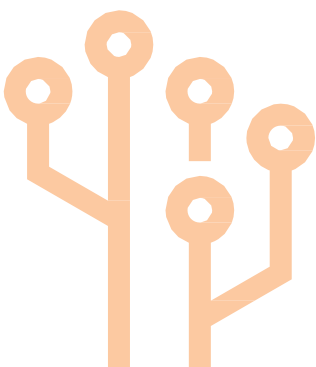




ENGINE
Education for Rural
Entrepreneurship
& Innovation



IO3. Local Leadership Toolkit



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List of Abbreviations

Acronym	Full term
E&I	Entrepreneurship & Innovation
ECTS	European Credit Transfer and Accumulation System
HEIs	Higher Education Institutions
IO	Intellectual Output
KSAs	Knowledge, Skills, and Attitudes
NGO	Non-Governmental Organisation
SMEs	Small and Medium Enterprises



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Chapter 1. Introduction

Higher education institutions play a central role in preparing future leaders capable of driving entrepreneurship and innovation in rural regions. Yet, across Europe, universities face persistent challenges in aligning their educational offers with the specific needs, opportunities and constraints of rural development. Existing Entrepreneurship and Innovation (E&I) curricula tend to prioritise urban, corporate or technology-driven contexts, while rural areas require a different blend of competences: place-based opportunity recognition, community engagement, sustainability-oriented innovation, and the ability to work with diverse local stakeholders. This Local Leadership Toolkit was developed to address this gap within the ENGINE project (*ENTrepreneurial rural Growth through exchanging of Good practices wIthIn Network Education*). It is a practical methodological guide that supports higher education institutions in reviewing and adapting their E&I education to better respond to the needs of rural contexts.

1.1. Rationale for developing the Local Leadership Toolkit

Rural entrepreneurship requires a nuanced understanding of territorial specificities, local resource endowments, demographic dynamics, cultural heritage, and region-specific development challenges. The Local Leadership Toolkit supports Higher Education Institutions (HEIs) in embedding these dimensions systematically into teaching and learning, responding to three core needs identified across the ENGINE partnership:

- Teaching content grounded in rural realities. Many existing E&I curricula are predominantly shaped by urban, corporate or technology-driven settings. The Local Leadership Toolkit proposes a methodology for adapted teaching contents that reflect different market structures, resource constraints, institutional environments, and opportunities linked to place-based assets.
- Alignment around the E&I competences required for rural development. Rural development leaders need a specific set of competences to recognise opportunities, drive innovation and create value in rural contexts. The Toolkit provides a structured approach to assess how well existing programmes develop these competences, identify gaps, and define the target competence profile that rural E&I education should deliver.
- Structured stakeholder integration. Effective rural innovation ecosystems rely on collaboration among HEIs, businesses, public authorities, Non-Governmental Organisations (NGOs), and community actors. The Toolkit offers practical tools to identify, classify and engage stakeholders in the educational process, strengthening relevance, authenticity and real-world impact.



1.2. Aim and scope of the document

This Local Leadership Toolkit was developed within the ENGINE project by four European higher education institutions: the Krakow University of Economics, the Polytechnic Institute of Viana do Castelo, FH Münster University of Applied Sciences and the University of Foggia. It draws on empirical research conducted in four rural regions across Europe: Małopolska (Poland), Alto Minho (Portugal), Münsterland (Germany) and Foggia (Italy).

It provides higher education institutions with a practical, step-by-step methodological framework to (i) review existing E&I study programmes, identify gaps and design a rural-oriented standardised E&I content plan, (ii) define the knowledge, skills and attitudes required for rural entrepreneurship and innovation and develop the corresponding student competence profile, and (iii) identify relevant stakeholders and clarify how they can support teaching and competence development.

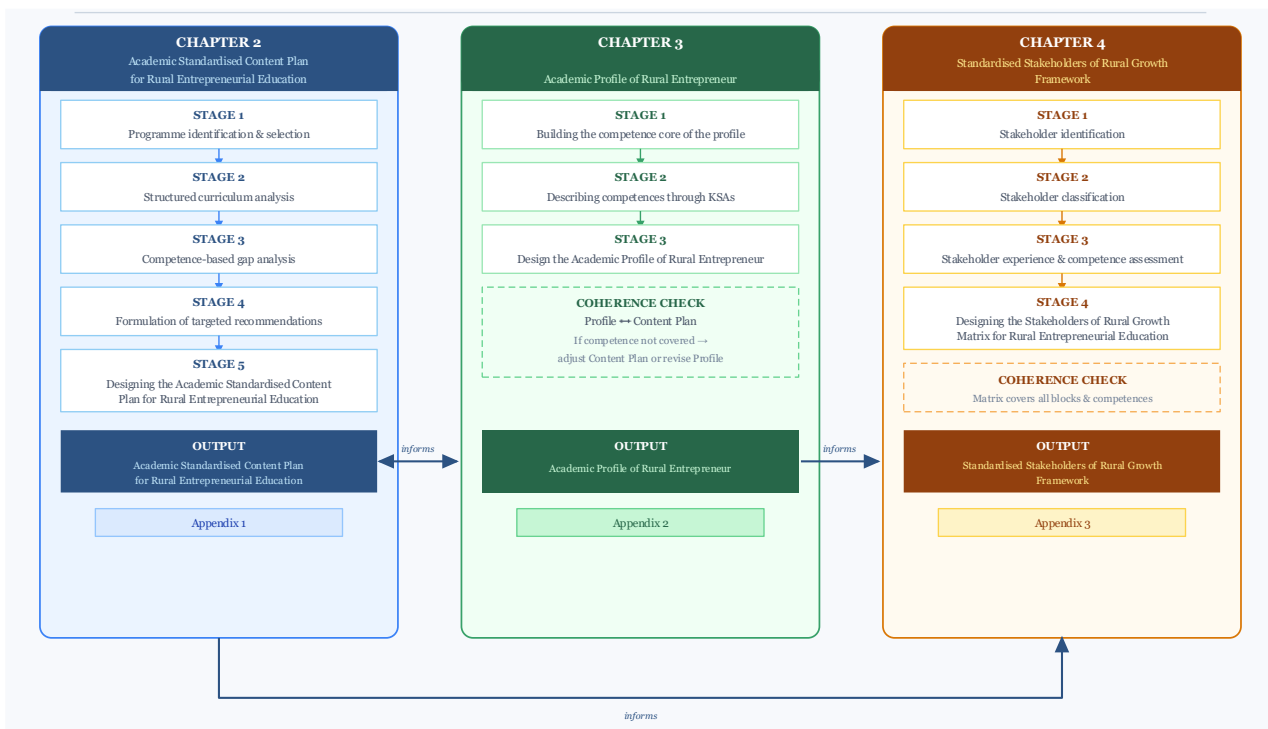
Using this Toolkit enables HEIs to address three key questions:

1. To what extent do existing E&I study programmes address rural contexts and develop relevant rural E&I competences, and how can their content be strengthened?
2. What knowledge, skills and attitudes should a rural entrepreneurship and innovation student develop?
3. Who are the relevant stakeholders that can support E&I education and competence development, and how can they be engaged in the teaching process?

These aims can be achieved by applying the methodology presented in Chapters 2, 3 and 4. Developed and validated within the ENGINE partnership, with input from key stakeholders, it guides higher education institutions step by step through a structured process to develop an Academic Standardised Content Plan for Rural Entrepreneurial Education, build an Academic Profile of Rural Entrepreneur (i.e. the competence profile of a student prepared to drive entrepreneurship and innovation in rural contexts) coherent with this plan and identify stakeholders who can be systematically integrated into the educational process. Figure 1 summarises the Local Leadership Toolkit methodology described in this document.



Figure 1 Local Leadership Toolkit – overview of methodology



Source: ENGINE Consortium elaboration

Chapter 2 presents a step-by-step procedure for analysing existing study programmes, assessing their relevance for rural E&I competences, identifying gaps, and designing the Academic Standardised Content Plan for Rural Entrepreneurial Education. **Chapter 3** guides HEIs in defining the knowledge, skills and attitudes required for rural entrepreneurship and innovation and developing the Academic Profile of Rural Entrepreneur, ensuring its coherence with the Academic Standardised Content Plan. **Chapter 4** provides methods for identifying, classifying and engaging stakeholders in the teaching and learning process. **Chapter 5** summarises the main outcomes and reflects on the Toolkit's contribution to strengthening higher education for rural development. **Appendices 1, 2 and 3** provide ready-to-use templates supporting the implementation of each step of the methodology.

1.3. Definition of key terms

To ensure clarity and consistency, the key terms used throughout this Toolkit are defined below:

- **Attitudes** – refers to the element of the competence, describing how the student applies knowledge and skills in a responsible, self-directed, and motivated way – including their openness to learning, initiative, and values related to the competence,



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- **Classification Criteria** - refer to the parameters used to categorise stakeholders within the regional databases to ensure a structured mapping. These criteria include: affiliation according to the Quadruple Helix concept, stakeholder type, stakeholder role in the educational process, level of stakeholder involvement, operational scope (geographical reach), and the nature of engagement with the university,
- **Competence** - refers to an integrated combination of knowledge, skills and attitudes that are particularly relevant and useful for entrepreneurship and innovation (E&I) education and for acting effectively in rural areas,
- **Core Themes** - refer to recurring areas of stakeholder expertise and activity identified through the cross-partner comparison of regional stakeholder databases. They help structure the unified stakeholder typology within each Quadruple Helix sector and guide how stakeholder types can be integrated into the educational process,
- **Knowledge** - refers to the element of the competence, describing what the student knows and understands after course unit completion,
- **Learning outcomes** - describe what a learner is expected to know, understand, or be able to do after developing that competence,
- **Module / course unit** - refers to a basic unit of study within a programme, typically associated with specific learning outcomes and a defined number of ECTS credits. A module may correspond to a single subject, a course unit, or a thematic block of learning activities assessed as one whole,
- **Quadruple Helix** - refers to the stakeholder's affiliation with one of the four key sectors defined in the Quadruple Helix model. The four sectors include: 1. Science & Education, 2. Business & Economy, 3. Public Administration & Policy, 4. Civil Society & Community,
- **Quality Criteria** - refer to the parameters used to assess stakeholders' suitability and potential contribution to E&I education initiatives. These criteria cover competences and experience in E&I relevant to rural areas, experience in implementing or advising on local or regional development, affiliations with rural areas and ability to operate at the intersection of sectors,
- **Skills** - refers to the element of the competence, describing what the student knows how to do, i.e. their ability to apply knowledge to tasks, solve problems, and implement actions in relevant contexts,
- **Study programme (area of education, curriculum)** - refers to the entire programme of study leading to a degree (e.g., Bachelor, Master). It covers the overall structure, intended learning outcomes and all modules that make up the full course of study.
- **Stakeholders of Rural Growth** - refers to individuals, groups, or organisations, such as farmers, SMEs, NGOs and public bodies, that have an interest in or influence on the development of entrepreneurship and innovation (E&I) in rural areas, including actors operating outside rural areas but with a clear impact on rural development, and who can support the educational process by providing practical insights, access to real-life cases and networks, and by addressing specific territorial needs.



- **Track / Specialization** - a structured pathway within a study programme, consisting of a coherent group of modules that provides focused expertise in a specific thematic area.

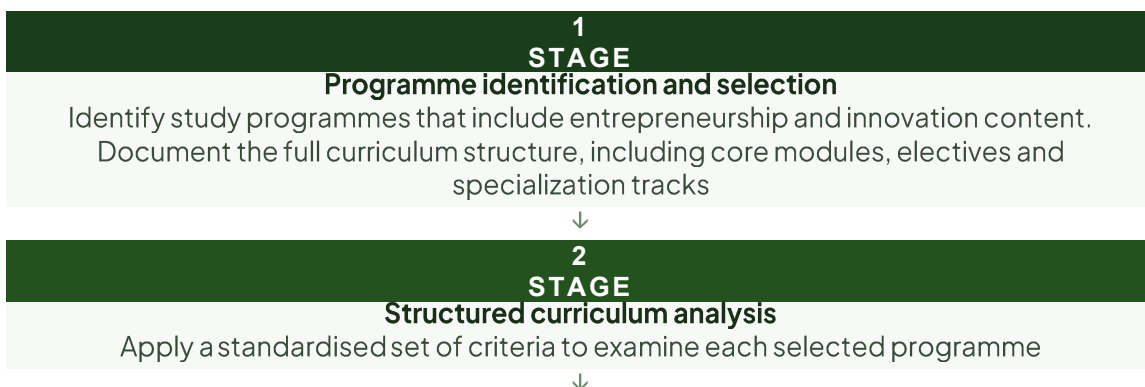
Chapter 2. Development of the Academic Standardised Content Plan for Rural Entrepreneurial Education

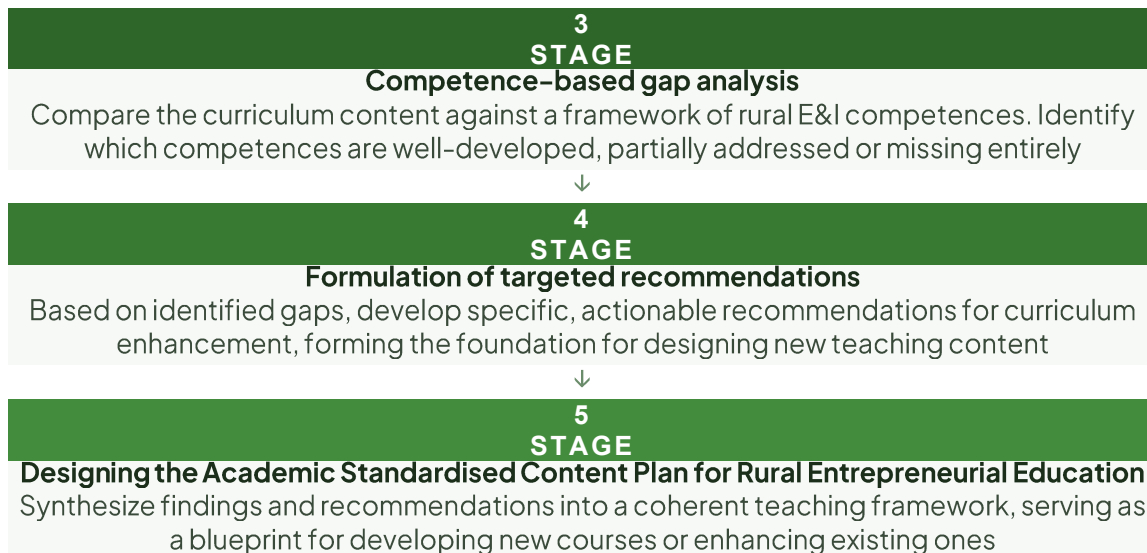
2.1. Scope and procedure for the development of Academic Standardised Content Plan for Rural Entrepreneurial Education

The development of an Academic Standardised Content Plan for Rural Entrepreneurial Education requires a systematic approach connecting three key elements: (1) a thorough review of existing study programmes, (2) assessing study programmes' alignment with rural entrepreneurship and innovation competences and (3) formulation of targeted recommendations for curriculum enhancement.

The procedure combines analytical rigour with institutional flexibility, allowing universities to adapt the framework to their specific contexts. It consists of five stages (Figure 2), described in detail in sections 2.2 and 2.3.

