

Look mom, I did that!



Work for Vestas – and be part of producing more than 50 million CO₂-free MWh per year. That's enough to power 12 million households.

ELECTRICAL DRIVES & SYSTEMS

The Electrical Drives & Systems is responsible for the research, development and implementation of electrical power system, power components, converters, and lightning protection system, electronics, sensors and controller software for wind turbines & systems.

Principal/Assoc Principal/Senior/R&D Engineer, Converter Software

You will be responsible to develop embedded software for converter systems according to the Vestas SW development process. You will be responsible for converting Matlab Simulink models into embedded software in C/C++. Our converters are designed with 1200V and 1700V IGBT's and operate at more than 400kW.

- Proficiency in the broad technical expertise in any of the following:
- Embedded software development in C or C++
 - Knowledge of Real-Time Operating Systems like VxWorks or similar
 - Software design techniques using UML and design patterns
 - Experience in DSP software development is an added advantage
 - Knowledge of formal software development processes and/or CMMI

Principal/Assoc Principal/Senior/R&D Engineer, Converter Hardware

You will be responsible for research and development of hardware and software for Vestas converter systems. You will be responsible for simulating, designing and validating Frequency Converters for our double fed generator concept. Converters are designed with 1200V and 1700V IGBT's and operate more than 400kW.

- Proficiency in the broad technical expertise in any of the following:
- Power electronics and laboratory experience
 - Electrical power generation systems
 - Design of converter and advanced power electronic panels
 - Thermal optimal construction
 - EMC correct design, EMC filters

Principal/Assoc Principal/Senior/R&D Engineer, Converter Performance Improvement

You will be part of a global team based in Denmark, USA and Singapore which provides design and maintenance support to our service organization. You will be working with global Technology R&D, manufacturing and service technicians on-site to provide prompt analysis support and design improvements of power electronics to enhance quality and performance of our Wind Turbines. As part of the Converter improvement team, you will need to travel to customer sites to provide support to our service organization.

- Post A: Software**
Proficiency in the broad technical expertise in any of the following:
- Control schemes
 - Simulation tools such as Matlab/Simulink and Simplorer
 - Embedded software development in C or C++
 - Knowledge of Real-Time Operating Systems like VxWorks or similar
 - Software design techniques using UML and design patterns

- Post B: Hardware**
Proficiency in the broad technical expertise in any of the following:
- Power electronics and laboratory experience
 - Electrical power generation systems
 - Design of converter and advanced power electronic panels
 - Thermal optimal construction
 - EMC correct design, EMC filters

Principal/Assoc Principal/Senior/R&D Engineer, Power Components

You will be responsible for creating requirements & test specifications. You will participate in tests with suppliers, write test reports, design reviews with suppliers and involved in test and validation of prototypes. Besides providing technical support to Strategic Purchase in evaluating supplier performance, you will participate in QA audits at suppliers facilities and carry out detailed fault analysis on components to determine best practice for test and specifications.

- Proficiency in the broad technical expertise in any of the following:
- Experience in power generation systems
 - Experience in MW generators
 - Knowledge of electrical machine fabrication practices
 - Experience in performing detailed faults analysis on components
 - Good experience in writing specifications and reports

Principal/Assoc Principal/Senior/R&D Engineer, Verification

You will be responsible for research & development in circuit simulation, EMC and thermal models. You will also create foundation for circuit simulation competence center and involve in product verification according to the V-model.

- Proficiency in the broad technical expertise in any of the following:
- In depth knowledge in circuit design of electronic systems
 - Good fundamentals required in EMI & EMC aspects and in thermal management and electronics cooling
 - Knowledge in testing for reliability of electrical circuits
 - Software tools such as Simulink, Matlab and Simplorer for simulation models

Power your life - Vestas offers you challenging, global career opportunities in cleantech. Our 23% market share makes us the world leader in modern energy. We have installed 35,000 wind turbines worldwide and we reduce CO₂ emissions by 31 million tons per year. In 2008, our more than 15,000 employees will welcome 2,500 new colleagues. Care to join us?

Established in 2007 as part of Vestas Global research organisation, Vestas Technology R&D Singapore broadly spans technical competencies working on technology research, development and engineering projects with regional and worldwide partners, universities and research institutions. In 2008, we will establish our regional R&D Hub in Fusionopolis, with a planned investment of S\$500 million in Singapore over the next 10 years.

AERO-MECHANICAL SYSTEMS

The department of Aero-Mechanical Systems is responsible for the research, development and implementation of new technology for wind turbine blades.

Principal/Assoc Principal/Senior/R&D Engineer, Sensor and Monitoring

You will be working in a cross functional technical team specifying, integrating and testing sensor and monitoring systems for wind turbine blades relating initially to condition monitoring and load sensing. You will work in projects with structured working methods in an integrated development environment and collaborate with colleagues within electronics, mechanics, test, and production.

- Proficiency in the broad technical expertise in the following:
- Sensor selection and integration and/or condition monitoring and load sensing aspects
 - Setting up test environments and verification for large structures
 - System design and integration of robust hardware electronics into large structures in harsh environments
 - Structural design, FMEA processes, design for reliability and robustness, and in monitoring mechanical degradation and have worked with composites

Principal/Assoc Principal/Senior/R&D Engineer, HVAC

You will be responsible for coordinating and liaising with conditioning team, supplier and local authorities as required to carry out projects. You will design, develop technical specification for HVAC and evaluate HVAC for its technical requirements. You will also prototype development and validate with supplier, prepare global specification and data sheet for HVAC and prepare technical bid evaluation/selection for supplier's capability. You will review and check HVAC specifications and drawings.

- Proficiency in the broad technical expertise in all the following:
- Broad background in HVAC which includes specification, product validation and supplier selection, implementation within energy technologies
 - Knowledge of heat exchanger design, analysis and selection
 - Good knowledge of heat transfer and fluid flow analysis

FOR ALL POSITIONS, candidates should possess an Engineering Degree with excellent communication, analytical and problem solving skills and meet the below minimum requirements:

PRINCIPAL

Masters with more than 8 years' relevant work experience and experience in leading large; multiple teams and drives technical topics/functions.

ASSOCIATE PRINCIPAL

Masters with more than 6 years' OR Bachelor with more than 8 years' relevant work experience and experience in leading and participating in a team.

SENIOR ENGINEER

Masters with minimum 4 years' OR Bachelor with minimum 6 years' relevant work experience.

ENGINEER

Bachelor with 1-2 years' relevant work experience. Self motivated and ability to execute assigned tasks.

VESTAS TECHNOLOGY R&D SINGAPORE PTE LTD

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Please email your resume to R&DSGCareer@vestas.com

For more information, visit our website at www.vestas.com

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