

Recommended courses at DTU

Energy Systems Analysis

Title	ECTS
42002 Modelling and Analysis of Sustainable Energy Systems using Operations Research	5
42003 Energy Economics, Markets and Policies	10
28870 Energy and Sustainability	5
42004 Feasibility studies of energy projects	5
42006 National energy system modelling with TIMES	5
46230 Power system balancing with large scale wind power	5
2435 Decision-Making Under Uncertainty	5
31761 Renewables in electricity markets	5
42XXX Econometrics applied for energy modelling	5
2443 Stochastic Simulation	5
10333 Physics of Sustainable Energy	5
31380 Intelligent Systems	10
31742 Power system grids	5
31778 Distributed Energy Technologies	5
31783 Integration of wind power in the power system	5
41416 Energy Systems - Analysis, Design and Optimization	10
42111 Static and Dynamic Optimization	5
42112 Mathematical Programming Modelling	5
42116 Implementing OR Solution Methods	5
42123 Optimization in Finance	5
42172 Risk and decision-making	5
42180 Quantitative modelling of behaviour	5
42879 Decision Support and Risk Analysis	5

Max. 1 course of the following list:

2431 Risk Management	5
11129 Sustainable District Heating	5
42085 Strategy, design and market	5
42114 Integer Programming	5
42136 Large Scale Optimization using Decomposition	5
42178 Transportation system analysis	5
42195 Transport economics	5
42372 Life Cycle Assessment of Products and Systems	10
42375 Advanced system modelling and life cycle inventory analysis	5
42429 Project Management	5
42435 Knowledge-based Entrepreneurship	5
42457 Supply Chain Management	5
46200 Planning and Development of Wind Farms	5

Thermal energy

Title	ECTS
42002 Modelling and Analysis of Sustainable Energy Systems using Operations Research	5
42003 Energy Economics, Markets and Policies	10
28870 Energy and Sustainability	5
42004 Feasibility studies of energy projects	5
42006 National energy system modelling with TIMES	5
46230 Power system balancing with large scale wind power	5
41416 Energy Systems - Analysis, Design and Optimization	10
11117 Solar Heating Systems	10
11128 Development of solar energy systems	5
12132 LCA Modelling of Waste Management Systems	5
12136 Bioenergy Technologies	10
28244 Combustion and High Temperature Processes	5
31730 Electric Power Engineering, fundamentals	10
31761 Renewables in electricity markets	5
41323 Advanced Fluid Mechanics	10
41343 Fuels and Emissions from Transportation	5
41346 IC Engines - Experimental Methods and data processing	5
41420 Refrigeration	10
41421 Advanced Power Plants	5
47301 Hydrogen Energy and Fuel Cells	5
1418 Introduction to Partial Differential Equations	5

Max. 1 course of the following list:

2435 Decision-Making Under Uncertainty	5
2685 Scientific Computing for differential equations	10
10333 Physics of Sustainable Energy	5
11117 Solar Heating Systems	10
11127 Sustainable heating and cooling of buildings	5
11129 Sustainable District Heating	5
11221 Ventilation and Climatic Systems	10
28451 Optimising Plantwide Control	7.5
28871 Production of Biofuels	10
28872 Biorefinery	5
31778 Distributed Energy Technologies	5
31783 Integration of wind power in the power system	5
41315 Applied CFD	5
41319 Computational Fluid Dynamics	10
41562 Fluid Power - Oil Hydraulics	5
42372 Life Cycle Assessment of Products and Systems	10
42435 Knowledge-based Entrepreneurship	5
46300 Wind Turbine Technology and Aerodynamics	10
47309 Materials for Hydrogen Production and Storage	5

Wind Energy

Title	ECTS
42002 Modelling and Analysis of Sustainable Energy Systems using Operations Research	5
42003 Energy Economics, Markets and Policies	10
28870 Energy and Sustainability	5
42004 Feasibility studies of energy projects	5
42006 National energy system modelling with TIMES	5
46230 Power system balancing with large scale wind power	5
46300 Wind Turbine Technology and Aerodynamics	10
31761 Renewables in electricity markets	5
31783 Integration of wind power in the power system	5
31786 Wind Turbine Electrical Design	10
41315 Applied CFD	5
46100 Introduction to Micrometeorology for Wind Energy	5
46200 Planning and Development of Wind Farms	5
46211 Offshore Wind Energy	10
46310 Projects in Wind Turbine Aeroelasticity	10
46320 Loads, Aerodynamics and Control of Wind Turbines	10
46400 Wind Turbine Measurement Technique	10
46800 Research Immersion - DTU Windenergy	5

Max. 1 course of the following list:

2685 Scientific Computing for differential equations	10
10333 Physics of Sustainable Energy	5
11129 Sustainable District Heating	5
31742 Power system grids	5
31745 Computational Electric Energy Systems	5
31778 Distributed Energy Technologies	5
31782 Electrical Machines	5
41319 Computational Fluid Dynamics	10
41416 Energy Systems - Analysis, Design and Optimization	10
41512 Power transmitting machine elements - design and optimization	5
41514 Dynamics of Machinery	5
41525 FEM-Heavy (Programming the Finite Element Method)	10
42435 Knowledge-based Entrepreneurship	5