Figure 2 Key stages for designing the Academic Standardised Content Plan for Rural Entrepreneurial Education





Source: ENGINE Consortium elaboration

Throughout this process, maintain clear documentation of decisions and rationale. Engage academic staff through consultations to validate findings and consider regional stakeholder input to ensure practical relevance of competence frameworks.

2.2. Integrated curriculum review: from analysis to gap identification and recommendations

This section presents a unified methodological approach that integrates three interconnected analytical tasks – (1) reviewing current E&I study programmes, (2) assessing their alignment with rural E&I competences and (3) formulating targeted recommendations – into a coherent diagnostic process.

Stage 1: Programme identification and selection

Begin by mapping your institution's educational offer to identify programmes containing E&I content. The selection should be inclusive rather than restrictive – many programmes contribute to entrepreneurship and innovation education without being explicitly labelled as such.

Apply a keyword-based selection procedure by examining study programme names (study programmes, areas of education, curricula). Start with clearly relevant terms (entrepreneurship, entrepreneurial, innovation, innovative). If no programmes match these criteria, expand to broader indicators such as i.e. business, startup (or start-up), management or economics. Document which keywords led to each programme's selection using the template provided in Appendix 1 (Table 1).

For each selected programme, gather complete documentation: official programme descriptions, intended learning outcomes, full module list with syllabi,



ECTS allocation and any specialization tracks. This forms the empirical foundation for your analysis.

Stage 2: Structured curriculum analysis

Analyse each programme using a standardised criteria framework by conducting a thorough review of course syllabi and module descriptions. The key analytical criteria and their assessment framework are summarized in Table 1. For each criterion, review programme documentation, assess the compliance level and document your findings with specific justifications following the guidance provided.

To facilitate systematic documentation of your analysis, a ready-to-use curriculum analysis template is provided in Appendix 1 (Table 2), including example assessments for each criterion drawn from partner university analyses conducted within the ENGINE project.

Table 1. Analytical criteria for study programme assessment

Criterion Name	What to assess	Compliance Level: Low / Medium / High	How to justify your assessment
Teaching methods used	Variety of formats, both theoretical and practice-oriented, used across the programme (e.g., lectures, exercises, workshops, labs, seminars, mentoring)	Low – only 2 teaching methods are used (e.g., lectures and exercises) Medium – 3 methods (e.g., lectures, exercises, workshops) High – 4 or more methods, including highly interactive / practical formats like mentoring or labs	Justify the selected level by specifying the teaching formats included and their variety
Practical orientation ("learning by doing")	Hands-on, experience-based learning components (projects, simulations, internships, case studies, student-led initiatives)	Low – the curriculum includes isolated practical elements (e.g. a single project or workshop across the entire programme), but they are not integrated or applied systematically Medium – the curriculum includes several different forms of practical learning (e.g. workshops and simulations), but they appear only in selected or elective course units High – practice-based learning is an integral part of the curriculum. It includes multiple formats (projects, simulations, teamwork, student-led initiatives) and is widely implemented and supported throughout the core curriculum	Describe the types of practical activities included in the curriculum (e.g., simulations, projects, business cases, student-led activities) and indicate how they are implemented and supported (e.g., through mentoring, feasibility testing or interdisciplinary collaboration)



Cooperation with external environment	<p>External collaboration with companies, organizations, public institutions, authorities or local communities, etc. (e.g., internships, projects, guest lectures, mentoring, field visits)</p>	<p>Low – the programme includes one limited or occasional form of cooperation (e.g. optional internship or guest lecture) Medium – the programme includes 2–3 types of cooperation, but only in selected course units or as optional elements High – external cooperation is a core component of the programme, widely implemented and systematically integrated across multiple modules</p>	<p>Describe the types of external cooperation included in the programme and indicate how frequently and in which form they are applied (e.g. mandatory internships, long-term partnerships, real-life case projects, collaboration in applied research). Indicate their relevance to students' E&I learning experience (i.e. opportunities to solve real-world problems, interact with external stakeholders, test ideas or develop entrepreneurial and creative skills in authentic contexts)</p>
Development of soft skills	<p>The development of soft skills that refer to transversal competences supporting effective collaboration, communication and problem-solving (creativity, critical thinking, teamwork, communication and persuasion, problem-solving, leadership, adaptability and empathy). They may be taught directly or embedded in module design</p>	<p>Low – one or two soft skills are addressed within single course units, with limited integration or focus Medium – several soft skills are developed across selected course units, through group work, presentations, case studies or similar active learning methods High – a wide range of soft skills is systematically embedded across the programme, with varied methods (e.g. teamwork, reflection, leadership tasks, real-world projects) and clearly linked to learning outcomes and assessment</p>	<p>Indicate which soft skills are explicitly or implicitly developed in the programme. Describe how they are embedded in the curriculum - whether through dedicated modules, specific module components or active learning methods such as group work, presentations, role-playing, reflection or real-world tasks. Explain the extent to which these skills are integrated across the programme and whether they are linked to learning outcomes or assessment strategies</p>
Development of entrepreneurial mindset	<p>The development of attitudes and dispositions characteristic of an entrepreneurial mindset (e.g., proactiveness, initiative-taking, opportunity recognition, risk tolerance, resilience, self-efficacy, curiosity, sense of ownership and value creation orientation). These attributes prepare students to navigate uncertainty, drive change and create value in various contexts</p>	<p>Low – mindset traits are mentioned but only weakly reflected in teaching activities. Development is incidental, limited to one or two isolated examples, with no clear link to learning outcomes or assessment Medium – several components are supported through selected course units or elective modules (e.g. startup simulations, self-directed tasks). However, the approach is partial and not fully embedded across the curriculum High – mindset development is systematically embedded across the programme. Multiple traits are targeted through varied formats (e.g.</p>	<p>Indicate which entrepreneurial mindset components are developed in the programme. Describe how they are introduced – through which activities, modules or teaching methods (e.g. real-life projects, simulations, mentoring, student initiatives, reflection). Explain the degree of integration of these elements (how consistently and systematically they are embedded across the programme and whether they are linked to intended learning outcomes or assessment methods)</p>

		entrepreneurial projects, failure-based learning, student responsibility, peer feedback) and are explicitly aligned with programme goals, learning outcomes and assessment	
Inclusion of local/regional context	Integration of local or regional characteristics, needs and opportunities relevant to the context in which the university operates (reference to local (regional) economic, social or environmental challenges; collaboration with local (regional) actors; use of local case studies and regionally relevant content in assignments, examples or projects)	<p>Low - local or regional context mentioned briefly or indirectly (e.g., single example or case)</p> <p>Medium - local or regional case studies are used in several different course units, but are not consistently embedded throughout the programme</p> <p>High - strong and systematic integration across the programme, including stakeholder involvement and locally or regionally grounded projects</p>	Explain how the local/regional dimension is present in the curriculum: e.g. types of local case studies, projects with local actors, regionally focused assignments or reference to specific territorial challenges. Indicate the scope and consistency of this integration
Interdisciplinary approach	Integration of knowledge from different academic fields to provide a broader perspective on entrepreneurship and innovation (e.g., interdisciplinary course units, team-taught modules, projects that combine knowledge from different disciplines or elective course units that allow students to gain a broader range of knowledge and skills)	<p>Low - interdisciplinary elements are mentioned but appear in only one course unit or context</p> <p>Medium - several modules reflect input from multiple disciplines or support multidisciplinary collaboration</p> <p>High - interdisciplinarity is a core principle of the programme; it is reflected in multiple course units, team teaching and projects requiring integration of diverse knowledge, including collaboration across different faculties/departments within the institution</p>	Describe how interdisciplinarity is included in the curriculum: for example, through course unit topics, project design or collaboration between departments. Indicate whether it is occasional, thematic or systematically applied
Entrepreneurship & Innovation components	Dedicated content related to entrepreneurship or innovation (e.g., Entrepreneurship fundamentals, Innovation management, Technology and innovation, Startup creation and business planning, Design thinking, Business model development, Social innovation, Sustainable entrepreneurship, Digital innovation). These components may be present as individual course unit, a group of modules or a full specialization/track	<p>Low - single course unit</p> <p>Medium - a group of course units</p> <p>High - full/dedicated specialization/track</p>	Identify how entrepreneurship and innovation are represented in the curriculum. Indicate whether it is through standalone course units, a thematic cluster or a dedicated study track. Specify the course units and list the educational content (thematic blocks) that are directly related to entrepreneurship and innovation



	focused on entrepreneurship and/or innovation		
Other thematic areas	Other key thematic content relevant to entrepreneurship and innovation (e.g., Marketing, Finance and Accounting, Management, Digital Technologies and Economy 4.0, Sustainable Development, Communication and Negotiation, Networking). These blocks can be delivered as standalone modules, embedded into broader subjects or integrated into practical activities and projects	Low – only 1-2 thematic areas are present Medium – 3-5 areas are addressed in separate modules or combined content High – 6 or more areas are clearly included across the programme, either in dedicated modules or integrated parts of core content	Indicate which of the other thematic areas are covered and how (e.g. as full modules, partial topics, electives or embedded content). Clarify whether they are mandatory or elective. Specify the educational content (thematic blocks) in the curriculum that relate directly to each of the other thematic areas. Indicate also any other thematic areas that may be related or linked to entrepreneurship and innovation

Source: D3.01. Formula for Identifying and Evaluating the Teaching of Entrepreneurship and Innovation, Engine Consortium, 2025.

Stage 3: Competence-based gap analysis

The core of the review process is assessing how well existing study programmes develop competences relevant to rural entrepreneurship and innovation. This requires a clear competence framework – a list of rural E&I competences relevant to your region – tailored to its specific rural development context and priorities.

The competence framework should be derived from a systematic analysis of rural development needs and opportunities in your institutional context. The ENGINE project developed a comprehensive methodology for this purpose, presented in **Intellectual Output 2: Rural Development Potential for Innovation and Entrepreneurship – Analysis Framework**, which guides institutions through mapping local rural resources and development potentials, identifying existing and potential entrepreneurial and innovative initiatives that can harness these potentials and determining E&I competences required to effectively implement these initiatives.

The resulting **Rural Development Potential Map** identifies key competence needs specific to your regional rural development context and forms the reference framework for assessing curriculum gaps. By linking your study programmes to the competences identified in the Rural Development Potential Map, you can systematically verify whether and to what extent your programmes develop the capabilities needed in your regional rural entrepreneurship and innovation ecosystem. This analysis informs the identification of strengths, weaknesses and gaps and in the next stage – the formulation of recommendations – to supplement curricula with targeted, rural-oriented content.



💡 HOW TO DERIVE YOUR COMPETENCE FRAMEWORK FROM THE RURAL DEVELOPMENT POTENTIAL MAP

The Rural Development Potential Map identifies key rural local resources, development potentials and entrepreneurial and innovative initiatives specific to your region. To translate these findings into a competence framework for gap analysis, follow three steps:

1. Review the descriptions of entrepreneurial and innovative initiatives in your Rural Development Potential Map, focusing on the knowledge, skills and attitudes - identified for each initiative.
2. Group the resulting competence needs into thematic clusters (e.g. financial management, community engagement, digital tools, sustainable practices).
3. For each cluster, formulate a concise competence statement that can serve as a reference point for assessing your study programmes.

The resulting list of competences – ideally at least 10 – forms your regional rural competence framework and the basis for the gap analysis in the next step.

💡 NOTE

If your institution has not yet developed a regional Rural Development Potential Map using the IO2 methodology, you may base your competence framework on:

- **ENGINE project regional Rural Development Potential Maps** developed for Małopolska, Alto Minho, Foggia and Münsterland regions (available at engine.uek.krakow.pl),
- **stakeholder consultations** with rural entrepreneurs, local authorities, NGOs and development agencies in your region,
- **other competence frameworks** relevant to rural entrepreneurship and innovation.

Whichever source is used, ensure the framework reflects the specific rural development context and priorities of your region.

For each competence area, systematically review your programmes and document your findings in a competence matrix (see curriculum analysis template in Appendix 1, Table 3, which includes example assessments from the ENGINE project partner universities). The matrix should capture:

- which programmes develop each competence and to what extent,
- common gaps and weaknesses across all programmes.

This visualization immediately reveals patterns – which competences are consistently strong, which are weak and where gaps cluster across your institutional portfolio.



Stage 4: Formulation of targeted recommendations

Based on gap analysis, develop specific, actionable recommendations for curriculum enhancement. These recommendations should address identified gaps and weaknesses in rural E&I competence development, forming the foundation for designing new teaching content or enhancing existing modules.

EXAMPLES

Examples of cross-cutting recommendations applicable to all analysed programmes:

- Strengthening rural contextualization of existing E&I content
- Enhancing community engagement and stakeholder collaboration
- Integrating place-based development perspectives
- Connecting sustainability principles with rural realities
- Developing digital competences adapted to rural contexts
- Building understanding of rural development policy and funding mechanisms

Recommendations should be general enough to allow adaptation across different institutional contexts, programmes and regional priorities while maintaining focus on developing competences essential for entrepreneurship and innovation in rural areas. For each identified gap, specify what teaching content should be added or enhanced and how it could be implemented. Document your recommendations in the competence matrix provided in the curriculum analysis template (Appendix 1, Table 3), ensuring clear linkage between each identified gap and the proposed teaching content. To facilitate this process, the template includes examples from ENGINE partner universities showing how identified gaps were translated into specific teaching content recommendations.

The recommendations directly inform the structure and content of the Academic Standardised Content Plan for Rural Entrepreneurial Education developed in Stage 5, detailed in section 2.3.

2.3. Designing the Academic Standardised Content Plan for Rural Entrepreneurial Education

The final, Stage 5, synthesizes analytical findings and recommendations into a coherent Academic Standardised Content Plan for Rural Entrepreneurial Education. This plan serves as a teaching framework, defining what should be taught to ensure students develop competences relevant to rural entrepreneurship and innovation.

The Academic Standardised Content Plan should be standardised (providing common structure and learning objectives applicable across institutions) yet flexible (allowing adaptation to local contexts, institutional profiles and regional priorities). It should organize rural E&I education into coherent thematic modules



grouped into broader content blocks. Each module should address specific knowledge domains and competence areas identified through gap analysis (Stage 3) and reflect the recommendations formulated in Stage 4.

An exemplary structure of the Plan developed within the framework of the Engine project is presented in Table 2.

