

| Offered as: 1-professional | | | | | |
|---|-------------|-------|-----------------------|----------------------|------------------------------|
| Specialisation: Power Electronics and Drives | | | | | |
| Module name | Course type | ECT S | Applied grading scale | Evaluation method | Assessment method |
| 1 SEMESTER For Students with a Bachelor's Degree from Aalborg University | | | | | |
| Dynamics in Electrical Energy Engineering | Project | 15 | 7-point grading scale | Internal examination | Oral exam based on a project |
| Computational Fluid Dynamics (CFD) and Multiphase Flow | Course | 5 | 7-point grading scale | Internal examination | Oral exam |
| Fluid Mechanics and Compressible Flow | Course | 5 | 7-point grading scale | Internal examination | Oral exam |
| Probability Theory, Stochastic Processes and Applied Statistics | Course | 5 | 7-point grading scale | Internal examination | Written or oral exam |
| 1 SEMESTER For Students with a Bachelor's Degree from Another University (INTRO Semester Students) | | | | | |
| Problem Based Project Organised Learning in Dynamics in Electrical Energy Engineering (INTRO) | Project | 10 | 7-point grading scale | Internal examination | Oral exam based on a project |
| Dynamic Modelling of Electrical Machines and Control Systems | Course | 5 | 7-point grading scale | Internal examination | Written exam |
| High Voltage Engineering and EMI/EMC | Course | 5 | 7-point grading scale | Internal examination | Written exam |
| Probability Theory, Stochastic Processes and Applied Statistics | Course | 5 | 7-point grading scale | Internal examination | Written or oral exam |
| Control Theory and MATLAB | Course | 5 | 7-point grading scale | Internal examination | Written exam |
| 2 SEMESTER | | | | | |
| Control of Power Electronic Systems | Project | 15 | 7-point grading scale | External examination | Oral exam based on a project |
| Control of Electrical Drive Systems and Converters | Course | 5 | 7-point grading scale | Internal examination | Written exam |
| Advanced Power Electronics and Applications | Course | 5 | 7-point grading scale | Internal examination | Oral exam |
| Optimisation Theory and Reliability | Course | 5 | 7-point grading scale | Internal examination | Written exam |
| 3 SEMESTER Ordinary Semester | | | | | |
| Advanced Project in Power Electronics and Drives | Project | 20 | 7-point grading scale | Internal examination | Oral exam based on a project |
| Elective Courses Energy Engineering | Course | 10 | | | |
| 3 SEMESTER Voluntary Traineeship | | | | | |
| Voluntary Traineeship | Project | 30 | 7-point grading scale | Internal examination | Oral exam based on a project |

| 4 SEMESTER Master's Thesis | | | | | |
|---|---------|----|-----------------------|----------------------|------------------------------|
| Master's Thesis | Project | 30 | 7-point grading scale | External examination | Oral exam based on a project |
| 3-4 SEMESTER Long Master's Thesis | | | | | |
| Master's Thesis | Project | 50 | 7-point grading scale | External examination | Oral exam based on a project |
| Elective Courses Energy Engineering | Course | 10 | | | |

| Elective Courses Energy Engineering | | | | | |
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| Module name | Course type | ECT S | Applied grading scale | Evaluation Method | Assessment method |
| Advanced Analysis of Thermal Machines | Course | 5 | 7-point grading scale | Internal examination | Written and oral exam |
| Advanced Modelling and Control of Voltage Source Converters | Course | 5 | 7-point grading scale | Internal examination | Written and oral exam |
| Analysis of Advanced Thermal Process Systems | Course | 5 | 7-point grading scale | Internal examination | Oral exam |
| Battery Energy Storage Systems | Course | 5 | 7-point grading scale | Internal examination | Written and oral exam |
| Biomass Conversion and Biofuels | Course | 5 | 7-point grading scale | Internal examination | Written and oral exam |
| Biomass Gasification, Combustion and their Advanced Modelling | Course | 5 | 7-point grading scale | Internal examination | Oral exam |
| Control of Grid Connected Photovoltaic and Wind Turbine Systems | Course | 5 | 7-point grading scale | Internal examination | Written and oral exam |
| Electrochemical Modelling of Fuel Cells, Electrolysers and Batteries | Course | 5 | 7-point grading scale | Internal examination | Oral exam |
| Energy Conversion and Storage in Future Energy Systems | Course | 5 | 7-point grading scale | Internal examination | Written and oral exam |
| Fault Tolerant Control | Course | 5 | 7-point grading scale | Internal examination | Written exam |
| Future Power System in Denmark | Course | 5 | 7-point grading scale | Internal examination | Written and oral exam |
| Modern Electrical Drives | Course | 5 | 7-point grading scale | Internal examination | Written and oral exam |
| Modern Power Electronic Devices and their Models | Course | 5 | 7-point grading scale | Internal examination | Written and oral exam |
| Non-linear Control and Multi-body Systems | Course | 5 | 7-point grading scale | Internal examination | Written or oral exam |
| System Identification and Diagnosis | Course | 5 | 7-point grading scale | Internal examination | Oral exam |
| Test and Validation | Course | 5 | Passed/Not Passed | Internal examination | Written and oral exam |
| Wind Power System and Renewable Energy Grid Integration | Course | 5 | 7-point grading scale | Internal examination | Written and oral exam |