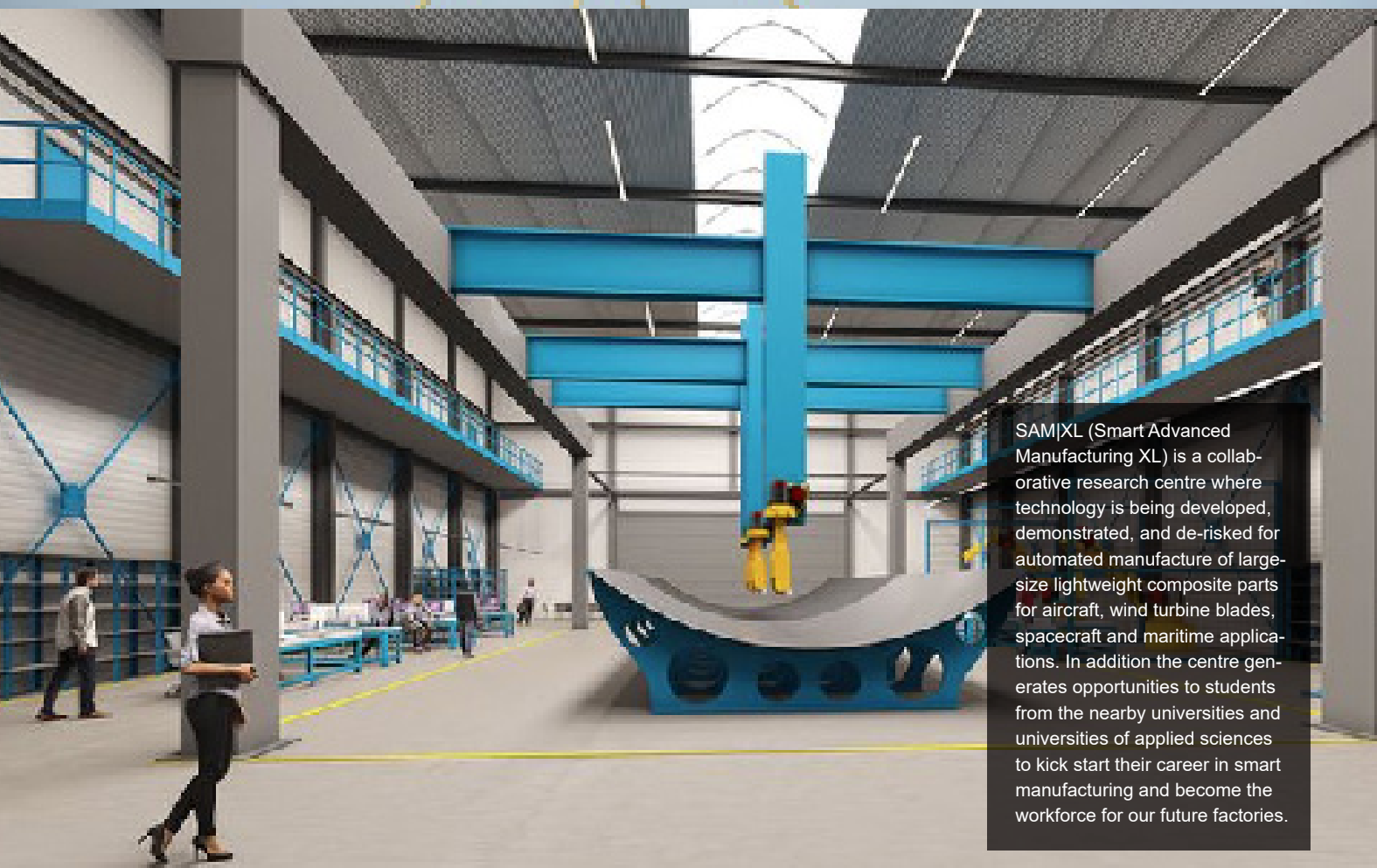


Space is no longer only accessible to governments. Nevertheless, developers of small satellites, such as universities and businesses, depend on the unused space in large rockets to launch them. This means that they have no control over the timing of the launch and that their choice is limited when it comes to the satellite's orbit. The commercial development of rockets, specifically designed for smaller amounts of cargo, offers a solution. For his graduation project, Nigel Drenthe improved and validated a cost estimation model for this that won the first Heinz Stoewer Space Award.



# Snapshot Faculty of Aerospace Engineering

Connecting people is the essence of Aerospace Engineering - whether it's connecting people through flight or through communications facilitated by satellites in space. However, the world's growing need for connectivity is under pressure from increasingly high demands with regard to sustainability, safety and cost efficiency. AE takes on this seemingly contradictory challenge by educating top-class engineers (on-campus and online) and PhDs, and by means of scientific research and the development of pioneering innovations. AE is one of the largest, most multifaceted scientific communities in the world focusing on aerospace and related areas, such as wind energy.



SAM|XL (Smart Advanced Manufacturing XL) is a collaborative research centre where technology is being developed, demonstrated, and de-risked for automated manufacture of large-size lightweight composite parts for aircraft, wind turbine blades, spacecraft and maritime applications. In addition the centre generates opportunities to students from the nearby universities and universities of applied sciences to kick start their career in smart manufacturing and become the workforce for our future factories.