Table 2. The proposed structure of the Academic Standardised Content Plan for Rural Entrepreneurial Education

No.	Title / Focus
Block A – Foundations of Rural Entrepreneurship and Innovation <i>Developing understanding of the rural innovation context and personal entrepreneurial competences</i>	
1	The Nature of Rural Entrepreneurship and Innovation – specific characteristics, scope and examples of rural enterprises and innovation
2	Structural Barriers and Development Challenges in Rural Areas – economic, social, infrastructural, environmental, technical and market constraints shaping rural entrepreneurship and innovation
3	Building an Entrepreneurial Mindset for Rural Development – understanding attitudes, motivations and behaviours that drive local change
4	Identifying Local Needs and Resources – from idea to opportunity – recognising local potential
5	Creating Value in Resource-Constrained Environments – adapting business models and ideas to rural realities
Block B – Entrepreneurship & Innovation Ecosystems and Rural Collaboration <i>Understanding the institutional, territorial and partnership context of rural entrepreneurship and innovation</i>	
6	The Rural Entrepreneurship and Innovation Ecosystem – mapping key actors
7	EU Policies and Instruments for Rural Development – mechanisms, target groups, procedures
8	Collaboration and Local Innovation Networks in Rural Areas – how rural actors cooperate and share knowledge to create innovation
9	Place Branding and Short Supply Chains – building local identity, trust and market value
Block C – Management, Finance and Marketing for Rural Initiatives <i>Providing essential managerial, marketing and financial competences for small-scale rural enterprises</i>	
10	Managing Small-Scale Initiatives – planning, organising and implementing rural projects
11	Mobilising Local Resources – how to combine available assets (people, spaces, local materials) and small funding sources to start or sustain an initiative
12	Financing Options for Rural Ventures – exploring available sources and instruments for funding entrepreneurial activities in rural areas
13	Marketing and Communication for Rural Enterprises – understanding how to position and promote rural enterprises within local and wider markets
14	Doing Business Responsibly in Rural Communities – promoting ethical, social and environmental responsibility among rural entrepreneurs, with emphasis on fairness, transparency, inclusion, constructive communication and negotiation with rural stakeholders and sustainable practices aligned with EU values and principles
Block D – Digitalisation for Rural Transformation <i>Developing practical and strategic digital competences for innovation in rural environments.</i>	
15	Digital Tools for Rural Work and Collaboration – practical tools for online cooperation, communication and local project management
16	Emerging Technologies in the Rural Context – exploring how digital and smart technologies open new pathways for rural innovation, business and community development, including basic ethical, legal and data protection considerations
Block E – Sustainability, Quality and Social Innovation	



<i>Linking entrepreneurship and innovation with sustainability, quality assurance and community wellbeing, including adaptation to climate change and the strengthening of local resilience</i>	
17	Circular and Green Innovation in Rural Areas - resource efficiency and environmental innovation for small actors.
18	Quality, Safety and Certification in Rural Sectors - key standards and regulatory frameworks that ensure product quality, consumer trust and sustainable local development
19	Social Innovation and Public Services in Rural Contexts - innovative solutions that enhance wellbeing, inclusion and access to essential products and services in rural communities
20	Cultural and Natural Heritage as a Driver of Innovation - leveraging local heritage for creative and sustainable entrepreneurship and innovation

Source: D3.02. Academic Standardised Content Plan for Rural Entrepreneurial Education, Engine Consortium, 2025.

The Academic Standardised Content Plan should be developed in parallel with the Academic Profile of Rural Entrepreneur (see Chapter 3), which defines the knowledge, skills and attitudes students should acquire through rural E&I education, expressed as specific learning outcomes. Once both documents are drafted, they undergo joint review to ensure alignment - verifying that teaching content adequately supports competence development, learning outcomes are achievable through proposed modules and no critical gaps exist. Based on this review, the Content Plan may be adjusted to ensure full correspondence with the Student Profile, which serves as the primary reference point for competence-driven curriculum design. The methodology for developing the Student Profile and the alignment process between content and competences is detailed in Chapter 3.

The Academic Standardised Content Plan provides a comprehensive framework of teaching content organized into thematic modules. Institutions can implement this framework flexibly depending on their context:

- as a complete standalone course (integrating all or selected modules),
- as thematic blocks embedded into existing E&I courses,
- as specialized modules offered as electives,
- as content for applied projects or capstone experiences.

Developing an Academic Standardised Content Plan for Rural Entrepreneurial Education is not merely a technical exercise but a strategic process of curriculum transformation. It requires systematic review of existing programmes, honest assessment of gaps against rural E&I competences and creative design of teaching approaches that connect students with rural realities.

The methodology outlined in this section provides a practical roadmap for higher education institutions, combining structured analytical criteria, competence-based gap analysis, targeted recommendations and coherent content planning. While standardised in approach, it allows flexibility in implementation: pedagogical decisions (teaching methods, assessment strategies, implementation pathways) are made at the institutional level, ensuring adaptability to diverse educational settings. The ultimate goal is ensuring that graduates possess the specific knowledge, skills and attitudes needed to drive sustainable, community-oriented development in rural areas.

The Academic Standardised Content Plan, developed by applying the methodology described in this chapter, establishes the thematic foundation of



rural E&I education. Chapter 3 builds directly on this foundation, translating the gaps and recommendations identified in Stages 3 and 4 into a coherent Academic Profile of Rural Entrepreneur that defines the knowledge, skills and attitudes students should develop.

Chapter 3. Development of the Academic Profile of Rural Entrepreneur

3.1. Scope and procedure for the Development of the Academic Profile of Rural Entrepreneur

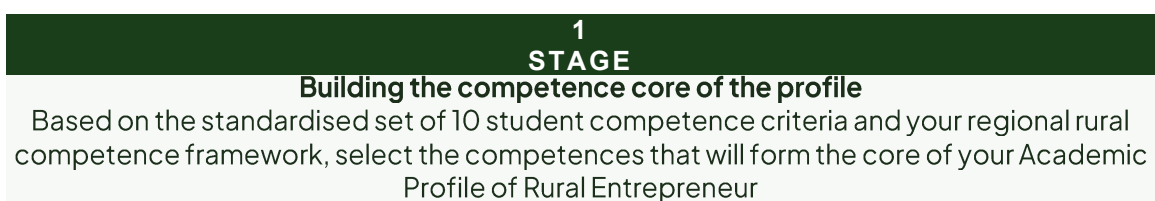
The purpose of this chapter is to provide a methodological framework for higher education institutions to develop the Academic Profile of Rural Entrepreneur - a structured competence profile defining the knowledge, skills and attitudes (KSAs) that students should develop to effectively drive entrepreneurship and innovation in rural contexts.

The profile is developed drawing on three complementary sources:

- the standardised set of 10 student competence criteria reflecting E&I competences essential in rural contexts and relevant to rural development priorities, grounded in academic literature and consultations with E&I academic teachers at ENGINE partner universities,
- the rural competence framework derived from a systematic analysis of rural development needs and opportunities in your institution’s regional context (see Chapter 2, stage 3)
- the findings of the curriculum review conducted in accordance with the methodology described in Chapter 2, which inform the description of knowledge, skills and attitudes for each competence in the profile.

The procedure consists of three major stages, as shown in Figure 3.

Figure 3 Key stages for designing the Academic Profile of Rural Entrepreneur



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**2
STAGE**

Describing competences through KSAs

For each selected competence, define the expected knowledge, skills and attitudes (KSAs), drawing on the curriculum review findings, which indicate what knowledge, skills and attitudes existing programmes already develop in relation to each competence, and where gaps and weaknesses remain, indicating what needs to be added or strengthened in the profile description



**3
STAGE**

Design the Academic Profile of Rural Entrepreneur

For each competence, formulate clear learning outcomes and verify coherence with the Academic Standardised Content Plan for Rural Entrepreneurial Education

Source: ENGINE Consortium elaboration

Throughout this process, maintain clear documentation of decisions and rationale. You may engage academic staff through consultations to validate findings or consider regional stakeholder input to ensure practical relevance of competence profile.

3.2. Building the Academic Profile of Rural Entrepreneur: from competence selection to profile design

This section guides you through the three stages of developing the Academic Profile of Rural Entrepreneur: building the competence core of the profile, describing each competence through knowledge, skills and attitudes, and designing the final profile with learning outcomes. The process concludes with a coherence verification ensuring alignment between the profile and the Academic Standardised Content Plan for Rural Entrepreneurial Education developed in accordance with the methodology described in Chapter 2.

Together, these stages translate the findings of the curriculum review, the standardised set of 10 student competence criteria and your regional rural competence framework into a coherent, regionally grounded competence profile that defines what rural E&I graduates should know, be able to do and value.

Stage 1: Building the competence core of the profile

Building on the regional competence framework developed according to the methodology described in Chapter 2 (stage 3), compare your regional rural E&I competences with the standardised set of 10 student profile criteria reflecting E&I competences essential in rural contexts and relevant to rural development priorities, grounded in academic literature and consultations with E&I academic teachers at ENGINE partner universities (Table 3).



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Table 3. Analytical criteria for competence assessment

Criterion Name	What to assess	KNOWLEDGE	SKILLS	ATTITUDES
Entrepreneurial competence	Entrepreneurial intention and mindset.	knows and understands the fundamental concepts and mechanisms of the economic functioning of profit- and non-profit-oriented entities in rural areas, including the idea of reward-based activity orientation.	is able to practically apply theoretical techniques and methods to develop business plans and knows how to implement reward-based mechanisms when identifying, designing, and launching rural development initiatives.	demonstrates openness to engage in social or business initiatives related to rural development and shows an entrepreneurial mindset: proactive behavior, willingness to take risks, resilience, and readiness to face challenges.
Innovativeness	Business and social innovation; innovation addressing local challenges through community-driven solutions.	knows and understands definitions and types of innovation, as well as the conditions fostering innovation in rural contexts. Knows models and tools for idea generation and innovation management.	is able to generate and evaluate innovative ideas, design creative solutions, and adapt existing approaches to rural needs. Is able to apply methods supporting innovation and lead or support innovation processes in projects or organizations.	expresses openness and willingness in towards creative solutions for rural development. Actively seeks out and supports innovative practices and takes initiative in proposing new solutions to improve life in rural areas. Values creativity, adaptability, and learning from failure.
Rural context competence	Understanding of local contexts, including functioning of rural entities, specific human behaviours and cultural dynamics.	knows and understands key definitions related to rural areas and the functioning of business, administrative and social entities; is aware of the specific features of the rural environment and human behaviour.	is able to identify sources of information related to rural entities functioning and has practical skills related to administrative processes required during rural development initiatives.	demonstrates interest in deepening knowledge and skills regarding the implementation of rural development activities and shows motivation to engage with rural-specific realities.
Marketing Competence	Marketing competences to communicate value effectively, attract customers, and enhance the visibility and economic viability of rural initiatives.	knows and understands general marketing tools, methods, and techniques, as well as their specific relevance and adaptation to the rural context – including promoting local products, services, and community-based initiatives.	is able to apply marketing techniques effectively to increase the visibility and attractiveness of products, services or initiatives, selecting tools that suit local conditions and audiences.	demonstrates openness to identifying marketing opportunities, both conventional and rural-specific, and takes initiative in applying them to enhance local development and outreach.
Financial and fundraising competence	Financial capacity, including budgeting, fundraising, basic accounting, and financial accountability.	knows and understands the key concepts, definitions, and principles related to financing and fundraising of development initiatives, including rural-specific funding schemes. Understands the fundamentals of accounting and financial planning for both business and social projects in rural settings.	is able to identify and assess potential funding sources—public, private, or community-based – relevant to rural initiatives. Can prepare appropriate financial documentation, apply for funding, and manage budgeting, reporting, and accountability processes for rural projects.	takes initiative in searching for funding opportunities, especially tailored to the rural context. Demonstrates responsibility and independence in securing, allocating, and tracking financial resources to ensure the viability of local development efforts.

Communication and negotiation competence	Effective communication and negotiation for building partnerships, presenting ideas, and engaging diverse stakeholders.	knows and understands key concepts, channels, and methods of communication and negotiation, particularly in the context of designing and implementing initiatives in rural areas.	is able to practically apply communication and negotiation techniques effectively during the planning and execution of rural development projects.	is open and proactive in seeking knowledge about communication and negotiation strategies and shows readiness to apply them in practice to foster cooperation and stakeholder engagement in rural settings.
Sustainability competence	Awareness of environmental and social aspects of rural initiatives	knows and understands definitions and concepts related to sustainability, particularly in the rural development context.	is able to apply methods and techniques and concepts related to sustainability, particularly in the rural development context.	is open to acquiring new knowledge and skills in the field of sustainability and actively prefers environmentally friendly and socially responsible solutions.
Networking competence	Ability to create and maintain networks to support and build trust-based relationships.	knows and understands the importance of building professional relationships, structures of cooperation, mechanisms of networking, and models of cross-sector collaboration. Is aware of the benefits networking brings to the development of initiatives, including in rural contexts.	is able to establish and maintain relationships with various stakeholders, build cooperation networks around initiatives, initiate partnerships, and engage others in joint actions. Uses communication and organizational tools to effectively manage network-based collaboration.	demonstrates openness, initiative, and proactivity in building relationships. Values cooperation, willingly shares knowledge and resources, and acts with trust, empathy, and mutual support.
Digital competence	Digital mindset combined with digital education. Ability to develop online business models	knows and understands technological and digital transformations in the modern economy and their impact on entrepreneurship and innovation, including business models, particularly in rural settings.	is able to use digital tools, methods and techniques to develop and implement rural development initiatives.	is open and motivated to use digital technologies to organize and manage activities that support rural development.
Managerial Competence	Managerial competence that supports decision-making, coordination of people and resources, crisis response, and strategic thinking	knows and understands the principles, methods, and tools of effective management, including organizational structures, time management, human resource coordination, delegation, and conflict resolution. Understands how these are applied in rural enterprises, projects, and institutions.	is able to organize and coordinate work effectively, allocate resources, delegate responsibilities, manage people and processes, resolve challenges, and adjust operations to changing conditions – particularly in the context of rural development and limited infrastructure.	demonstrates responsibility, initiative, and a structured approach to leading and managing rural activities. Is open to developing leadership capabilities, values cooperation, and seeks continuous improvement in the organization and coordination of local development efforts.

Source: D3.01. Formula for Identifying and Evaluating the Teaching of Entrepreneurship and Innovation, Engine Consortium, 2025.

For each regional rural competence assess whether it fully overlaps with one of the 10 student profile criteria, is partially aligned, or is specific to your regional context only. On this basis, select the competences that will form your profile, applying the following rule:



- include a minimum of 6 competences from the standardised set of 10 student profile criteria that are relevant to your regional rural development context. This ensures that your profile is grounded in academically validated criteria and shares a common core with profiles developed by other institutions, making it comparable and transferable across European higher education contexts,
- complement these with additional competences from your regional rural competence framework that are not covered by the standardised criteria, reflecting the specific entrepreneurial and innovation needs of your rural region.

The result is the target competence list for your Academic Profile of Rural Entrepreneur.

To facilitate documentation of your competence selection, a ready-to-use template is provided in Appendix 2 (Table 2), including examples of competence selection drawn from ENGINE partner universities.

NOTE

If your institution has not yet developed a regional rural competence framework, refer to the guidance provided in Chapter 2, Stage 3 on alternative sources for defining your regional rural E&I competence needs.

Stage 2: Describing competences through KSAs

The knowledge, skills and attitudes (KSAs) descriptions form the core of the Academic Profile of Rural Entrepreneur and provide the basis for formulating learning outcomes in the next stage.

To describe each competence, follow these steps:

1. For each competence selected in Stage 1, review the corresponding findings from the curriculum review conducted in Chapter 2. Identify what knowledge, skills and attitudes existing programmes already develop in relation to this competence – these form the starting point for your description.
2. Identify gaps and weaknesses revealed by the curriculum review – areas where existing programmes are insufficient or where the rural dimension is lacking. These indicate what needs to be added or strengthened in your KSA description.
3. Formulate the KSA descriptions for each competence by combining the knowledge, skills and attitudes already developed in existing programmes with those that are missing or need to be strengthened. Use the Competence Profile Development provided in Appendix 2 (Table 2), which includes examples from ENGINE partner universities.

Stage 3. Designing the Academic Profile of Rural Entrepreneur

This final stage focuses on formulating learning outcomes for each selected competence and verifying the coherence of the completed profile with the Academic Standardised Content Plan for Rural Entrepreneurial Education



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developed in accordance with the methodology described in Chapter 2.

For each competence, formulate clear learning outcomes – concise statements describing what a student is expected to know, understand or be able to do after developing that competence. Learning outcomes should be realistic, measurable and aligned with the KSA descriptions developed in Stage 2.

The Academic Profile offers a clear framework to guide programme design and ensure constructive alignment between intended competences, teaching and learning activities, and assessment. The profile should be sufficiently universal to serve as a reference point across different institutional contexts, while remaining grounded in the specific needs, opportunities and constraints of the region in which the institution operates. Table 4 presents an exemplary structure of the Profile developed within the ENGINE Project.

Table 4. The proposed structure of the Academic Profile of Rural Entrepreneur

Competence	Description			Learning outcomes
	Knowledge	Skills	Attitudes	
1. Entrepreneurial and Innovation Competence in Rural Contexts	<ul style="list-style-type: none"> - Understands core concepts of entrepreneurship, business models and value creation in profit and non-profit rural entities. - Knows typical forms of rural entrepreneurship (family businesses, cooperatives, social enterprises, agritourism, craft-based ventures). - Understands opportunity recognition, risk and uncertainty in rural markets, including seasonality and small market size. - Understands definitions, types and processes of innovation (product, process, organisational, social) relevant to rural development. - Knows tools and methods for creativity, idea generation and innovation management, and recognises both technological and non-technological sources of innovation, including local knowledge. 	<ul style="list-style-type: none"> - Identifies and evaluates entrepreneurial opportunities that address rural needs. - Designs viable business models and simplified business plans for rural ventures. - Assesses risks and takes informed decisions about launching or adapting ventures. - Generates, adapts and develops innovative ideas and solutions suited to rural constraints. - Plans and facilitates innovation processes, including co-creation with rural stakeholders and adaptation of existing technologies to local conditions. 	<ul style="list-style-type: none"> - Demonstrates proactiveness, initiative and resilience in uncertain environments. - Is open to experimentation, questioning assumptions and embracing alternatives. - Values local and experiential knowledge as legitimate drivers of entrepreneurship and innovation. - Shows ethical, community-oriented behaviour and respect for local traditions. - Accepts uncertainty and views failures as opportunities for learning and improvement 	<p>Graduates will be able to analyse rural challenges and transform them into viable business or social opportunities, design and justify entrepreneurial and innovative solutions, and take responsible action that strengthens rural resilience and improves quality of life, combining modern approaches with local resources and community needs.</p>
2. Rural context, territorial and heritage competence	<ul style="list-style-type: none"> - Understands socio-economic, cultural and environmental characteristics of rural territories, including institutions, actors and policies. - Knows main agricultural and rural development 	<ul style="list-style-type: none"> - Maps and interprets local resources, actors and dynamics to support initiative design. - Integrates local regulations and policy instruments into project and business planning. - Designs context- 	<ul style="list-style-type: none"> - Demonstrates respect for rural identity, traditions and community knowledge. - Is sensitive to cultural diversity and demographic challenges in rural 	<p>Graduates will be able to analyse a rural territory, identify its resources and constraints, and design initiatives that align with local characteristics, policies and</p>



	<p>policies, support schemes and regulatory frameworks affecting rural initiatives.</p> <ul style="list-style-type: none"> - Is familiar with local natural and cultural heritage and their potential for entrepreneurship and tourism. 	<p>sensitive solutions that respect and valorise cultural and natural heritage.</p>	<p>areas.</p> <ul style="list-style-type: none"> - Shows motivation to engage with rural realities and contribute to territorial development. 	<p>community expectations</p>
3. Marketing, branding and market access competence	<ul style="list-style-type: none"> - Understands marketing principles (segmentation, targeting, positioning) and their adaptation to rural products, services and experiences. - Knows territorial marketing and place branding strategies, including DOP/IGP and heritage-based branding. - Understands traditional and digital distribution channels, short supply chains and tourism channels relevant for rural initiatives. 	<ul style="list-style-type: none"> - Develops value propositions and brand identities rooted in local heritage and territorial identity. - Designs and implements marketing strategies using low-cost and digital tools (social media, storytelling, e-commerce). - Selects and manages appropriate distribution channels to reach local and external markets. 	<ul style="list-style-type: none"> - Values authenticity, transparency and ethical communication. - Appreciates local culture and identity as strategic assets. - Is customer-oriented while remaining respectful of community interests. 	<p>Graduates will be able to design, communicate and deliver compelling rural brands and marketing strategies that enhance visibility, market access and economic viability of rural initiatives.</p>
4. Financial, strategic, and fundraising competence	<ul style="list-style-type: none"> - Understands basic accounting, budgeting, cash-flow management and financial reporting. - Knows public, private and community-based funding sources relevant to rural projects (subsidies, grants, microfinance, cooperative schemes). - Understands risk concepts and financial specifics of rural investments (seasonality, price volatility, small scale). 	<ul style="list-style-type: none"> - Prepares simple budgets, financial projections and funding applications for rural initiatives. - Analyses financial statements and basic indicators to assess viability and performance. - Identifies and selects appropriate funding instruments and manages financial reporting obligations. 	<ul style="list-style-type: none"> - Acts responsibly and transparently in handling financial resources. - Shows persistence in searching for suitable funding opportunities. - Considers long-term sustainability and community impact in financial decisions. 	<p>Students will be able to plan, secure and manage financial resources for rural micro and small enterprises, develop strategic and financial plans, maintain basic financial records, and ensure transparency, accountability and long-term economic sustainability through effective fundraising and financial monitoring.</p>
5. Communication and negotiation competence	<ul style="list-style-type: none"> - Understands principles, channels and techniques of interpersonal, organisational and public communication in rural settings. - Knows basics of negotiation, mediation and conflict management with diverse stakeholders. - Is familiar with digital communication tools and e-commerce communication. 	<ul style="list-style-type: none"> - Communicates clearly and persuasively with different rural stakeholders (farmers, SMEs, authorities, NGOs, citizens) in accessible language. - Adapts communication style to cultural norms and local expectations. - Negotiates and mediates to align interests, build agreements and resolve conflicts. 	<ul style="list-style-type: none"> - Demonstrates active listening, empathy and openness to feedback. - Respects diverse perspectives and knowledge systems. - Seeks collaborative, win-win solutions 	<p>Graduates will be able to communicate and negotiate effectively in multi-stakeholder rural environments, building trust and supporting the implementation of rural initiatives</p>
6. Sustainability competence	<ul style="list-style-type: none"> - Understands environmental, social and economic dimensions of sustainability and their relevance to rural territories. - Knows circular economy 	<ul style="list-style-type: none"> - Integrates sustainability criteria into project and business planning. - Identifies and applies sustainable practices (resource efficiency, waste reduction, by-product valorisation, 	<ul style="list-style-type: none"> - Prefers environmentally friendly and socially responsible options. - Demonstrates long-term thinking and responsibility towards future 	<p>Graduates will be able to design and manage rural initiatives that contribute to sustainable development, balancing economic</p>

	<p>principles, climate and resource challenges in rural areas, and related policy frameworks (e.g. SDGs).</p> <ul style="list-style-type: none"> - Is aware of sustainable practices in agriculture, tourism and rural services 	<p>responsible tourism).</p> <ul style="list-style-type: none"> - Uses basic tools to assess environmental and social impacts of rural initiatives 	<p>generations.</p> <ul style="list-style-type: none"> - Is willing to challenge unsustainable practices and advocate for change. 	<p>viability with environmental protection and social cohesion</p>
7. Networking and partnership competence	<ul style="list-style-type: none"> - Understands structures and mechanisms of cooperation and networking in rural ecosystems (associations, cooperatives, clusters, LAGs, public-private partnerships). - Knows basic governance models and roles of key stakeholders (science/education, business, public administration, civil society). 	<ul style="list-style-type: none"> - Identifies relevant stakeholders and builds trust-based relationships. - Organises and participates in networks, partnerships and collaborative projects. - Mobilises stakeholders around common goals and coordinates joint actions. 	<ul style="list-style-type: none"> - Shows openness, initiative and generosity in sharing knowledge and resources. - Values cooperation, mutual support and collective problem-solving. - Respects different interests and seeks inclusive participation 	<p>Graduates will be able to build and manage effective networks and partnerships that strengthen rural initiatives and extend their impact</p>
8. Digital competence for rural transformation	<ul style="list-style-type: none"> - Understands digital transformation trends and their implications for rural entrepreneurship and innovation. - Knows key digital tools and platforms (communication, e-commerce, basic data analytics, cloud and collaborative tools), and challenges of low-connectivity contexts. - Is aware of ethical, legal and security issues related to data, AI and digitalisation 	<ul style="list-style-type: none"> - Uses digital tools to communicate, manage information, promote rural products/services and support decision-making. - Designs simple, context-appropriate digital strategies, including hybrid analog-digital workflows suitable for low-infrastructure environments. - Supports rural SMEs in adopting practical, low-barrier digital solutions 	<ul style="list-style-type: none"> - Is curious and confident in learning and applying new technologies. - Values inclusive and accessible digital solutions that reduce, rather than deepen, digital divides. - Acts responsibly regarding data protection and digital ethics 	<p>Graduates will be able to leverage digital tools and strategies to enhance efficiency, market access and innovation in rural enterprises and communities, taking into account infrastructural and social constraints</p>
9. Managerial competence	<ul style="list-style-type: none"> - Knows principles, methods and tools of management, including organisational structures, HR management, time management and conflict resolution. - Understands basics of project and operations management suited to small-scale rural initiatives. - Is aware of regulatory, institutional and labour-market specificities affecting rural organisations. 	<ul style="list-style-type: none"> - Organises and coordinates work, allocates resources and delegates tasks in rural teams and organisations. - Plans, implements and monitors small-scale projects using simple project-management tools. - Responds to operational challenges in flexible, problem-solving ways, using local resources and partnerships. 	<ul style="list-style-type: none"> - Demonstrates responsibility, reliability and commitment to community-oriented leadership. - Shows flexibility and resilience under resource constraints and multiple roles. - Values continuous improvement, collaboration and transparent governance. 	<p>Graduates will be able to manage teams, operations and projects in rural enterprises and organisations, ensuring effective use of resources, timely delivery of results and alignment with community and stakeholder expectations.</p>
10. Legal and regulatory competence	<ul style="list-style-type: none"> - Has a basic understanding of the main regulatory areas affecting rural enterprises and is aware that specific legal requirements differ across countries. - knows the main types of national and EU-level institutions and sources that provide legal 	<ul style="list-style-type: none"> - Identifies and interprets a key legal requirements relevant to rural enterprises, including compliance obligations, licensing, and sector-specific standards. - Searches for, selects, and uses authoritative legal and regulatory sources at national and 	<ul style="list-style-type: none"> - Demonstrates a proactive mindset towards compliance and risk prevention. - Shows responsibility, transparency, and respect for legal and ethical norms. - Maintains openness to continuous learning in response 	<p>Graduates will be able to identify key regulatory requirements affecting rural enterprises, use national and EU sources to guide compliant decisions, assess the relevance of rural development</p>

	guidance for rural enterprises. – Understands the main types of rural development schemes and funding instruments as well as core concepts related to data protection and intellectual property/geographical indications.	EU level. – Applies basic regulatory principles to decisions involving rural development schemes, funding instruments, data protection, and intellectual property/geographical indications. – Communicates regulatory implications clearly to stakeholders and integrates compliance considerations into planning and operations.	to evolving regulations. – Values accuracy and diligence when assessing legal information and its implications for rural activities	schemes, funding instruments, data protection and IP/GI rules, and integrate these considerations into basic operational and strategic planning
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Source: D3.03. Academic Profile of Rural Entrepreneur (universal EU-wide), Engine Consortium, 2025

The final step is to verify coherence between the Academic Profile of Rural Entrepreneur and the Academic Standardised Content Plan for Rural Entrepreneurial Education. It should be verified through a synthetic assessment of how well the proposed educational content aligns with the E&I competences required to launch and grow business and social initiatives in rural areas, as already mentioned in Chapter 2.

Each competence in the profile should be supported by corresponding teaching content in the Content Plan. If a competence included in the profile is not reflected in the Content Plan, consider the following options:

- (1) add the missing teaching content to the Content Plan to ensure the competence can be effectively developed;
- (2) modify or expand existing content blocks in the Content Plan to better address the competence; or
- (3) if the competence cannot be realistically addressed within your institution's teaching framework at this stage, reconsider its inclusion in the profile.

This iterative verification ensures constructive alignment between what is taught and what students are expected to achieve.



Chapter 4. Stakeholders of Rural Growth: Identification, Assessment, and Standardised Framework

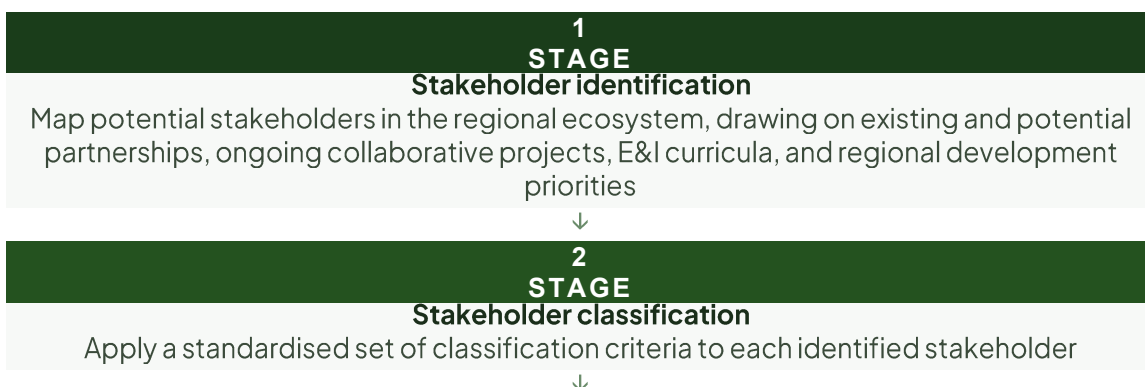
4.1. Scope and procedure for the development of Standardised Stakeholders of Rural Growth Framework

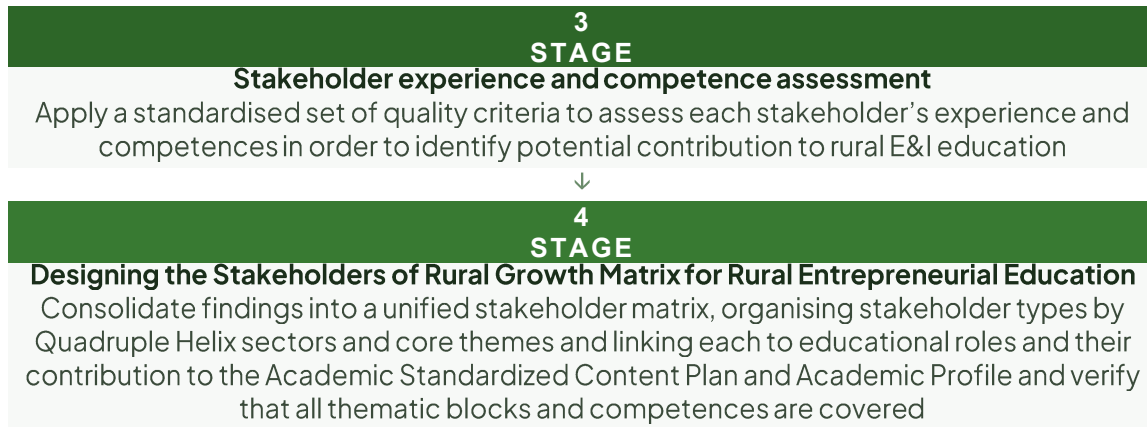
Stakeholders of Rural Growth are individuals, groups, or organisations, such as farmers, SMEs, NGOs and public bodies, that have an interest in or influence on the development of E&I in rural areas, including actors operating outside rural areas but with a clear impact on rural development, and who can support the educational process by providing practical insights, access to real-life cases and networks, and by addressing specific territorial needs.

