skills, and exposure to academic traditions, with strong but slightly lower benefits for language acquisition.	Major added value, especially in multi-campus study, intercultural skills, and exposure to academic traditions, with strong but slightly lower benefits for language acquisition.	Major added value for students is seen in multi-campus study, gaining intercultural skills, language acquisition as well as exposure to different academic traditions.	Major added value for students is seen in multi-campus study, gaining intercultural skills, language acquisition as well as exposure to different academic traditions. Additionally, the added value of the programme is seen in high employability.
Benefits for Staff (average rating)	Major added value for staff is seen in enhanced cooperation with partners, joint research opportunities and the exchange of new teaching methods.	significant added value for staff is seen in enhanced cooperation with partners and joint research opportunities as well as in new teaching methods	significant added value for staff is seen in enhanced cooperation with partners and joint research opportunities as well as in new teaching methods	Major added value for staff is seen in enhanced cooperation with partners, joint research opportunities and the exchange of new teaching methods.	Major added value for staff is seen in enhanced cooperation with partners and joint research opportunities.



Category	Master in Civil Engineering	Master in Legal Sciences	Master in Chemistry	Master in Health Professions	Master in Mechatronic Engineering
<b>Programme Development &amp; Sustainability</b>					
Year of First Discussions	March 2025	2023	2024	2023	2022
Year of Agreement	August 2025	2025	2025	2025	2024
Challenge of Academic Calendars (rating + solution)	Not a challenge	Minor challenged solved through different mobility schedules.	Minor challenged solved through different mobility schedules.	Moderate challenge, no solution provided	Not a challenge
Other Challenges & Solutions	<p>Credit Recognition and Administrative complexity</p> <p>Solved by making clear statements in the academic cooperation agreement for the establishment of a double degree programme.</p> <p>Both programmes are accredited and mutually recognised.</p>	<p>Language of instruction;</p> <p>Solved by translating the classes in English for all students (French students included); Administrative complexity solved by mutual direct contact with professors and staff; Erasmus teaching attendance; Blended intensive program experiences</p>	<p>Language of instruction: All French classes have been translated into English.</p>	<p>Accreditation differences and legal/regulatory barriers; in process of solving by correspondence with the authorities (E.g. Ministry of education and National accreditation agency) to approve the educational plan and confirm with accreditation.</p>	<p>Legal/regulatory barriers; administrative complexity. Solved through a lot of communication and trust between partners.</p>

<b>Category</b>	<b>Master in Civil Engineering</b>	<b>Master in Legal Sciences</b>	<b>Master in Chemistry</b>	<b>Master in Health Professions</b>	<b>Master in Mechatronic Engineering</b>
Future Plans (expansion, modules, scaling)	Scaling up student participation; introduction of new modules co-teaching with other INGENIUM partner teachers in blended format	Scaling up student participation; consolidation of the experience	Scaling up student participation	Expansion to new partners; introduction of new modules; scaling up student participation	Keeping the programme as is
Sustainability Strategy	Stable institutional funding, long-term partner agreements	Applying for the European Degree Label; Long-term partner agreements	Applying for the European Degree Label	External/European funding, long-term partner agreements; applying for the European degree label	Stable institutional funding