

Project management and commercialization of research results, 7.5 credits

Projektledning och kommersialisering av forskningsresultat, 7.5 högskolepoäng

Kurskod / Course code:	FOESXXX
Ämne på forskarnivå / Third-cycle subject:	Energy and environmental engineering
Akademi / School:	EST
Giltig från och med:	240328 (originally 2004)
Fastställd av / Established by:	EST
Beslutsdatum / Decision date:	240328
Senast ändrad / Last modified:	YYMMDD
Utbildningsnivå / Level of education:	Forskarnivå/ 3 rd cycle course
Språk / Language:	English

Course objective

The purpose of the course is to give the students tools for taking decisions on how to act if they want to commercialize their research results. Different routes will be presented and discussed as well as what to consider.

Course content

In this course, students will gain comprehensive knowledge and practical skills on how to commercialize research results in a feasible way.

Intended learning outcomes

Upon successful completion of the "Research Planning" course, students will be able to:

1. Produce a Thesis project Canvas, Value Proposition Canvas and a Business model Canvas.

2. Demonstrate knowledge about IP, Intellectual properties, including when it is suitable to apply for patents or handle IP in other ways.
3. Describe what it means to be an Entrepreneur or Intrapreneur. This includes both theory and practice.
4. Demonstrate knowledge about Project management including how to form projects theoretically, like TEAM building and planning, but also an understanding of how to act if there are disturbances in the project.
5. Demonstrate an understanding of different cultures in companies and other environments and discuss how to handle this.

The intended qualitative targets in relation to the Higher Education Ordinance, appendix 2.

Competence and skills

For the Degree of Doctor, the doctoral student shall demonstrate:

- B1: the capacity for scholarly analysis and synthesis as well as to review and assess new and complex phenomena, issues, and situations autonomously and critically,
- B2: the ability to identify and formulate issues with scholarly precision critically, autonomously, and creatively, and to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames and to review and evaluate such work,
- B4: the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general,
- B5: the ability to identify the need for further knowledge,

Judgement and approach

For a Degree of Doctor the doctoral student shall demonstrate

- C1: intellectual autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics, and
- C2: specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used.

Teaching formats

Lectures, seminars, workshops, assignments.

Examination

The PhD student will prepare (INL1) and present (SEM1) three different pieces of work: Thesis project Canvas, Value Proposition Canvas and a Business model Canvas.

The PhD student shall participate in the lectures. If a student is not able to attend a specific lecture then will need to carry out a specific mini-assignment in the subject matter of the lecture with help from course materials and other sources.

<i>Examination</i>	<i>SEM1 1 hp</i> <i>INL1, Individual task 3.5 hp</i> <i>OBN1, Obligatory presence (physical or digital).</i> <i>3hp</i>
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Grade

Examinations included in the course are assessed according to a grade scale of fail or pass.

Grades are to be decided by a teacher specially appointed by the university.

A participant who fails to pass any examination component (SEM1, INL1, OBN1) must retake the respective component in the subsequent offering of the course.

Requirements

To participate in the course and the examinations included in the course, the applicant must be admitted to doctoral studies. Exceptions can be made at the discretion of the course responsible and course examiner for industry professionals holding a relevant MSc degree or equivalent experience in the subject.

Specific entry requirements

The course has a practical orientation and does not require any specialized professional background. The training will be individually adapted to the needs of each participant. The course is recommended for all PhD students.

Selection criteria

Doctoral students admitted to other subjects at Mälardalen University may be admitted to the course, subject to availability. The same applies to doctoral students admitted to other higher education institutions within and outside of Sweden, as well as industry professionals.

Selection of applicants will be made in accordance with the ranking below:

1. Doctoral students in Energy and Environmental engineering
2. Doctoral students at Mälardalen University
3. Doctoral students at other universities in Sweden
4. Doctoral students at other higher education institutions outside Sweden

5. Industry professionals holding a relevant MSc degree or equivalent experience in the subject

Transitional and other provisions

- [N/A]