The development of a Standardised Stakeholders of Rural Growth framework requires a systematic approach connecting three key elements: (1) mapping of relevant stakeholders present in the regional ecosystem, (2) assessment of their competences, experience and potential contribution to rural E&I education, and (3) an understanding of how their expertise aligns with the curricular content defined in the Academic Standardized Content Plan for Rural Entrepreneurial Education and the competence development needs reflected in the Academic Profile of Rural Entrepreneur.

The procedure consists of four stages (Figure 4), described in detail in Sections 4.2 and 4.3.

Figure 4 Key stages for designing the Standardised Stakeholders of Rural Growth Framework





Source: ENGINE Consortium elaboration

4.2. Stakeholder analysis: from identification and classification to competence assessment

This section presents a unified methodological approach for identifying, classifying and characterising stakeholders with the potential to contribute to rural E&I education, creating a practical resource for the integration of external expertise into academic curricula.

Stage 1: Stakeholder identification

Build an initial list of relevant stakeholders – both existing collaborators and potential future partners – by drawing on the following sources: (1) institutional knowledge of existing partnerships and cooperation agreements with external organisations; (2) ongoing collaborative projects, internship programmes and advisory arrangements; (3) existing E&I study programmes, to identify stakeholder types already embedded in curricula. Additionally, an analysis of territorial development priorities and rural stakeholder landscapes in the region should be conducted to broaden the scope of identification beyond existing institutional networks. The scope of identification should be broad – actors who do not explicitly operate in entrepreneurship and innovation may still offer a relevant contribution to rural E&I education.

Stage 2: Stakeholder classification

Once the initial list of stakeholders has been compiled, categorise stakeholders within the regional ecosystem and ensure a structured mapping, applying a standardised set of classification criteria (Table 5).



Table 5. Analytical criteria for stakeholder classification

CLASSIFICATION CRITERIA	Explanation of the Criteria
Type of stakeholder	Allows the classification of stakeholders according to their institutional type and legal or functional form. Examples include: university / higher education institution; research institute / R&D center; academic expert or educator, small and medium-sized enterprise (SME), family business, startup, farmer-entrepreneur, business support organisation (e.g. chamber of commerce, cluster), local or regional government authority, public agency or development institution, public education authority or funding body, non-governmental organisation, Local Action Group, cooperative / social enterprise, association / foundation, community leader.
Sector according to the Quadruple Helix concept	Refers to the stakeholder's affiliation with one of the four key sectors defined in the Quadruple Helix model. The four sectors include: 1. Science & Education, 2. Business & Economy, 3. Public Administration & Policy, 4. Civil Society & Community.
Role of the stakeholder in the educational process	Captures the specific function or contribution of the stakeholder within educational activities. Examples include: mentor, lecturer/trainer, advisor, project partner, internship organiser.
Level of stakeholder involvement	Refers to the depth, frequency, and strategic importance of the stakeholder's participation in educational initiatives. It distinguishes between different levels of commitment and responsibility in the context of collaboration with universities. Examples include: Strategic partner – involved in long-term cooperation, Operational-level contributor – regularly engaged in the implementation of activities (e.g. workshops, mentoring, joint projects), Consultant – provides expert input on specific issues, Ad hoc collaborator – involved occasionally, on a short-term or one-off basis.
Operational scope (geographical reach)	Indicates the geographical scale at which the stakeholder operates and implements their activities. It helps assess the reach, influence, and transferability of their experience, networks, and good practices. Categories include: Local – focused on a single municipality, village, or local community, Regional – active across multiple localities within a region or administrative province, National – operating at a country-wide level with broader policy or programme impact, International – involved in transnational cooperation, EU-funded projects, or global partnerships.
Nature of engagement with the university	Identifies the form and purpose of the stakeholder's collaboration with the university. It reflects the type of involvement in educational activities and helps assess the stakeholder's functional role. Examples include: educational activities, research activities, advisory services, organisational support, financial support, other.

Source: D3.01. Formula for Identifying and Evaluating the Teaching of Entrepreneurship and Innovation, Engine Consortium, 2025.

Document each identified stakeholder using the Stakeholders of Rural Growth Template provided in Appendix 3 (Table 1), ensuring that all classification criteria are consistently applied across all stakeholders. To facilitate this process, the template includes examples from ENGINE partner universities showing how stakeholders from different sectors and contexts were identified and classified.


NOTE

Please note that the classification at this stage should remain at a general, typological level – describing types of stakeholders rather than identifying specific named organisations or individuals. The selection and engagement of concrete partners takes place at a later stage, during the preparation of teaching materials or the delivery of the educational process and should follow the applicable data protection regulations.



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Stage 3: Stakeholder experience and competences assessment

Having classified the identified stakeholders, the third stage focuses on assessing the depth and relevance of their experience and competences by applying a standardised set of quality criteria to assess each stakeholder's suitability and potential contribution to rural E&I education (Table 6). For stakeholder types already collaborating with the institution, describe their confirmed competences and experience; for potential future partners, describe the expected or desired profile.

Table 6 Analytical criteria for stakeholder assessment

QUALITY CRITERIA	Explanation of the Criteria
Competencies and experience in entrepreneurship and innovation relevant to rural areas	Possession of relevant theoretical and/or practical knowledge and skills in entrepreneurship and innovation, with a demonstrated engagement in business activities or the provision of support for innovative initiatives specifically targeting rural areas.
Experience in implementing or advising on local or regional development	Demonstrated involvement in initiatives that support local or regional development, particularly through collaboration with public institutions, civil society actors, or community groups. This includes both advisory and implementation roles in planning, executing, or evaluating development policies and projects. Examples include: Cooperation with local government units, NGOs, or Local Action Groups (LAGs), consulting services for local communities, participation in the design or delivery of development programs and strategies, shaping and advising on policies, initiatives, or funding instruments aimed at rural entrepreneurship and innovation.
Affiliations with rural areas, underpinned by in-depth knowledge of their unique socio-economic and cultural specificities	Demonstrated and sustained connection with rural areas, derived from professional affiliation, personal background, community involvement, or participation in rural development initiatives. This connection should reflect an informed understanding of rural dynamics, including socio-economic conditions, cultural patterns, and development challenges.
Ability to operate at the intersection of sectors (cross-sector potential)	Demonstrated capacity to engage across multiple sectors (e.g. business – education – public administration – civil society), which enhance the stakeholder's capacity to integrate various actors within development and educational processes. Examples include: experience in partnerships combining academic, business, and policy elements, participation in multi-stakeholder initiatives or rural innovation networks, bridging roles between communities and institutional actors.

Source: D3.01. Formula for Identifying and Evaluating the Teaching of Entrepreneurship and Innovation, Engine Consortium, 2025.

The results of the assessment should be documented using the Stakeholders of Rural Growth Template provided in Appendix 3 (Table 2), which includes illustrative examples from ENGINE partner universities demonstrating how the criteria are applied across different stakeholder types and regional contexts. Findings may be validated through consultation with academic staff, drawing on their direct experience with external collaborations and teaching practice.



4.3. Standardised Stakeholders of Rural Growth Matrix for Rural Entrepreneurial Education

Drawing on the findings captured through the template provided in Appendix 3 (Tables 1 and 2), the fourth stage consolidates the results of the stakeholder analysis into a Standardised Stakeholders of Rural Growth Matrix for Rural Entrepreneurial Education. The matrix organises identified stakeholder types by Quadruple Helix sectors and core themes, linking each to specific educational roles and indicating their potential contribution to the Academic Standardised Content Plan for Rural Entrepreneurial Education and to the student competences defined in the Academic Profile of Rural Entrepreneur. It thus provides a practical guide for integrating relevant regional actors into rural E&I education, ensuring that teaching content and competence development are directly informed by professional and regional expertise

An exemplary matrix developed within the ENGINE project is presented in Table 7.

Table 7 The proposed structure of the Standardised Stakeholders of Rural Growth Matrix for Rural Entrepreneurial Education

Quadruple Helix Sector	Core Themes	Harmonised Role of Stakeholder in the Educational Process	Contribution to Content Plan	Impact on Academic Profile of Rural Entrepreneur
S1 - Science & Education	1. Multidisciplinary Scientific Expertise	Educational Content Review: May provide validation of teaching materials for relevance and quality. Expert Advisory: Can enable specialised guidance on rural development and scientific methodologies.	Block B - Entrepreneurship & Innovation Ecosystems and Rural Collaboration	Full coverage of all 10 competences. Highest impact on:
	2. Agrifood sector expertise		Block A - Foundations of Rural Entrepreneurship and Innovation	1. Entrepreneurial and Innovation Competence in Rural Contexts
	3. Digital and innovation mentoring	Guest Lecturing: May deliver specialised lectures on technical and scientific subjects.	Block D - Digitalisation for Rural Transformation	7. Networking and partnership competence
	4. Research-based knowledge	Innovation Facilitation: Might support research-to-market validation and technology transfer for student	Block E - Sustainability, Quality and Social Innovation	8. Digital competence for rural transformation



		<p>projects.</p> <p>Research Support: Can provide scientific literature, data, and evidence bases for student projects.</p>		
S2 – Business & Economy	<p>1. Rural SMEs (e.g., agribusiness, tourism, services, crafts)</p> <p>2. Financial Services & Investment</p> <p>3. Business Support & Innovation Infrastructure</p>	<p>Case and Challenge Provider: May contribute industry perspectives, real-world business hurdles (agrifood, energy, tourism), and cases for challenge-based learning.</p> <p>Professional Mentor and Advisor: Can provide practitioner talks, guest sessions, and expert feedback on student projects and financial feasibility.</p> <p>Internship and Practice Facilitator: Might host study visits and provide opportunities for hands-on experience in sales, marketing, and operational management where feasible.</p>	<p>Block C – Management, Finance and Marketing for Rural Initiatives</p> <p>Block A – Foundations of Rural Entrepreneurship and Innovation</p> <p>Block B – Entrepreneurship & Innovation Ecosystems and Rural Collaboration</p> <p>Block E – Sustainability, Quality and Social Innovation</p>	<p>1. Entrepreneurial and Innovation Competence in Rural Contexts</p> <p>4. Financial, Strategic, and Fundraising Competence</p> <p>3. Marketing, Branding and Market Access Competence and 7. Networking and Partnership Competence</p> <p>6. Sustainability Competence</p> <p>8. Digital Competence for Rural Transformation</p> <p>9. Managerial Competence</p>
S3 – Public Administration & Policy	<p>1. Rural and Territorial Development Policy</p> <p>2. Local Governance and Public Services</p>	<p>Expert Advisory: Can offer policy guidance on rural development and territorial strategies.</p> <p>Data & Policy Insights: May provide regulatory data and policy implementation insights.</p> <p>Project Partnership & Facilitation: Might act as institutional partners and multi-stakeholder facilitators.</p> <p>Access Facilitation: Can enable connections to practitioners, SMEs,</p>	<p>Block B – Entrepreneurship & Innovation Ecosystems and Rural Collaboration</p> <p>Block E – Sustainability, Quality and Social Innovation</p>	<p>1. Entrepreneurial and Innovation Competence (as applicable)</p> <p>2. Rural context, territorial and heritage competence</p>



		and community projects where feasible.		
S4 – Civil Society & Community	1. Social Innovation and Inclusion 2. Cultural and Natural Heritage Valorisation 3. Community-Led Education and Outreach	Challenge and Case Provider: May contribute real-world community projects and practical insights based on local territorial knowledge and experience. Community Outreach Partner: Might facilitate social innovation workshops, community engagement, and co-creation activities. Community-based Capacity Builder: Can deliver practical sessions focused on community-based learning, traditional skills, and local knowledge transfer where feasible.	Block E – Sustainability, Quality and Social Innovation Block A – Foundations of Rural Entrepreneurship and Innovation	1. Entrepreneurial and Innovation Competence in Rural Contexts 2. Rural context, territorial and heritage competence 5. Communication and Negotiation Competence 6. Sustainability Competence 7. Networking and Partnership Competence

Source: D3.04 Stakeholders of Rural Growth, Engine Consortium, 2026

The Standardised Stakeholders of Rural Growth Matrix consolidates the findings from the stakeholder analysis into a structured, sector-based framework that goes beyond individual stakeholder descriptions. By organising stakeholder types according to Quadruple Helix sectors and core thematic areas of expertise, it provides a clear picture of which actors can contribute to rural E&I education and in what capacity, explicitly linking each stakeholder type to harmonised educational roles and mapping their potential contribution to the thematic blocks of the Academic Standardised Content Plan for Rural Entrepreneurial Education and the student competences defined in the Academic Profile of Rural Entrepreneur.

Once the matrix has been developed, it is recommended to verify its coherence with the Academic Standardized Content Plan for Rural Entrepreneurial Education and the Academic Profile of Rural Entrepreneur. Check whether each thematic block of the Content Plan and each competence defined in the Profile is supported by at least one stakeholder type in the matrix. If a thematic block or competence is not covered, expand the stakeholder analysis by identifying additional actors whose expertise could address the gap, returning to Stage 1 if necessary. This verification ensures that the matrix provides comprehensive support for the full scope of the educational programme, rather than reflecting only the stakeholders



most readily available.

The matrix is intended as indicative guidance – stakeholder types and engagement formats should be selected based on local context, feasibility and availability and may be adjusted or replaced with suitable alternatives.

Chapter 5. Conclusions

The Local Leadership Toolkit addresses a persistent gap in higher education: the limited alignment between mainstream entrepreneurship and innovation education and the realities of rural development. Rural contexts require place-based opportunity recognition, community engagement, sustainability-oriented innovation, and the capacity to collaborate with diverse local actors. By offering a coherent and transferable methodological framework, this Toolkit supports higher education institutions in redesigning and strengthening their educational provision so that graduates are better prepared to initiate, lead and sustain entrepreneurial and innovative initiatives in rural areas.

