

PROGRAMME SYLLABUS FOR

Master Programme in Wind Power Project Management

60 ECTS CREDITS

PROGRAMME CODE

TAMWM

APPROVAL

Approved 2009-12-03 by the Faculty Board at Gotland University.

Valid as from autumn term 2010.

LEVEL

Advanced level 400

LEARNING OUTCOMES

After completing their studies the student should be able to:

- identify and apply knowledge of wind energy in energy systems.
- explain basic principles of spatial planning
- assess the feasibility of wind power development in a region
- assess the feasibility of a wind power project
- perform planning and management processes of wind energy projects.
- facilitate communication in topics regarding wind power development

CONTENTS AND ORGANIZATION OF THE STUDY PROGRAMME

The Wind Power Project Management programme blends wind energy development and project management subjects into the curriculum to ensure graduates exit with requisite skills to balance sustainable energy production with needs of the project stakeholders.

The programme prepares students for a professional career in the renewable energy sector with a curriculum focus on wind power development and management. Turbine technology, economics, energy utilization, environmental assessment, meteorology and supply chain management are representational subjects incorporated in the interdisciplinary programme with focus on wind farm planning and operations.

The programme is organized in a sequential path of thematic instruction in technology and management subjects to plan and execute wind power projects. Starting in the autumn term, the Wind Energy Science Module (30 ECTS) with industry relevant technology subjects such as wind resources and measurement, turbine efficiency, energy estimations, and grid integration are presented. Over the spring term, students transfer from the technology foundation to the Management Module (15 ECTS) and subjects in planning and development, project economics, community relations, environmental impact regulations and acceptance, and wind farm optimization.

Research and writing skills are equal elements of professional competence and important parts of the curriculum. These topics are addressed by a Thesis Module (15 ECTS) that functions over the entire academic year. Study begins early in the autumn term with a series of thesis seminars and workshops, culminating at the end of the spring term with an independently researched student thesis.

ENTRANCE REQUIREMENTS

Entrance requirements include a bachelor's degree of 180 Swedish credits points or equal in engineering or a science related field of study such as ecology, environmental studies, natural or social science, economics, design, civil engineering, architecture or urban planning, and with a foundation

level of calculus and statistics. Swedish students are required to have passed the equivalent of Mathematics C in the Swedish Secondary School system.

Applicants must have written and verbal command of the English language suitable for master's level studies, independent research and composition skills equal to the creation of a master thesis. A proficiency test of upper level English language is required, corresponding to the Swedish level of "Engelska B".

TYPE OF TEACHING

The language of instruction and literature is English. Interdisciplinary topics are presented by lectures, seminars, case studies, workshops and study visits.

DEGREE CERTIFICATE AND ACADEMIC QUALIFICATION

Upon successful completion of the Master Programme in Wind Power Project Management the student is awarded the degree:

Master of Science (60 ECTS) in Energy Technology with specialization in Wind Power Management/Magisterexamen i energiteknik med inriktning mot vindkraftförvaltning.