



Dynamic System Modeling Lead Engineer M/F Barcelona, Spain

Bachelor's Degree in engineering or equivalent knowledge

Role Summary: The Onshore Wind Engineering Performance team is responsible for defining performance requirements of wind turbines, ensuring that the design meets these requirements, developing simulation capabilities, and executing simulations.

**Business Segment:**

Renewable Energy OnShore Wind

**Function:**

Engineering/Technology

**Essential Responsibilities:**

- Develop and implement dynamic system modeling capability including coding / scripting
- Execute multibody simulations for new product development and readiness-to-serve activities
- Work closely with subsystem / component teams to understand modeling requirements & CTQs (Critical to Quality), for the purposes of correct modeling and to enable others to effectively use and run the simulations
- Work with the loads / system simulation team for coordinated use and development of modeling capability
- Develop technical documentation, including but not limited to training material, to empower others to effectively use multibody simulation software
- Ensure simulations meet accuracy requirements and recommend validation plans
- Leverage test data from component test, drivetrain test stands and prototype testing
- Contribute to Performance requirements (through Design Memos) and relevant design practice(s)

**Qualifications/Requirements:**

- Bachelor's Degree in engineering or equivalent knowledge / experience
- Some experience in multibody simulations or related

**Desired Characteristics:**

- Development experience with commercial multibody simulation software such as but not limited to ADAMS, Simpack, SAMCEF
- Demonstrated direct experience in executing multibody simulations in tools such as Simpack, ADAMs, SAMCEF, etc.
- Strong desire for code development (coding / scripting work)
- Ability to work in a global, matrix organizational environment
- Experience in coding / scripting preferably related to multibody simulation
- Software development experience
- Experience with finite-element modeling such as but not limited to ANSYS
- Experience with CAD software such as but not limited to Unigraphics (NX), CATIA, SOLIDWORKS
- Wind turbine engineering experience
- Conceptual and theoretical understanding and practical experience in dynamics, including structural dynamics problems in time domain and rotational dynamics
- Master's Degree in engineering or equivalent knowledge / experience
- System or product level mindset