The Toolkit's main contribution is a coherent, step-by-step methodology built around three complementary components: (i) an Academic Standardised Content Plan for Rural Entrepreneurial Education, providing a structured framework for designing and strengthening rural E&I curricula (Chapter 2), (ii) an Academic Profile of Rural Entrepreneur, defining the knowledge, skills and attitudes students should develop, together with the corresponding learning outcomes (Chapter 3) and (iii) a Standardised Stakeholders of Rural Growth framework, supporting the identification, assessment and engagement of relevant actors in the educational process (Chapter 4). Together, these elements promote constructive alignment between what is taught, how it is taught and assessed, and the competences rural development leaders need in practice.

Chapter 2 provides a practical roadmap for curriculum transformation. It combines a structured review of existing study programmes with an explicit competence-based gap analysis and the formulation of targeted recommendations. The methodology encourages institutions to document programme selection transparently, assess curricula against standardised analytical criteria (e.g., practical orientation, cooperation with external environments, soft skills and entrepreneurial mindset development, and the inclusion of local and regional context), and link findings to competence needs derived from rural development priorities. The outcome is not a rigid curriculum, but a standardised yet adaptable Content Plan organised into thematic blocks that institutions can implement as a standalone course, embed into existing modules, offer as electives, or use in applied projects and capstones depending on their institutional profile and regional priorities.

Chapter 3 complements this work by translating curriculum improvement into an explicit competence architecture. It guides HEIs in developing a standardised student profile that defines the KSAs and learning outcomes required for effective rural E&I leadership. The profile reflects a balanced set of competences, ranging from entrepreneurial and innovation competence in rural contexts to territorial and



heritage awareness, marketing and market access, financial and fundraising capability, communication and negotiation, sustainability, networking, digital competence, managerial competence, and basic legal (regulatory) awareness. Importantly, the Toolkit emphasises the verification of coherence between the Content Plan and the Student Profile, ensuring that proposed teaching content actually supports competence development and that intended learning outcomes are realistic and assessable.

Chapter 4 strengthens the Toolkit by providing a structured method for identifying, classifying and engaging Stakeholders of Rural Growth in rural E&I education. Through a standardised yet flexible approach, it helps HEIs connect relevant actors from across the Quadruple Helix to educational roles, thematic content areas and the development of specific student competences. In this way, stakeholder engagement becomes an integral part of curriculum design, ensuring that rural E&I education remains territorially grounded, practice-oriented and responsive to local development needs.

Finally, the Toolkit is designed as a practical instrument for adoption and continuous improvement. The templates provided in the appendices facilitate consistent documentation, comparability across institutions and reflective learning over time. While the framework is standardised in its logic and core components, it remains flexible in its implementation, encouraging HEIs to tailor competence frameworks and teaching priorities to their rural development context, and to iteratively refine content based on feedback from academic staff, students and regional stakeholders. In this way, the Local Leadership Toolkit contributes to strengthening higher education's capacity to support sustainable, community-oriented rural development across the European Union.



Appendix 1. Curriculum analysis template

1. Identification of Entrepreneurship & Innovation study programmes

Table 1. Identified Entrepreneurship & Innovation study programmes

Name of the study programme	(in the original language and in English translation)			
Level of study	(Bachelor, Master)			
Mode of study	(full-time / part-time)			
Responsible unit (faculty/institute/department)				
Field(s) of education / discipline(s)				
Language of instruction				
Number of ECTS credits				
Programme duration	(no. of semesters)			
Selected for analysis	✓ – if selected, also label the program as P1, P2, P3, etc.			

Source: Engine Consortium elaboration



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2. Analysis of the selected Entrepreneurship & Innovation study programmes

Table 2. Analysis of the selected Entrepreneurship & Innovation study programmes

No.	Criterion Name	Compliance level + justification		
		Name of the study program (P1)	Name of the study programme (P2)	Name of the study programme (P3)
1.	Area of education	<i>Example (KUE): High</i> - keywords entrepreneurship, innovation		
2.	Teaching methods used	<i>Example (KUE): High</i> - more than 4 methods, including highly interactive and practical formats (lectures, exercises, seminars, labs, workshops, internship)		
3.	Practical orientation ("learning by doing")	<i>Example (UniFG): High</i> - Case studies and team-based project work are integrated across multiple courses. Discussions and exercises are present in almost every course, promoting active application of concepts. Mandatory internship, seminars, on-site visits, and guest speakers from the corporate world are included in specific courses, further strengthening the program's practical orientation		
4.	Cooperation with external environment	<i>Example (KUE): High</i> - external cooperation is a core component of the program and is extensively implemented and systematically embedded across multiple modules. Such cooperation encompasses professional internships, through which students acquire experience in enterprises, institutions, and organizations, as well as course-based projects reaching out to real companies. The departments offering this program have concluded cooperation agreements with numerous partners, including representatives of enterprises, public institutions, development agencies, etc., formalizing their involvement in student education. Practitioners from the socio-economic milieu (representatives of enterprises and various institutions) actively contribute to the delivery of workshops and arrange study visits to their premises, during which students are exposed to real professional practices. For example, workshops on business planning, challenges, development opportunities, and financing conducted with an entrepreneur from the clothing industry (Contemporary Entrepreneurship); a study visit to the headquarters of an IT company accompanied by workshops on adapting technological trends (Digital Economy); workshops on entrepreneurial behaviour from the perspective of real estate agencies; and the analysis and assessment of conditions, challenges, and market dynamics in the Małopolska real estate market (Regional Development Strategies). Furthermore, diploma seminars frequently incorporate empirical research conducted in collaboration with external organisations		
5.	Development of soft skills	<i>Example (IPVC): Medium</i> - there is no course unit specifically designed for the exclusive teaching of soft skills. However, several course units include the development of soft skills alongside technical skills. For instance, the Entrepreneurship course aims to foster creativity and critical thinking; the Human Resource Management course develops leadership skills; and the Business Project course enhances students' ability to deal with real-world challenges. In addition, teaching methodologies across several course units involve group work, project presentations, and case-based learning, enabling students to develop teamwork, oral communication, problem-solving, and adaptability skills, among others		
6.	Development of entrepreneurial mindset	<i>Example (UEK): High</i> - the development of an entrepreneurial mindset is systematically embedded throughout the program. A range of entrepreneurial attributes such as proactiveness, creativity, opportunity recognition, responsibility, and resilience are intentionally cultivated through diverse learning formats, including interactive training projects, simulations, innovation design tasks,		



		teamwork, and self-directed assignments. Students are encouraged to adopt a proactive orientation and to develop skills such as risk tolerance, continuous learning, experimentation, and value creation (e.g., Contemporary Entrepreneurship, Contemporary Business Models, Business Plan, Personal Branding on LinkedIn). A good example is the module Personal Branding on LinkedIn, in which students enhance the effectiveness of their personal brand through, inter alia, gamification and problem-based learning. Another example is the development of abilities to analyse, design, and optimise business models using tools such as the Business Model Canvas, Lean Startup, and Value Proposition Canvas in the module Contemporary Business Models. Furthermore, the ability to operate in a highly competitive market is cultivated in the module Organizational Competitiveness		
7.	Inclusion of local/regional context	Example (IPVC): Medium – Local and regional cases are not consistently embedded in course units. However, several business ideas proposed by students and developed in the Strategic Management and Marketing and the Innovation Management and Entrepreneurship units are project ideas for the region. In the Thesis course unit, applied projects and internships are typically carried out in local companies		
8.	Interdisciplinary approach	Example (UniFG): Medium - The program supports interdisciplinary learning primarily through a wide range of elective courses drawn from diverse fields such as technology, communication, psychology, career development, and soft skills. Students have opportunities to engage in interdisciplinary projects through the C-Lab (contamination lab) and participate in the university's web radio, WeUnifg, further fostering cross-disciplinary collaboration and skills development		
9.	Entrepreneurship & Innovation components	Example (FHM): High - The program includes dedicated modules focused on entrepreneurship and innovation, such as Entrepreneurship (pdf 2, p. 99) to understand the dynamics of entrepreneurial ecosystems, to apply lean startup and agile development principles, and to evaluate the viability and scalability of new ventures. Innovation & Entrepreneurship (p. 129) develops Innovation strategy and creative problem-solving with Design thinking and user-centered development. With that, students learn to analyse innovation processes in startups and corporates, get to know how to develop and pitch innovative product/service concepts, and how to navigate challenges of innovation adoption and diffusion. Finally, they learn to manage innovation in fast-changing environments. Managing Technology (p. 76). focuses on Integration of tech innovation into business model. The aim is, to assess the impact of emerging technologies on business strategy, lead technology-driven change initiatives, and align technological capabilities with organisational goals. These modules form a consistent thematic block that reflects a strong focus on entrepreneurship and innovation throughout the curriculum		
10.	Other thematic areas	Example (FHM): High. The program covers 7 relevant thematic areas: Finance and Accounting (p.44), in which students develop Financial analysis, budgeting, reporting, decision-making to interpret financial statements, assess investment decisions, and apply accounting principles. In the module Legal Basics (p.54), student get to know legal reasoning, contract analysis, and compliance awareness to understand business law fundamentals, evaluate legal risks, navigate international legal frameworks. Project Management (p.100), includes planning, scheduling, resource allocation, and risk management to manage complex projects, apply project lifecycle models, and use tools like Gantt charts and KPIs. Digital Technologies (p. 76), covers the topics of digital transformation, and strategic IT use, to assess digital tools for business, manage tech-driven change, and to align IT with strategic goals. Communication and Negotiation (p.58), covers interpersonal skills, persuasive communication, and conflict resolution to communicate effectively across cultures, negotiate deals, and manage stakeholder relationships. Sustainability (p. 81)		



		includes sustainable strategy, and ethical decision-making to integrate sustainability into business models, assess environmental impact, and lead responsible innovation. Business Planning and Strategy (p. 99) includes strategic thinking, market analysis, and business model development to formulate and implement strategies, develop business plans, and evaluate competitive environments. These areas are addressed through dedicated or embedded modules throughout the curriculum		
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Source: Engine Consortium elaboration

3. E&I competence needs in rural areas: coverage and recommended teaching contents

Table 3. Coverage of rural E&I competences and recommended teaching contents

E&I competences included in the Rural Competence Framework	Does the programme develop this competence? <i>Yes - the competence is clearly developed;</i> <i>Partial - the competence is only partly developed;</i> <i>No - the competence is not developed</i>			Justification – which modules / teaching contents correspond across all programmes	Gaps /Weaknesses (remarks) across all programmes	Recommended Teaching Contents / Thematic Blocks
	P1	P2	P...			
Example (UEK): Managerial competence	Yes	Yes	Yes	P1_Eco-innovation_implementing pro-ecological practices; P1_Contemporary Social Challenges_managing social conflicts; P2 see P1; P3_Economics of Sustainable Development_knowledge of sustainable development in business and natural resource management; P3_Regional Entrepreneurship and Innovation_knowledge of sustainable development of regional economies; P4 see P3; P5_Market Institutions_ability to identify economic problems and processes, taking into account sustainable development; P6_Social Innovation_ability to create an innovative solution to social problems; P7_Environmental Management_sustainable development and ecology, implementation of pro-ecological practices; P7_Environmental Technologies_acquisition of skills to understand, analyse, and interpret processes and phenomena related to the implementation of innovative environmental technologies (TI)	Generally: all programs include modules covering topics related to sustainable development and ecology. Gaps: issues related to social challenges, including those concerning demographic changes, are not addressed (with the exception of P1 and P6).	Social Problems in Rural Areas: the module should cover the main social problems faced by rural populations and ways to address or mitigate them, such as demographic changes, population aging, and rural depopulation, as well as the activation and social inclusion of elderly people.
Example (IPVC): Environmental Sustainability and Social Responsibility Commitment to eco-friendly practices and to	Partial	Partial	Yes	P1 – addressed partially in Financial Reporting P2 – addressed partially in Organization Behaviour P3 – addressed in Economics, Sustainability and Innovation P4 – addressed in Cultural Tourism and Sustainable Territories and	In general, the competence Environmental Sustainability and Social Responsibility – Commitment to eco-friendly practices and to the sustainable	However, some teaching blocks can be suggested: Sustainable Resource Management and Circular Practices – Efficient use of local resources and adoption



the sustainable development of local communities.				Ethics, Responsibility, and Tourism Sustainability	development of local communities is already embedded in the programmes.	of simple circular solutions. Community-Based and Socially Responsible Entrepreneurship – Creation of shared value and social impact through local cooperation. Green Value Creation and Impact Communication – Integration of sustainability into products and transparent communication of results.
Example (UniFG): Communication and networking	Yes	Yes	Yes	<p><i>P1</i> – Optional courses: Communication and Public Speaking as well as Soft Skills. As mentioned, all programmes foster strong communication abilities, as students are required to prepare for oral examinations and frequently present projects in groups. Regarding networking skills, optional courses such as Career Labs and the mandatory Internship further strengthen these competences.</p> <p><i>P2</i> – The course does not include any compulsory modules specifically focused on communication or networking. However, it is possible to take optional modules such as Communication and Public Speaking as well as Soft Skills. Moreover, all programmes at the University of Foggia require strong oral abilities, as examinations are conducted orally.</p> <p><i>P3</i> – See <i>P1</i> and <i>P2</i>. Furthermore, courses such as Internationalisation Strategies for SMEs cover topics like building and working within networks.</p>	No significant gaps were identified in communication skills across the programs, as oral exams, presentations, and interactive activities are an integral part of the Italian higher education system, ensuring strong development of students' communication competences.	Regarding networking, masters could further enhance activities involving local stakeholders, such as seminars, guest speakers, company visits, and simulations/case studies, which already exist but could be expanded to provide broader engagement opportunities. Formalise partnerships with Apulian business networks (Confindustria, Confagricoltura, Coldiretti, tourism consortia, Chamber of Commerce, etc) for: guest speaker series, networking events integrated into courses, and mentorship programs linking students with local entrepreneurs during internships. <ul style="list-style-type: none"> - Teaching about business communication, such as emails, reports, proposals, summaries, and other technical documentation. Professional presentation, cross-cultural communication, and crisis communication, video communication. - Network mapping exercise. - Students provide insights to local traditional businesses while learning about it (like a reversed internship). - Organising debates series on local challenges and opportunities. - Partner with universities in other European countries, particularly located in



						rural areas, in order to organise joint projects. - Partner with local organisations on communication campaigns for social causes.
Example (FHM): Strategic business planning and investment consulting	Yes	Yes	Yes	<p>P1: International Strategic Management Business planning and strategy development.</p> <p>Corporate Finance Investment decisions and enterprise evaluation.</p> <p>P2: Strategic Management (TP1) Introduction to strategic development.</p> <p>Business Consulting Introduction to analysis, consulting, and investment planning.</p> <p>P3: IT Project Management Stakeholder communication, monitoring, and evaluation.</p> <p>Business Process Management Strategic planning, process design, and investment evaluation.</p> <p>P4: FDI, SPRINTSI Business model innovation, market analysis, and strategic recommendations.</p>	<p>Gap: Strategic tools are taught in abstract or corporate contexts; rural-specific planning (e.g., land use, infrastructure, local investment) is not integrated.</p> <p>Weakness: No case studies or simulations involving rural municipalities, regional clusters, or decentralized consulting environments.</p>	<p>1. Land use, infrastructure, and investment logic tailored to rural contexts. This content should introduce planning frameworks that account for spatial constraints, infrastructure gaps, and land-based economic activities typical of rural areas. Examples include zoning for mixed-use development, rural transport planning, and investment prioritization for decentralized utilities or agricultural hubs.</p> <p>2. Mapping regional value chains, innovation networks, and anchor institutions. Teaching should focus on identifying and analyzing local production systems, institutional actors, and innovation drivers within a region. Case studies could include food processing clusters, rural maker spaces, or university-led entrepreneurship ecosystems, emphasizing strategic alignment and regional development potential.</p> <p>3. Evaluation tools for small-scale investments, cooperative models, and local funding instruments. Modules should introduce financial assessment methods suited to small enterprises, cooperatives, and community ventures. Learning could include cost-benefit analysis for micro-projects, feasibility studies for shared infrastructure, and navigation of local or EU rural funding schemes.</p> <p>4. Mobile advisory services, digital consulting platforms, and peer-to-peer mentoring in rural areas. Content should explore scalable consulting formats that overcome geographic barriers.</p>



						such as mobile business clinics, WhatsApp-based advisory groups, or online mentoring networks. Examples might include digital platforms for farm management advice, remote bookkeeping support, or peer-led innovation circles.
Competence ...						

