



Faculty of Health, Science and Technology  
Environmental and Energy Systems

## Syllabus

# Degree Project for Master of Science in Environmental and Energy Systems

**Course Code:**

EMAE30

**Course Title:**

Degree Project for Master of Science in Environmental and Energy Systems  
*Examensarbete för masterexamen i miljö- och energisystem*

**Credits:**

30

**Degree Level:**

Master's level

**Progressive**

Second cycle, contains degree project for Master of Arts/Master of Science  
(120 credits) (A2E)

**Major Field of Study:**

MEI (Environmental and Energy Systems)

### Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2018-09-03, and is valid from the Spring semester 2019 at Karlstad University.

### Prerequisites

Bachelor degree or professional degree 180 ECTS credits. Courses totalling 165 ECTS credits in environmental and energy systems, including at least 30 ECTS cr at G2F level or higher plus at least 30 ECTS cr earned at A1N level or higher, or equivalent. Upper secondary school level Swedish 3/8 or Swedish as a second language 3/B, and English 6/b or equivalent.

### Learning Outcomes

The aim of the degree project is that students develop and demonstrate the knowledge and skills required for a MSc degree (120 ECTS credits) in terms of independent research work in the field of environmental and energy systems.

#### Knowledge and understanding

For a degree project Pass grade, students should be able to:

- demonstrate broad knowledge and understanding of the field as well as specialised knowledge of the chosen area.

#### Competence and skills

For a degree project Pass grade, students should be able to:

- critically, independently and creatively identify, formulate and deal with research problems,
- plan and carry out advanced tasks within specified time limits using adequate methods,
- integrate knowledge acquired and critically analyse and handle complex issues,
- clearly present and discuss their results and the knowledge and arguments on which these are based,

orally and in writing,

- present how results can contribute to sustainable development, orally or in writing,
- write a report conforming to standard practice in science as regards disposition, formal aspects and correct referencing.
- participate in research and development work and thereby contribute to knowledge development,

**Judgement and approach**

For a degree project Pass grade, students should be able to:

- assess a fellow-student's degree project or equivalent in terms of relevant scientific, social and ethical aspects.

### **Content**

The purpose, aim, method and time plan of the degree project must be approved by the examiner before the work is begun. Students are then assigned a supervisor.

If two students collaborate on a project, their individual problem formulations must be clearly indicated from the start. The students are required to submit separate reports.

Students are required to conduct, manage, perform and present the project problem independently.

Students are responsible for the process and the result. Instruction is in the form of supervision and seminars.

### **Reading List**

See separate document.

### **Examination**

Assessment is based on the following components: problem formulation, implementation, written report, oral presentation and performance as seminar discussant.

On the first notification of a Fail grade after the end of the course period, students can no longer claim the right to supervision. The number of submissions for assessment is limited to five.

### **Grades**

One of the grades Fail (U), Pass (G), or Distinction (VG) is awarded in the examination of the course.

### **Quality Assurance**

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

### **Course Certificate**

A course certificate will be provided upon request.

### **Additional information**

The local regulations for studies at the Bachelor and Master' levels at Karlstad University stipulate the obligations and rights of students and staff.