



Name of Module: I&E Study	Credit Points (ECTS): 6	Module-ID:
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University: UNS	Department:	

1. Prerequisites for Participation

According to general prerequisites for EIT Digital Master School programs; attendance to the I&E Basics, BDLab and EIT Digital Summer School modules.

2.a. Applicable EIT Overarching Learning Outcomes (EIT Handbook rev. April 2016)

The I&E Study contributes to following EIT OLO:

After completion of the I&E Study, students...

- ... have the ability to use knowledge, ideas and technology to create new or significantly improved products, services, processes, policies, new business models or jobs (Innovation skills and competencies)
- ... have the ability of decision-making and leadership, based on a holistic understanding of the contributions of Higher Education, research and business to value creation, in limited sized teams and contexts (Leadership skills and competencies)

The I&E Study may optionally (applicability depending on the selected topic) contribute to following EIT OLOs: After completion of the I&E Minor, students additionally...

- ... have the ability to identify short and long term future consequences of plans and decisions from an integrated scientific, ethical and intergenerational perspective and to merge this into a solution-focused approach, moving towards a sustainable society (Making value judgments and sustainability competencies)
- ... have the ability to think beyond boundaries and systematically explore and generate new ideas (Creativity skills and competencies)
- ... have the ability to translate innovations into feasible business solutions (Entrepreneurship skills and competencies)
- ... have the ability to use cutting-edge research methods, processes and techniques towards new venture creation and growth and to apply these also in cross-disciplinary teams and contexts (Research skills and competencies)

2.b. Intended Learning Outcomes

After completion of the I&E Study module, students...

- ... have the ability to apply, synthesize, and evaluate prior I&E learning within a specific innovation or entrepreneurial project setting and a specific innovation area.
- ... have the ability to conduct a business analysis, make decisions and formulate recommendations or justify actions in a real environment.
- ... have the ability to choose and apply relevant concepts/methods and/or tools and collect relevant data for conducting a business analysis and making decisions in a real environment.
- ... have the ability to produce a professional writing on a business analysis topic.
- ... have the ability to apply concepts, methods and tools pertaining to identifying and assessing the impact/value of a technology in an industry, market and/or organization and the innovation / business opportunities it creates.

+ other locally defined ILOs contributing to optimal coverage of the EIT OLOs.

3. Content

Two topics – with related concepts, methods and/or tools – will be covered in the context of a selected innovation or entrepreneurial case:

- One fixed and common topic: Assessing the impact of a technology on an industry, market and/or organization, the support and barriers to its deployment, the influence on a specific goal/agenda (technology transfer, existing industry, new company, etc.).
- One case-dependent topic: pertaining to market / business environment analysis (main forces affecting the business, suppliers, partners, competition, environmental issues), sustainability and social issues, business modeling, go-to-market strategies, etc.

The innovation or entrepreneurial project may be originating from:

- Cases issued from EIT Digital Innovation Action Lines: within Activities, Partners / Business Community projects,
- Cases based on the continuation of students EIT Digital Summer School (or BDLab) project,
- Cases within other innovation or entrepreneurial projects rooted in a real-life environment as may be collected in the university ecosystem.

4. Teaching and Learning Method

The I&E Study is based on a group assignment and on an individual assignment. A large autonomy is given to the students to organize and achieve their goals.

a. Group assignment:

Students will work in teams of around 4 students. Teams will be assigned cases. Each team will identify and address a challenge/question in the context of their assigned case. This challenge/question may be related to considering alternate business models or go-to-market scenarios in relation with the innovation or entrepreneurial case, fed by exploration in some specific areas: business environment, competition, suppliers, partners, environmental and sustainability issues, etc.

To address their challenge/question, the students will cover the 4 generic steps of an explorative business analysis:

- **Identification of the relevant challenge/question,**
- **Acquisition of applicable concepts/methods/tools,**
- **Observations (data collection) on a selected part of the case,**
- **Analysis and interpretation.**

Students' supervision comprises:

- One individual or group session to introduce and detail the assignment and help students identify the challenges/questions,
- 1-to-many workshops: one for each of the 4 study steps above. Students support can be structured through pre-/post-assignments for each workshop,
- One oral defense.

It is expected that the authors of the case will contribute to supervision, provide data/contacts, participate to an oral defense and/or offer other meeting occasions to ensure rooting of the business assignment in real life.

b. Individual assignment:

Students will work on an online individual assignment. This individual assignment can be done before, during or after the group assignment. In this assignment, students will acquire concepts and tools pertaining to the assessment of the impact of a technology on an industry, market and/or organization. Students will also get the opportunity to apply these concepts and tools to their own case (based on their group-assignment case when possible).