Source: Engine Consortium elaboration

Appendix 2. Competence analysis template

1. Identification of Entrepreneurship & Innovation study programmes

Table 1. Analysed Entrepreneurship & Innovation study programmes

Name of the study program	(in the original language and in English translation)				
Level of study	(Bachelor, Master)				
Mode of study	(full-time / part-time)				
Responsible unit (faculty/institute/department)					
Field(s) of education / discipline(s)					
Language of instruction					
Number of ECTS credits					
Programme duration	(no. of semesters)				

Source: Engine Consortium elaboration



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2. Academic Profile of Rural Entrepreneur

Table 2. Competence Profile Development

No.	COMPETENCE: <i>key competences that are particularly relevant and useful for E&I education and acting effectively in rural areas</i>	DESCRIPTION:			LEARNING OUTCOMES <i>clear statement describing what a learner is expected to know, understand, or be able to do after developing that competence</i>	LINK TO THE STANDARD SET OF 10 STUDENT COMPETENCE CRITERIA <i>Is the competence included? (Yes/No)</i>
		KNOWLEDGE <i>the element of the competence, describing what the student knows and understands after course unit completion</i>	SKILLS <i>the element of the competence, describing what the student knows how to do, i.e. their ability to apply knowledge to tasks, solve problems, and implement actions in relevant contexts</i>	ATTITUDES <i>the element of the competence, describing how the student applies knowledge and skills in a responsible, self-directed, and motivated way - including their openness to learning, initiative, and values related to the competence</i>		
1	EXAMPLE (UEK) Managerial competence in the rural context	1. The student knows and understands the mechanisms of enterprise operation as well as the principles of formulating development strategies for enterprises operating in local markets. 2. The student possesses detailed knowledge in managing individual functional areas of an enterprise, particularly with regard to small family businesses operating in rural areas. 3. The student knows and understands the specifics of managing social, tourism, educational, and agricultural ventures adapted to rural conditions.	1. The student can develop innovative solutions to problems by applying knowledge of organizational management, taking into account the specific characteristics of small firms operating under local conditions. 2. The student can make managerial decisions within an enterprise, utilize innovative tools and local resources, and manage projects effectively. 3. The student can manage social, tourism, educational, and agricultural projects carried out in rural communities.	1. The student demonstrates a commitment to exploring modern management trends and sensitivity to the challenges and unique characteristics of the local community. 2. The student is aware of the specific challenges inherent in the operation and management of rural enterprises. 3. The student seeks innovative solutions that can be applied in rural contexts.	The student is able to design and implement effective enterprise management methods, incorporating contemporary management trends, and to adapt business and social activities to the specific characteristics of rural areas.	Yes - corresponds to Managerial competence
2	EXAMPLE (UEK) Financial and fundraising competences in the rural context	1. The student knows and understands the mechanisms and sources of obtaining capital for conducting business and social activities. 2. The student possesses knowledge regarding the possibilities of financing entities operating in rural areas. 3. The student knows the principles of accounting and financial reporting.	1. The student can apply acquired knowledge to effectively raise capital for the development of both entrepreneurial ventures and social initiatives from internal and external sources. 2. The student can identify financing opportunities and secure funds for entities operating in rural areas. 3. The student can conduct bookkeeping and financial reporting.	1. The student is prepared to demonstrate an active approach in the process of seeking and obtaining sources of financing for business and social activities in rural areas. 2. The student is prepared to face the challenges associated with financing business and social activities in rural areas. 3. The student is aware of the need to maintain accurate and reliable financial reporting..	The student is able to obtain financing for the development of both entrepreneurial ventures and social initiatives, manage finances, and conduct accurate financial reporting in enterprises, particularly those operating in rural areas	Yes - corresponds to Financial and fundraising competences

3	EXAMPLE (IPVC) Innovation and creativity	Knows and understands: <ul style="list-style-type: none"> • The role of innovation in rural development, including business and social innovation. • How community-driven approaches can address local challenges in low-density territories. • Factors that influence rural resilience and context-adapted solution design. 	Can: <ul style="list-style-type: none"> • Generate creative ideas that respond to rural needs and resource limitations. • Apply innovative approaches to improve products, services or community initiatives. • Adapt solutions to local conditions using available resources, traditional knowledge and new methods. 	Demonstrates: <ul style="list-style-type: none"> • Openness to experimentation and context-appropriate innovation. • Willingness to challenge assumptions and explore alternative solutions. • Commitment to contributing positively to rural resilience and community well-being 	Students will be able to: <ul style="list-style-type: none"> • Identify opportunities for innovation in rural settings. • Design creative and feasible solutions to local challenges. • Apply innovative thinking in project development using locally available resources. • Assess the value and impact of innovation on rural communities 	Yes – Innovation competence
4	EXAMPLE (IPVC) Rural context and resources	Knows and understands: <ul style="list-style-type: none"> • The functioning of rural territories, including local institutions, community dynamics and cultural behaviours. • The main agricultural, land-use, environmental and rural development policies influencing local initiatives. • How to identify and analyse natural, cultural and human resources through territorial resource mapping. • Essential local and regional regulations related to rural business creation, land management, food production, and tourism. 	Can: <ul style="list-style-type: none"> • Identify, map, and interpret local resources relevant for rural entrepreneurship. • Analyse local socio-cultural dynamics to design context-appropriate initiatives. • Navigate rural regulatory frameworks and incorporates them into project planning. • Engage effectively with rural actors and institutions using informed, context-sensitive approaches. 	Demonstrates: <ul style="list-style-type: none"> • Respect for rural identity, traditions, and community knowledge. • Sensitivity to local cultural dynamics and diversity across rural territories. • Responsibility towards sustainable use of territorial resources. • Willingness to collaborate with local stakeholders and adapt to rural realities 	Students will be able to: <ul style="list-style-type: none"> • Analyse a rural territory, including resources, actors and cultural dynamics. • Integrate local regulations and policies into rural project planning. • Map natural, cultural, and human resources to support initiative development. • Design context-adapted solutions that align with rural community needs and characteristics. 	Yes – Rural context competence
5	EXAMPLE (UniFG) Digital technological competences and	<ul style="list-style-type: none"> • Understands the data digitisation process, conceptual frameworks, and operational IT models for data collection and processing. • Has comprehensive knowledge of digital 	<ul style="list-style-type: none"> • Can identify and use statistical and IT tools to organise, evaluate, and manage qualitative and quantitative information. • Has basic familiarity with programming concepts. • Can analyse data from different sources for business insights. 	<ul style="list-style-type: none"> • Shows curiosity and openness to learning new technologies. • Ethical awareness, particularly regarding data privacy and AI use. • Proactive in applying technology to solve real-world rural problems. • Values innovation 	The student can effectively use digital infrastructures to support innovation and entrepreneurship in rural areas. Through laboratory practice, the student can analyse data from heterogeneous sources, use AI and machine learning tools at an introductory	Yes – corresponds to Digital competence



		<p>infrastructures and their application in business contexts.</p> <ul style="list-style-type: none"> • Understands the centrality of algorithms and artificial intelligence in modern digital systems. • Is familiar with datafication and the digital turn in society and business. • Understands neural networks. • Is familiar with big data analytics and methods for analysing vast amounts of heterogeneous data from diverse sources. • Knows web technologies, digital platforms, and cloud computing. • Understands corporate digitalisation and digital transformation in business organisations. • Is familiar with blockchain, IoT, and innovative technologies applied to strategic sectors (energy, agri-food). • Knows about digital innovation in urban and rural social systems • Is familiar with ethical issues related to AI, digital risks, and cybersecurity. 	<ul style="list-style-type: none"> • Can use introductory machine learning tools and interpret their outputs in business contexts. • Can use Microsoft Power Platform (Power Apps, Power BI, Automate) for business process automation. • Can create websites using HTML5, CSS, JavaScript, and WordPress. • Can apply SEO techniques and digital marketing strategies. • Can conduct big data analytics to extract insights for strategic decision-making. • Can identify and select appropriate technical solutions in digital contexts. • Can implement digital transformation strategies in organisations. • Can use digital tools to support rural entrepreneurship (e-commerce platforms, digital twins, business analytics dashboards). 	<p>while respecting sustainability, social responsibility.</p> <ul style="list-style-type: none"> • Seeks to improve social inclusion in rural communities through social literacy. • Aims to use technology to foster entrepreneurship and innovation in rural areas. 	<p>level, and contribute to the implementation of digital transformation strategies that enhance the competitiveness of rural businesses. The student can identify and select appropriate technical solutions for digital challenges, particularly addressing local needs such as digitalisation of traditional Apulian agri-food companies, development of e-commerce platforms for local products, implementation of precision agriculture technologies, creation of digital tools for rural tourism, and application of data analytics to improve business performance in rural SMEs.</p>	
6	EXAMPLE (UniFG) Communication and networking	<ul style="list-style-type: none"> • Understands principles of effective business communication in both written and oral forms. • Knows transmedia communication strategies. • Is familiar with public and corporate communication methods, 	<ul style="list-style-type: none"> • Can communicate clearly and persuasively in diverse professional settings, both private contexts and large audiences. • Can prepare and deliver effective oral presentations and pitches using public speaking techniques. • Can write professional business documents adapted to different types of interlocutors. 	<ul style="list-style-type: none"> • Demonstrates active listening and seeks feedback from interlocutors, as well as open to constructive criticism. • Shows respect for diverse perspectives and cultural backgrounds. • Actively participates in team discussions and collaborative projects. 	<p>The student is able to communicate effectively across different contexts, audiences, and media platforms, demonstrating specialised communication skills developed through extensive practical experience. Through active participation in team projects, didactic labs, examinations,</p>	<p>Yes – corresponds to Communication and networking competences</p>



		<p>including e-commerce communication.</p> <ul style="list-style-type: none"> • Is familiar with interpersonal communication theories and practices in digital environments. • Understands networking strategies and relationship-building in business contexts. • Knows about cross-cultural communication and international business etiquette. • Is familiar with the use of ICT environments for communication (blended learning, e-learning platforms). • Understands the malleability and interactivity of digital communication. • Knows how to use common digital tools for communication 	<ul style="list-style-type: none"> • Can choose appropriate methods of transmitting messages consistent with the audience. • Can analyse and interpret information feedback from interlocutors (soliciting and interpreting responses). • Can communicate technical and complex information to non-specialist audiences. • Can use digital communication tools effectively. • Can work effectively in teams and facilitate collaboration through group projects. • Can build and maintain professional networks. • Can communicate in English in professional contexts. • Can develop e-commerce communication strategies. 	<ul style="list-style-type: none"> • Values both formal and informal communication approaches. • Shows confidence in communicating with diverse audiences, from local farmers and artisans to institutional representatives and international partners. • Demonstrates engagement with digital communication tools to bridge communication gaps between rural and urban environments. • Shows initiative in building relationships with local communities, cooperatives, rural businesses as well as international stakeholders. • Demonstrates responsibility in professional communication. 	<p>internships, thesis defence, and in-class peer review, the student can clearly articulate complex analyses and their underlying assumptions in both written and oral forms, selecting appropriate communication methods for each type of interlocutor. In the rural entrepreneurship context, the student can build strong professional networks with local communities, businesses, and institutions in the Apulian territory, communicate the value of local products and heritage to diverse audiences, facilitate collaboration among rural stakeholders, and bridge communication gaps between traditional rural businesses and digital markets.</p>	
7	<p>EXAMPLE (FHM)</p> <p>Sustainable business model development</p>	<p>1. Students understand how sustainability principles can be applied to rural enterprises, local resource cycles, and community-led initiatives. They are familiar with key rural sustainability challenges, including decentralized energy systems, agricultural innovation, and resource regeneration.</p> <p>2. They know examples such as agricultural by-product valorization, community composting systems, and repair-based micro-enterprises, with a focus on designing closed-loop models tailored to regional</p>	<p>1. Students are able to apply circular-economy principles—reuse, recycling, and resource efficiency—to rural settings where material flows are highly localized.</p> <p>2. They can identify decentralized energy solutions and evaluate business models that allow rural communities to generate, manage, and distribute renewable energy.</p> <p>3. Students know how to translate the UN Sustainable Development Goals into practical strategies for small rural businesses and local governments.</p> <p>4. They can engage diverse stakeholders through examples such as sustainable tourism models, inclusive employment schemes, and climate-resilient farming practices.</p>	<p>Students:</p> <ul style="list-style-type: none"> • develop a proactive and responsibility-driven attitude toward sustainable rural development; • value community participation and collective ownership as drivers of long-term resilience; • cultivate openness toward environmentally regenerative and socially inclusive solutions. 	<p>After successfully completing this course, students will be able to:</p> <ul style="list-style-type: none"> • design sustainability-oriented strategies for rural enterprises and local governments; • identify and evaluate circular-economy and renewable-energy solutions suited to rural ecosystems; • engage stakeholders and translate sustainability goals into actionable, community-anchored initiatives. 	<p>Yes, sustainability competence</p>



		ecosystems. 3. Students are familiar with case studies including farm-based biogas plants, solar-powered irrigation systems, and cooperative ownership structures for local energy grids, emphasizing both technical feasibility and community empowerment. They also understand SDG mapping, impact measurement tools, and stakeholder engagement approaches in rural contexts.				
8	EXAMPLE (FHM) Knowledge transfer and innovation management	<p>1. Students understand the fundamentals of knowledge transfer and innovation management in rural and regional contexts. They recognize the limitations of traditional international strategic management frameworks when applied to fragmented markets, infrastructure-constrained settings, and locally embedded stakeholder environments.</p> <p>2. Students learn about participatory and citizen-science approaches that integrate experiential and place-based knowledge. They understand methods for involving local actors—such as farmers, craftspeople, and community groups—in data collection, problem framing, and solution co-creation. Examples include mapping rural supply chains, documenting informal innovation practices, and developing region-specific development</p>	<p>1. Students can translate complex strategic and innovation frameworks into rural-relevant approaches. They are able to design and conduct participatory research processes that actively involve local stakeholders in identifying needs and co-creating solutions.</p> <p>2. Students can engage in living-lab formats and contribute to joint experimentation between universities and rural actors, applying digital tools, business models, or service innovations in real-world settings.</p> <p>3. They can develop communication materials for non-academic stakeholders and tailor knowledge outputs to local practitioners—farmers, artisans, small businesses, or municipal actors—by using clear language, practical tools, and community-based facilitation methods</p>	<p>Students:</p> <ul style="list-style-type: none"> • value local and experiential knowledge as legitimate sources of innovation; • cultivate openness to co-creation and shared learning with rural communities; • adopt an inclusive and collaborative attitude toward knowledge transfer; • develop sensitivity for communicating complex content to diverse, non-academic audiences. 	<p>After successfully completing this course, students will be able to:</p> <ul style="list-style-type: none"> • design and implement participatory research and citizen-science methods in rural settings; • develop and moderate rural-university partnerships and living-lab processes; • translate academic insights into accessible formats for local stakeholders; • adapt strategic and innovation frameworks to the specific realities of rural regions. 	Yes – <i>Communication and negotiation competence</i>



