UNIVERSITY OF BORÅS

Circular Economy
Cirkulär ekonomi

5 credits
5 högskolepoäng

Ladok Code: A521TA
Version: 2.0
Established by: Committee for Education in Technology 2021-05-07
Valid from: Autumn 2021

Education Cycle: Second cycle
Main Field of Study (Progressive Specialisation): Industrial Economics (A1N)
Disciplinary Domain: Technology
Prerequisites: Degree of Bachelor of Science or Degree of Bachelor of Science in Engineering, 180 credits, or Bachelor's degree in physics or chemistry or equivalent. In addition, knowledge of English equivalent to English 6 is required.
Subject Area: Industrial Engineering and Management
Grading Scale: Seven-degree grading scale (A-F)

Content

The course provides students with knowledge of the principles, concepts, and frameworks used in the topic of circular economy and provides insight into how these models work in reality within companies and their industrial value chains. In the course, students also get to reflect on different strategies for how circular business models can be developed, implemented, and scaled up. An overview of the most important tools used to measure and assess the effects of circular economy is also presented.

Learning Outcomes

After completing and passing the course, the student will be able to:

Knowledge and understanding
1.1 explain various trends and driving forces in the circular economy and how these can be implemented in industrial value chains to contribute to sustainable development,
1.2. explain the most important terms regarding circular economy with a focus on value chains and business models,
1.3. describe the frameworks and tools used in the topic of circular economy,
1.4. describe the challenges that exist in the adoption of circular economy, and in this context describe the connections that exist between the important enablers of technology and design,
1.5 describe the various measures and indices used in circular economy,
1.6. describe the development of circular economy within some industrial value chains.

Skills and abilities
2.1. use the frameworks, methods and tools related to circular economy when analysing industrial value chains and business models,
2.2. critically examine how circular economy is implemented in industrial value chains,
2.3. in writing and orally, present and discuss different aspects of circular economy.

Evaluation ability and approach
3.1. evaluate, plan, and develop strategies and action plans for circular economy.

Forms of Teaching

The teaching consists of lectures, supervision, and seminars.
Teaching is conducted in English.

The language of instruction is English.

Forms of Examination

The course is examined through the following examination components:

- Written individual examination
  Learning outcomes 1.1-1.6, 2.1-2.2
  Credits: 2.5
  Grading scale: A-F
- Group work with written assignment and oral presentation
  Learning outcomes: 1.3, 1.5, 2.1-2.3, 3.1
  Credits: 2.5
  Grading scale: A-F

  The course is assessed with the grades A / B / C / D / E / Fx / F. To get an E or higher grade on the course, all parts of the examination must be passed / E or better. The final grade for the course is obtained by averaging the components: Written individual examination (2.5 credits) and Group work (2.5 credits).

  If the student has received a decision/recommendation regarding special pedagogical support from the University of Borås due to disability or special needs, the examiner has the right to make accommodations when it comes to examination. The examiner must, based on the objectives of the course syllabus, determine whether the examination can be adapted in accordance with the decision/recommendation.

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

Literature and Other Teaching Materials

Student Influence and Evaluation

The course is evaluated in accordance with current guidelines for course evaluations at the University of Borås in which students' views are to be gathered. The course evaluation report is published and returned to participating and prospective students in accordance with the above-mentioned guidelines, and will be taken into consideration in the future development of courses and education programmes. Course coordinators are responsible for ensuring that the evaluations are conducted as described above.

Miscellaneous

The course is a programme course for the Master's programme Resource Recovery. This syllabus is a translation from the Swedish original.