

**N5T Extended Campus Programme: Master level courses in Batteries 2023-2024 (31 October 2023)**

**Course list subject to change**

University	Course code	Title	ECTS	Semester
Aalto	AAE-E3120	<a href="#">Circular Economy for Energy Storage D</a>	5 ECTS	Fall
Aalto	AAE-E3070	<a href="#">Electrical Energy Storage Systems D</a>	5 ECTS	Spring
Aalto	CHEM-E4106	<a href="#">Electrochemistry D</a>	5 ECTS	Spring
Aalto	CHEM-E4255	<a href="#">Electrochemical Energy Conversion D</a>	5 ECTS	Fall
Aalto	CHEM-E6180	<a href="#">Fundamentals of Hydrometallurgy</a>	5 ECTS	Fall
Aalto	CHEM-E6160	<a href="#">Fundamentals of Pyrometallurgy</a>	5 ECTS	Fall
Aalto	CHEM-E6130	<a href="#">Metal Recycling Technologies</a>	5 ECTS	Fall
Aalto	CHEM-6140	<a href="#">Fundamentals of Minerals Engineering and Recycling</a>	5 ECTS	Fall
Aalto	ELEC-E8714	<a href="#">Sustainable Electronics</a>	5 ECTS	Fall
Aalto	ELEC-E8412	<a href="#">Power Electronics</a>	5 ECTS	Fall
Aalto	ELEC-E8402	<a href="#">Control of Electric Drives and Power Converters D</a>	5 ECTS	Spring
Aalto	ELEC-E8405	<a href="#">Electric Drives</a>	5 ECTS	Fall
Aalto	ELEC-E8424	<a href="#">Distributed Generation Technologies</a>	5 ECTS	Fall
NTNU	TMT4287	<a href="#">Hydrogen Technology, Fuel Cells and Batteries</a>	7.5 ECTS	Spring
NTNU	TMT4445	<a href="#">Advanced Functional Materials</a>	7.5 ECTS	Fall
NTNU	TMR4290	<a href="#">Marine Electric and Hybrid Power and Propulsion Systems</a>	7.5 ECTS	Spring
NTNU	TKP4158	<a href="#">Hydrometallurgical Process Technology</a>	7.5 ECTS	Fall
NTNU	TEP4506	<a href="#">Sustainable Energy Systems, Specialization Course</a>	7.5 ECTS	Fall
NTNU	TKJ4200	<a href="#">Irreversible Thermodynamics</a>	7.5 ECTS	Fall
KTH	EJ2201	<a href="#">Electrical Machines and Drives</a>	6 ECTS	Fall
KTH	EJ2410	<a href="#">Hybrid Vehicle Drives</a>	7,5 ECTS	Fall
KTH	KE2110	<a href="#">Applied Electrochemistry</a>	7,5 ECTS	Fall
KTH	CK2300	<a href="#">Batteries</a>	7,5 ECTS	Fall
KTH	CK2020	<a href="#">Advanced Inorganic Chemistry</a>	7,5 ECTS	Fall
KTH	CK2320	<a href="#">Hydrogen</a>	7,5 ECTS	Fall
KTH	EI2460	<a href="#">Batteries for Energy Storage in Electrical Systems</a>	6 ECTS	Spring
KTH	EI2455	<a href="#">Smart Electrical Networks and Systems</a>	7,5 ECTS	Academic year (Fall + spring)
KTH	EG2230	<a href="#">Electricity Pricing and Emissions</a>	6 ECTS	Fall
KTH	EG2240	<a href="#">Power System Planning</a>	6 ECTS	Spring
KTH	EJ2440	<a href="#">Electric Transportation</a>	6 ECTS	Spring
KTH	MJ2386	<a href="#">Energy Storage Technology</a>	6 ECTS	Fall
Chalmers	EEN016	<a href="#">Lithium-ion battery systems for vehicles and large-scale energy storage</a>	7.5 ECTS	Fall
Chalmers	TIF351	<a href="#">Funcional energy materials</a>	7.5 ECTS	Fall
Chalmers	TRA285	Structural batteries: Design, manufacturing and characterisation	7.5 ECTS	Fall
Chalmers	TRA350	Structural batteries: Design, manufacturing and characterisation	15 ECTS	Fall
Chalmers	TRA360	<a href="#">Battery materials and manufacturing</a>	7.5 ECTS	Fall
Chalmers	TRA280	<a href="#">Rechargeable batteries: From atom to cell</a>	7.5 ECTS	Spring/Fall (Quarters 2 & 3)
Chalmers	MMS195	<a href="#">Introduction to propulsion and energy systems for transport</a>	7.5 ECTS	Fall
Chalmers	EEN140	<a href="#">Electric drive systems for vehicles and vessels</a>	7.5 ECTS	Spring
Chalmers	TME095	<a href="#">Electric and hybrid vehicles</a>	7.5 ECTS	Fall
Chalmers	ENM056	<a href="#">Electrical machines - design and analysis</a>	7.5 ECTS	Fall
Chalmers	EEN135	<a href="#">Electric machines for vehicles and vessels</a>	7.5 ECTS	Spring
Chalmers	SEE030	<a href="#">Variation management in the electricity system</a>	7.5 ECTS	Spring
Chalmers	TRA275	<a href="#">Fuel cell systems</a>	7.5 ECTS	Spring
Chalmers	TRA230	<a href="#">Solar energy: From photons to future societal impact</a>	7.5 ECTS	Fall
Chalmers	KOO093	<a href="#">The synthesis, properties and structures of solid state materials</a>	7.5 ECTS	Fall

Chalmers	KBT245	<a href="#">Green chemistry</a>	7.5 ECTS	Fall
DTU	47330	<a href="#">Energy storage and conversion</a>	5 ECTS	Fall
DTU	47211	<a href="#">Electrochemical energy storage and Power2X</a>	5 ECTS	Fall
DTU	47305	<a href="#">Electrochemistry</a>	5 ECTS	Spring
DTU	28870	<a href="#">Energy and Sustainability</a>	5 ECTS	Fall
DTU	47310	<a href="#">Battery materials and chemistries: from fundamental mechanisms to battery cells</a>	5 ECTS	Fall
DTU	47332	<a href="#">AI-orchestrated self-driving labs</a>	5 ECTS	June
DTU	47335	<a href="#">Atomic-scale modelling of energy materials (online)</a>	5 ECTS	Spring
DTU	47319	<a href="#">Functional materials</a>	5 ECTS	Spring
DTU	47338	<a href="#">Organic energy materials</a>	5 ECTS	Fall
DTU	38102	<a href="#">Technology Entrepreneurship</a>	5 ECTS	Fall
DTU	45200	<a href="#">Innovation in Engineering (Polytechnical Foundation) Students with advanced innovation competences should take 42502/42505/42503.</a>	5 ECTS	Jan, June, August