		<p>indicators.</p> <p>3. Students are familiar with rural-university partnerships and living-lab formats. They understand how collaborative experimentation—e.g., rural mobility pilots, smart agriculture trials, or co-designed digital platforms—supports iterative learning, mutual benefit, and long-term capacity building.</p> <p>4. They also know communication and transfer formats tailored to non-academic audiences, including visual toolkits, storytelling-based reports, and community workshops.</p>				
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Source: Engine Consortium elaboration

Appendix 3. Stakeholders of Rural Growth template

Table 1. Classification criteria for identifying stakeholders

No.	Sector according to the Quadruple Helix concept	Type of stakeholder	Role of the stakeholder in the educational process	Level of stakeholder involvement	Operational scope (geographical reach)	Nature of engagement with the university	Currently cooperating? Yes/No
1.	S1 Science & Education	<i>For intermediary or bridging stakeholders, classify them under the most representative group while acknowledging both representations. Examples:</i>	<i>Function or contribution of the stakeholder within educational activities. Describe their current role if</i>	<i>Depth, frequency, and strategic importance of the stakeholder's participation in educational initiatives. Describe their current level of</i>	<i>Categories: local, regional, national, or international.</i>	<i>Form and purpose of collaboration. Ex.: educational activities, research activities, advisory</i>	



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		<p>S3-S4 - Local Action Group; S4-S2 - Social enterprise. Remember to list the sector or field of activity of the stakeholder. Examples: S2 - SME agrifood; S2 - SME tourism; S3-Regional government authority tourism.</p> <p>Ex. Research institutes, academic expert, educator, universities, HEIs.</p>	<p>already collaborating, or the envisioned role if this is a potential partner. Ex.: mentor, lecturer/trainer, advisor, project partner, internship organiser.</p>	<p>involvement if already collaborating, or the envisioned level if this is a potential partner. Ex.: Strategic partner - involved in long-term cooperation.</p> <p>Operational-level contributor - regularly engaged in the implementation of activities.</p> <p>Consultant - provides expert input on specific issues.</p> <p>Ad hoc collaborator - involved occasionally on a short-term or one-off basis.</p>		<p>services, organisational support, financial support.</p>	
2.	<p>EXAMPLE (UEK)</p> <p>S1 Science & Education</p>	<p>Academic staff (lecturer/researcher) at an agricultural university (HEI)</p>	<p>Provider of research-based input (scientific literature and evidence base), reviewer of educational materials (relevance and quality validation), expert advisor, guest lecturer</p>	<p>Consultant (expert input); ad hoc collaborator (reviews, guest lectures)</p>	<p>Regional / national</p>	<p>Educational activities, advisory services</p>	<p>No</p>
3.	<p>EXAMPLE (UniFG)</p> <p>S1 Science & Education</p>	<p>National research council and Research Groups/Observatories.</p>	<p>Multidisciplinary scientific advisor: providing expertise on innovation, digital transformation, and sustainable regional development.</p>	<p>Consultant: provides expert input on specific scientific and economic issues.</p>	<p>National.</p>	<p>Research activities and advisory services</p>	<p>Yes</p>
4.	<p>S2 Business & Economy</p>	<p>Ex. Small and medium-sized enterprises, family business, startups, business support organisation (chamber of commerce, cluster), investment and funding organisations (seed funders, business angels, venture capital firms).</p>					
5.	<p>EXAMPLE (UEK)</p> <p>S2 Business & Economy</p>	<p>Business support organisation - technology park / innovation hub / business incubator</p>	<p>Mentor (student projects/startup ideas), practitioner talks/guest sessions, case study/challenge provider (innovation, digitalisation), expert advisor (consultation on</p>	<p>Consultant; ad hoc collaborator</p>	<p>Regional</p>	<p>Educational activities, advisory services, organisational support (access to the local business ecosystem, introduction to practitioners)</p>	<p>No</p>



			content and case studies), introduction to practitioners				
6.	EXAMPLE (UniFG) S2 Business & Economy	Small and medium enterprise - Sustainable tourism & hospitality.	Internship organiser: providing hands-on experience in an important sector for the rural areas, particularly Gargano.	Strategic partner: long-term cooperation on internships.	Local	Educational activities.	Yes
7.	S3 Public Administration & Policy	Ex. Local or regional government authority, public education authority or funding body, Local Action Groups.					
8.	EXAMPLE (IPVC) S3 Public Administration & Policy	Local and regional public authorities and public agencies for development, innovation and rural policy (municipalities, intermunicipal bodies, regional agencies).	Advisor; project partner; provider of policy insights/data; facilitator for community projects; internship organiser.	Strategic partner; operational contributor (project implementation).	Local/regional.	Advisory services; educational activities; organisational support.	Yes
9.	S4 Civil Society & Community	Ex.: Non-governmental organisations, associations, cooperatives, social enterprises.					
10.	EXAMPLE (FHM) S4 Civil Society & Community	Local sustainability & community development initiatives (e.g., Transition Town Münster)	Co - creation partner, workshop facilitator	Consultant - provides input on sustainability and community innovation	Local	Educational activities, advisory services	Partially

Source: Engine Consortium elaboration

Table 2. Quality criteria for stakeholder engagement in education initiatives

No.	Type of stakeholder	Competences and experience in E&I relevant to rural areas	Experience in implementing or advising on local or regional development	Affiliations with rural areas, underpinned by in-depth knowledge of their unique socio-economic and cultural specificities	Ability to operate at the intersection of sectors (cross-sector potential)	Alignment with the Academic Standardised Content Plan for Rural Entrepreneurial Education	Alignment with the Standardised Academic Profile of Rural E&I Student
Note for No. and Type of stakeholder: The order of stakeholders listed in Table 2 must match the order used in	...	Short statements describing the stakeholder's key competences and relevant experience in E&I in a rural context (e.g., possession of relevant theoretical and/or practical	Short statements describing the stakeholder's experience in implementing and/or advising on local or regional development. If this is a stakeholder you already collaborate with, describe their confirmed	Short statements describing the stakeholder's connection with rural areas. Indicate how this link is established, e.g. through a professional role,	Short statements describing the stakeholder's cross-sector capacity, i.e., their experience in partnerships or initiatives involving actors from	Indicates how stakeholder competences correspond to the thematic blocks defined in Table 5.3 of	Indicates how stakeholder competences and experience contribute to the



<p>Table 1 to ensure consistency and enable straightforward cross-referencing.</p> <p>1.</p>	<p>knowledge, demonstrated engagement in business activities, or provision of support for innovative initiatives targeting rural areas). These can be person-specific competences, i.e. the knowledge, skills, and experiences of individual stakeholders such as entrepreneurs or experts directly involved in rural development activities OR organisational competences, i.e. the institutional resources, networks, and capacities of organisations such as Local Action Groups, associations, or public bodies. If this is a stakeholder you already collaborate with, describe their confirmed competences and experience. If this is a potential stakeholder, describe the required or desired competences and experience (the expected profile).</p> <p>Examples:</p> <p>S1: providing training in rural entrepreneurship and innovation; supporting rural startups through mentoring/incubation, leading agrifood innovation projects.</p> <p>S2: running a rural startup; leading innovation projects (e.g. in agriculture or food processing); developing digital tools for rural businesses</p> <p>S3: supporting rural startups (e.g., through innovation funding programmes); enabling innovation projects (e.g. in agriculture or food processing).</p> <p>S4: facilitating innovation in rural cooperatives; supporting innovation projects (e.g. in agriculture or food processing); supporting/ running rural social enterprises;</p>	<p>experience. If this is a potential stakeholder, describe the required/desired experience (the expected profile).</p> <p>Demonstrated involvement in initiatives that support local or regional development, particularly through collaboration with public institutions, civil society actors, or community groups. This includes both advisory and implementation roles in planning, executing, or evaluating development policies and projects.</p> <p>Examples:</p> <p>S1: participating in the design or delivery of development strategies, evaluating the impact of rural development policies</p> <p>S2: advising local communities or public authorities on development initiatives; participating in the delivery of development programmes</p> <p>S3: partnering with civil society actors in designing or evaluating development programmes; working with business associations on economic development strategies.</p> <p>S4: cooperating with local government units on development projects; contributing to the planning or implementation of development initiatives</p>	<p>business activity, public-sector involvement or personal/community ties. This connection should reflect an informed understanding of rural dynamics, including socio-economic conditions, cultural patterns, and development challenges. If the stakeholder is already cooperating with you, describe their confirmed connection; if potential, describe the required/desired connection (expected profile).</p> <p>Examples:</p> <p>S1: working with rural SMEs or farms; conducting long-term fieldwork in rural communities</p> <p>S2: operating rural SMEs or farms</p> <p>S3: professional experience in rural development programmes, involvement in rural territorial planning</p> <p>S4: growing up or living in rural areas, active involvement in rural community development initiatives, membership in local cooperatives or LAGs</p>	<p>multiple sectors. Indicate which sectors were involved (e.g., science/education + business + public administration; public administration + science/education + community; multi-stakeholder initiatives). If the stakeholder is already cooperating with you, describe confirmed experience; if potential, describe the required/desired cross-sector profile.</p> <p>Examples:</p> <p>S1: experience in partnerships combining research, business, and policy advisory elements.</p> <p>S2: experience collaborating with public institutions, research centres and community organisations on rural innovation initiatives</p> <p>S3: track record of leading multi-stakeholder initiatives</p> <p>S4: experience in multi-stakeholder initiatives or rural innovation networks, bridging roles between communities and institutional actors</p>	<p>D3.O2:</p> <p>Block A – Foundations of Rural Entrepreneurship and Innovation</p> <p>Block B – Entrepreneurship & Innovation Ecosystems and Rural Collaboration</p> <p>Block C – Management, Finance and Marketing for Rural Initiatives</p> <p>Block D – Digitalisation for Rural Transformation</p> <p>Block E – Sustainability, Quality and Social Innovation</p>	<p>development of the student competences defined in Table 2 of D3.O3.</p> <ol style="list-style-type: none"> 1. Entrepreneurial and Innovation Competence in Rural Contexts 2. Rural Context, Territorial Heritage Competence 3. Marketing, Branding and Market Access Competence 4. Financial, Strategic and Fundraising Competence 5. Communication and Negotiation Competence 6. Sustainability Competence 7. Networking and Partnership Competence 8. Digital Competence for Rural Transformation 9. Managerial Competence 10. Legal and Regulatory Competence
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		facilitation of community-based innovation					
2.	EXAMPLE (UEK) Academic staff (lecturer/researcher) at an agricultural university (HEI)	Possession of relevant theoretical and practical expertise in rural entrepreneurship and innovation, supported by research and teaching activities, including engagement in applied projects with rural stakeholders (e.g., agriculture, agri-food, rural business development)	Experience in applied regional/rural projects with municipalities/NGOs/business, providing expert input to local strategies and development programmes, stakeholder-based project work in rural areas	Professional link through research and teaching on rural (agricultural) topics and applied cooperation with rural stakeholders	Ability to cooperate across sectors (S1, S2, S3, S4) through research, applied projects, expert work, stakeholder-based teaching	A, B, C, E	1, 2, 6, 7, 9, 10
3.	EXAMPLE (UniFG) National research council and Research Groups/Observatories	Multidisciplinary expertise in agrifood innovation and sustainable development. Extensive experience in technology transfer, scientific advisory for public policies, and the advanced qualification of human resources through research training.	Demonstrated consolidated experience in supporting local and regional development through applied research, advisory activities, and the implementation of development-oriented projects in collaboration with universities, public authorities, and territorial stakeholders.	Demonstrates a strong connection with rural areas through research projects promoting the social, cultural, and economic development of rural territories.	Experienced in cross-sector initiatives combining researchers from public, private, and academic sectors to support collaborative development projects.	A, B, D, E	It directly supports competences 1, 2, 5, 6, 7, 8 and indirectly supports competences 3, 4, 9 e 10
4.	...						
5.	EXAMPLE (UEK) Business support organisation - technology park / innovation hub / business incubator	Strong practical competence in entrepreneurship and innovation support through running incubation/acceleration, mentoring startups/SMEs, delivering training and supporting innovation/digitalisation projects	Experience in implementing entrepreneurship and innovation support programmes (incubation, acceleration, training), collaborating with local/regional authorities and development agencies and delivering SME development and digitalisation initiatives	Professional link via dedicated support to rural SMEs or projects aimed at rural communities and rural businesses (e.g., support for businesses operating in rural municipalities or serving rural markets)	Ability to cooperate across sectors (S1, S2, S3) through multi-actor initiatives such as incubation/acceleration programmes and ecosystem-building activities	A, C, D	1, 4, 7, 8, 9
6.	EXAMPLE (UniFG) Small and medium enterprise - Sustainable tourism & hospitality.	Practical experience in managing small and medium-scale hospitality activities in hinterland and coastal areas of the Province of Foggia, offering accommodation, wine and food experiences, and digital promotion, etc. Innovation mainly through sustainable practices, service diversification, and the use of online tools.	Direct involvement in local development through employment creation, cooperation with local businesses, as well as contribution to local tourism initiatives.	Strong connection with hinterland and coastal areas of the Province of Foggia, particularly the Gargano zone, with in-depth knowledge of local natural resources, cultural and historical heritages, seasonality, as well as visitor dynamics.	Cooperation with local community, businesses (e.g., suppliers) and authorities.	A, C, E	1, 2, 3, 6, 9
7.	...						
8.	EXAMPLE (IPVC) Local and regional public authorities and public agencies for	Enabling role for entrepreneurship (infrastructure, services, permits); knowledge of local needs and public support measures.	Design and implementation of territorial strategies and EU - funded projects; policy instruments and public service delivery.	Mandate over rural territories; detailed knowledge of socio-economic and cultural specificities.	Lead multi-stakeholder partnerships (municipalities, SMEs, NGOs, HEIs).	A, B, C, E	2, 5, 7, 9, 10



	development, innovation and rural policy						
9.	...						
10.	<p>EXAMPLE (FHM)</p> <p>Local sustainability & community development initiatives (e.g., Transition Town Münster)</p>	Grassroots innovation, sustainability, community mobilisation	Participation in local sustainability and development projects	Engagement with rural communities and networks	Collaborate with civil society, public sector, academia	B, E	2, 5, 6, 7

Source: Engine Consortium elaboration



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