

Preliminary course list – Sustainable Energy Engineering

Mandatory courses

<i>Course code</i>	<i>Course name</i>	<i>ECTS</i>
MVKP10	Energy Engineering	7.5
FMIF20	Environmental Issues	7.5
MVKN51	Energy Converters for Sustainable Transport	7.5
MVKN95	Environmentally Friendly Power Generation	7.5
MVKN61	Turbomachinery	7.5
AEBF30	Photovoltaic Systems	7.5
NEW COURSE	Thermo-chemical Conversion of Biomass	7.5
NEW COURSE	Degree Project	30

Elective-mandatory courses (choose 3 courses)

<i>Course code</i>	<i>Course name</i>	<i>ECTS</i>
MMVN05	Numerical Fluid Dynamics and Heat Transfer	7.5
MVKN76	Steam and Gas Turbines for Renewable Power Production – with Aero-engines	7.5
MVKP25	Hydrogen, Batteries and Fuel Cells	7.5
MVKP15	Wind Power Technology	7.5
MVKN30	Project in Sustainable Energy	7.5
MVKP05	Project – Formula Student	7.5

Track courses – Elective courses

Automotive track

<i>Course code</i>	<i>Course name</i>	<i>ECTS</i>
EIEN41	Electric and Electric Hybrid Vehicle Technology	7.5
MVKN55	Advanced Combustion Engine Concepts	7.5

Computational fluid dynamics track

<i>Course code</i>	<i>Course name</i>	<i>ECTS</i>
MVKN70	Advanced Methods within Numerical Fluid Mechanics and Heat Transfer	7.5
MVKN90	Turbulence - Theory and Modelling	7.5

Electric power systems track

<i>Course code</i>	<i>Course name</i>	<i>ECTS</i>
EIEN15	Electric Power Systems	7.5
EIEN10	Wind Power Systems	7.5

Heating and cooling track

<i>Course code</i>	<i>Course name</i>	<i>ECTS</i>
MVKP01	District Heating and Cooling	7.5
AEBF25	Solar Heating Technology	7.5