



HÖGSKOLAN I GÄVLE

Energy Management 7.5 cr

Energimanagement 7,5 hp

Set by Faculty of Engineering and Sustainable Development

Version

Set at

Valid from

5/9/22

HT2023

Level	A1N
Education level	Second cycle
Course identifier	ETA011
Credits	7.5 cr
Main field of study	Energy Systems
Subject group	Energy Technology
Disciplinary domain	Technology 100.0 %

Learning outcomes After completion of the course the student shall be able to

Knowledge and understanding

1. reflect on how decisions on energy issues in companies and organizations are made and regulations that affect this
2. describe LEAN and critically reflect on the connection to energy management
3. describe the function of and reflect on energy services and principal non-energy-benefits related to energy management and improved energy efficiency

Competence and Skills

4. analyze and evaluate how digitalization can promote energy efficiency and energy key performance indicators
5. analyze and reflect on leadership linked to energy efficiency
6. demonstrate the ability to give written and oral account of project work and discuss information, problems and solutions in dialogue with different groups

Judgement and approach

7. evaluate and review the function of energy services and principled added values linked to energy management and energy efficiency.

Course content	Energy history, international and national energy work Corporate energy efficiency work and its barriers and driving forces Energy management, energy legislation, economic, informative and administrative policy instruments, stakeholder requirements and energy economy Energy management system, energy studies, energy policy, energy goals, implementation, education and energy auditing and digitalization Application of LEAN for energy systems, the link between LEAN and energy efficiency, leadership and communication									
Teaching	Lectures and seminars									
Prerequisites	Completion of Bachelor's degree in technology or natural sciences of at least 180 credits, or equivalent foreign degree with at least 7.5 credits of which in energy related courses, or equivalent knowledge English language proficiency equivalent to (the Swedish upper secondary school) English course 6/B									
Examination	Written examination and project work 0010 Written examination 2 cr examines Learning outcomes 1-3, grades A-F 0020 Written examination 2.5 cr examines Learning outcomes 4-5, grades A-F 0030 Oral and written presentation of project work and opposition to other project work 3 cr examines Learning outcomes 4-7, grades Fail, Pass, Pass with distinction									
Grade	A, B, C, D, E, Fx, F									
Other regulations	Degree Criteria for final grade will be given by the course responsible or examiner latest at the beginning of the course.									
Sustainable environment	The majority of the course content deals with sustainable development..									
Module	<table border="0" style="width: 100%;"> <tr> <td style="width: 70%;">0010 Written examination</td> <td style="width: 10%; text-align: right;">2 cr</td> <td style="width: 20%;">Grade: AF</td> </tr> <tr> <td>0020 Written examination</td> <td style="text-align: right;">2.5 cr</td> <td>Grade: AF</td> </tr> <tr> <td>0030 Project work</td> <td style="text-align: right;">3 cr</td> <td>Grade: UV</td> </tr> </table>	0010 Written examination	2 cr	Grade: AF	0020 Written examination	2.5 cr	Grade: AF	0030 Project work	3 cr	Grade: UV
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