

Bachelor's / Master's Thesis

Development of a time-efficient thermodynamic model for the preliminary design of aircraft engines

Start: immediately possible

➤ Project focus and main topics:

- **Research** on the general functioning of aircraft engines
- **Development** of a **thermodynamic Model** for the preliminary design of the aircraft engine primary gas path
- Transfer of the gas path contours into individual engine subsystems
- Integration and testing of the design process in an existing pre-design programme

➤ What we expect from you:

- Interest in new and further developments in the field of aircraft engines
- Basic thermodynamic knowledge and a general mechanical understanding are advantageous
- Basics in MS Excel

➤ What we offer to you:

- Insights into engineer-specific working methods
- Working with the CAD program Siemens NX, as well as the programming languages VBA, C# and Python
- Contact to industrial project partners (Rolls-Royce)
- Possibility to work parallel in a student job on this topic at the BTU

If interested please contact: