

 23.1.2024

SÄTEN MAISTERIOHJELMAT JA -SUUNTAUTUMISET 2024-2025

SÄTEN MAISTERIOHJELMAT

- » Sähkötekniikan maisteriohjelma/Master's Programme in Electrical Engineering
 - 2-kielinen lähiopiskeluohjelma Lappeenrannassa
 - Suuntautumisvaihtoehdot
 - Sähköverkot ja –markkinat
 - Renewable Power-to-X Economy (EE)
 - Electrical Drives and Power Electronics (EE)
 - Elektroniikka
 - Control, communications and automation(EE)
- » Master's Programme in Electric Transportation Systems
 - Lähiopiskeluohjelma Lahdessa
- » (Sähkötekniikan DIODI-maisteriohjelma)
 - Etäopiskeluohjelma
 - Erillishaku

TUTKINTORAKENTEET

- » Ydinopinnot LPR-ohjelmassa, Electric Transportation Systems poikkeaa hiukan

<u>Obligatory core studies (21 cr)</u>		<u>Year</u>	<u>per.</u>	<u>cr</u>
BH60A4600	Introduction to M.Sc. Studies *	*DI 1	1-2	1
BL20A0900	<u>Tiede, teknologia ja yhteiskunta</u> **	DI 1-2	2	4
	Technology and Society **	DI 1	3-4	4
LES10A170	Applied Mathematics I	DI 1	1-2	4
LES10A180	Applied Mathematics II	DI 1	3-4	3
BL30A1300	Power Electronic Converters	DI 1	1-2	5
BL40A2302	Energy Efficiency	DI 1	4	4

Ydinopinnot sis. lisäksi 4-8 op labroja.

- » Erikoistumisopinnot noin 70 op
- » Siuopinto, vapaasti valittavissa, 20 op



ENERGY TECHNOLOGY DD PROGRAMME WITH HANNOVER

- » 2 year master's degree programme in Energy Technology
- » You get two degrees and certificates, MSc in Power engineering from LUH (Leipniz University of Hannover) and MSc in Energy Technology from LUT
- » At LUT, programme is officially under energy technology, but in practice common of electrical engineering and energy technology.

- » 1st year is studied at LUT
- » 2nd year is studied at LUH in Hannover

- » Video presentation of the programme (7:40 min) <https://echo360.org.uk/media/fa1301f9-87ff-4be0-bc0a-f15afa289b8f/public>



COURSES INCLUDED IN THE LUT/LUT PROGRAMME

Courses studied at LUT

- » Energy markets
- » Energy and society
- » Energy economics
- » Energy efficiency
- » Energy resources
- » Energy Systems engineering
- » Fluid machinery
- » Power plant design
- » Renewable energy technology
- » Advanced topics in modelling of energy systems
- » Electrical power transmission

Courses studied at LUH

- » Heavy-duty gas turbines
- » Electric power systems
- » Electrical energy storage
- » Electrical machines and drives
- » Electrical machines for eAutomotive traction applications with journal club
- » Electrothermal processing
- » Power electronics
- » Project work
- » Sustainable combustion
- » Sustainability assessment

ENERGY TECHNOLOGY DD PROGRAMME WITH HANNOVER

» Requirements

- A Bachelor Degree or equivalent in Energy Technology, Power Engineering, Electrical Engineering, Mechanical Engineering or equivalent
- Final mark of the Bachelors studies of equivalent at least 3.0 in Finland
- A final mark of Bachelor studies worse than the given value can be balanced by:
 - a certificate of professional occupation in the field or engineering; or
 - a certificate of an internship of at least 8 weeks in the field of engineering beyond the Bachelors requirements; or
 - the final mark of the Bachelor thesis at least 4.0 in Finland
- Language test certificate of English language skills:
 - Degree completed in EU/EEA country is approved to certify the required language skills (eli LUTin valmistuneilta ei vaadita)
 - (Otherwise official test is required (TOEFL/IELTS/CEA/PTE))

» Application period for applying in DD programmes is 22.1. – 8.2.2024.

- ## » Further information in eLUT: <https://elut.lut.fi/en/completing-studies/internationalisation-and-student-exchange/double-degree/double-degree-0>