Students' supervision comprises (may be combined with the group assignment supervision):

- One group session to introduce and detail the assignment,
- 1-to-many workshops to help students follow the steps in the assignment structure.

5.a. Assessment and Grading Procedures

Final grade is based for 75% on the group assignment grade and 25% on the individual assignment grade.

a. Group assignment:

The assessment is based on a written group report. The report includes a description of the challenges the students faced, the decision-making points and of the ways they addressed them. The report includes a description of the team organization and of the specific contributions of the team members.

The report should be 10 to 15 pages long + annexes. Local university rules may require longer reports. The report may be shorter if additional specific deliverables – prepared in the course of the project – are annexed to it. Report and annexes are provided to the originator of the case.

The assessment may include an oral defense. It may include a share of peer-to-peer assessment.

50% of the grade is based on 'business analysis competence' grading criteria' and 50% on 'general I&E competence' grading criteria.

b. Individual assignment:

Individual assignment.

5.b. Grading Criteria**Business analysis competence grading criteria:**

Part	Indicative list of criteria	Weight
Challenges identification	<ul style="list-style-type: none"> - Report describes the larger innovation or entrepreneurial context using relevant concepts and terminology? - Report identifies relevant and significant Innovation or Entrepreneurial challenges/questions and expresses them clearly? 	10%
Concepts acquisition	<ul style="list-style-type: none"> - Report gives sufficient arguments to what degree chosen concepts/methods/tools are important, relevant and/or applicable – or not – to the study context? - Concepts are described in correct business-related terms? 	20%
Data collection	<ul style="list-style-type: none"> - Data are correctly defined? - Collected data are relevant to address the topics and apply the concepts/methods/tools? 	20%
Analysis and interpretation	<ul style="list-style-type: none"> - There is a justified description of the students contributions? - Significance of the results and added value of the contribution? 	20%
Conclusion	<ul style="list-style-type: none"> - Significance of the results and added value of the contribution? - Relevance of the decision-making process and decisions to address challenge? - Relevance of the reflection on the concepts applicability 	20%
General	<ul style="list-style-type: none"> - Report is written in proper English? - A novice in the technical field can read report? - Quality of professional writing is sufficient? 	10%
TOTAL		100%

General I&E competence Grading criteria

The competence grading criteria cover the applicable EIT Overarching Learning Outcomes.

	Indicative list of criteria	Weight
Mandatory	<ul style="list-style-type: none"> - Systematically drives his project according to the dimensions of (1) customer problem/solution discovery (including in relation to the product technical development) and (2) market discovery (related to strategic thinking) in ways that are relevant for the situation (Innovation) - Description of the decision-making is detailed, objective and provides evidence of how leadership practice could be applied. Shows ability to achieve milestones, do problem solving, understand team roles, handle conflicts, negotiate, interact with stakeholders (Leadership) 	
Optional (applicability depending on the selected topic)	<ul style="list-style-type: none"> - Extends a novel or unique idea to create new knowledge or knowledge that crosses boundaries <u>OR</u> Invent or find solutions to address and solve his/her project main challenges (customer problem, functionality, business model, development,...). (Creativity) - Addresses key steps in his BM/BP/BD project/activity. Plans / diagnoses / recommendations or actions are well supported and appropriate. Identifies appropriate strategies for risk reduction. <u>OR</u> Systematically uses analytical business skills to recognize, assess and/or develop business opportunities in relation to all dimensions covered in his project/study/activity: market, customers, competition, environment, human, and material and technical resources. (Entrepreneurship) - Apply cutting-edge research methods and give evidence of deep knowledge and understanding of R&D trends and game players in the ICT field <u>OR</u> Apply appropriate research methods throughout the project. (Research) - Apply ethical perspectives and theoretical concepts in relation to the topic of the work or its results. Consider and discuss future consequences of these in different situations and/or for different societal groups from a sustainability perspective. Show a solution focused approach <u>OR</u> Relate the value proposed in his project/study/activity to all relevant stakeholders including producers, customers, shareholders, communities, ecological systems and policies as appropriate. (Making Value and Sustainability judgments) 	
TOTAL		100%

6. Workload calculation (contact hours, homework, exam preparation,..)

For 6 ects, the workload is 150-180 hours of student work per student.

7. Frequency and dates
<p>The I&E study module is delivered during S1 or S1+S2 of the Exit year.</p> <p>Bulk of the I&E Study work is done in S1.</p> <p>Grading is done in S1 or S2.</p>
8. Max. Number of Participants

9. Enrolment Procedure

10. Recommended Reading, Course Material

EIT Digital online I&E content:
<ul style="list-style-type: none">• As available from EIT Digital: 'Online I&E Study package'.
11. Other Information (e.g. home page of module)