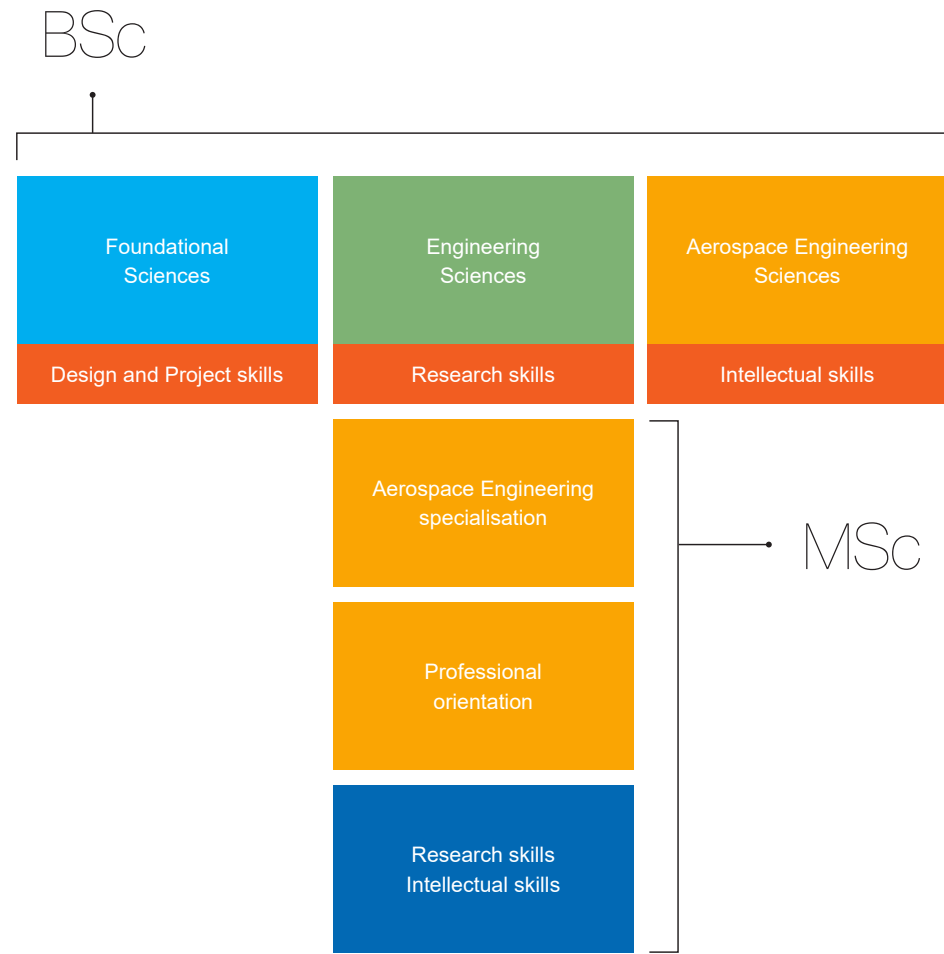


The Centreline Project asks how are we going to fly into the year 2035? Together with nine partners from six countries, researchers at TU Delft are exploring a propulsion method to reduce fuel use and greenhouse gas emissions. The prototype features an electrically driven propulsive device located in the back of the fuselage to deal more efficiently with the effects of drag caused by the flow of air around the aircraft.

# Education

## The T-shaped Engineer

The BSc covers a broad base of aerospace engineering disciplines, foundational sciences and professional skills. In the MSc students acquire in-depth knowledge in a chosen field and expand professional and research skills.

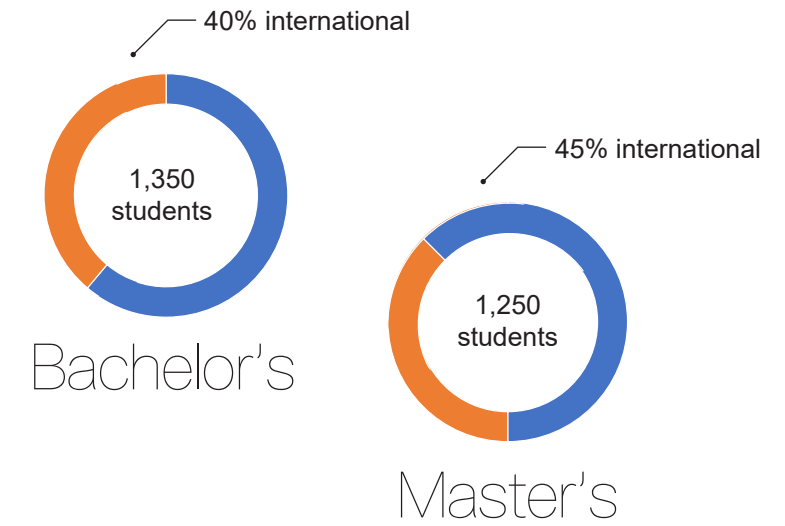


A broad Bachelor programme fully taught in English with a wide coverage of engineering disciplines. In the research-based Master programme the students specialise in a profile. The faculty population is highly international.

**A good balance between theory and practice, project work and hands-on experience**

## Design and Project Skills

Design, project and collaboration skills are an integral part of the BSc. In the Design Synthesis Exercise, students collaborate to apply everything they learned in one complete design.



## Strong in online education

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- » Massive Open Online Courses: 100.000+ participants in multiple different courses
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- » Blended courses
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# Innovation



Sustainable Aviation



Wind Energy



Materials

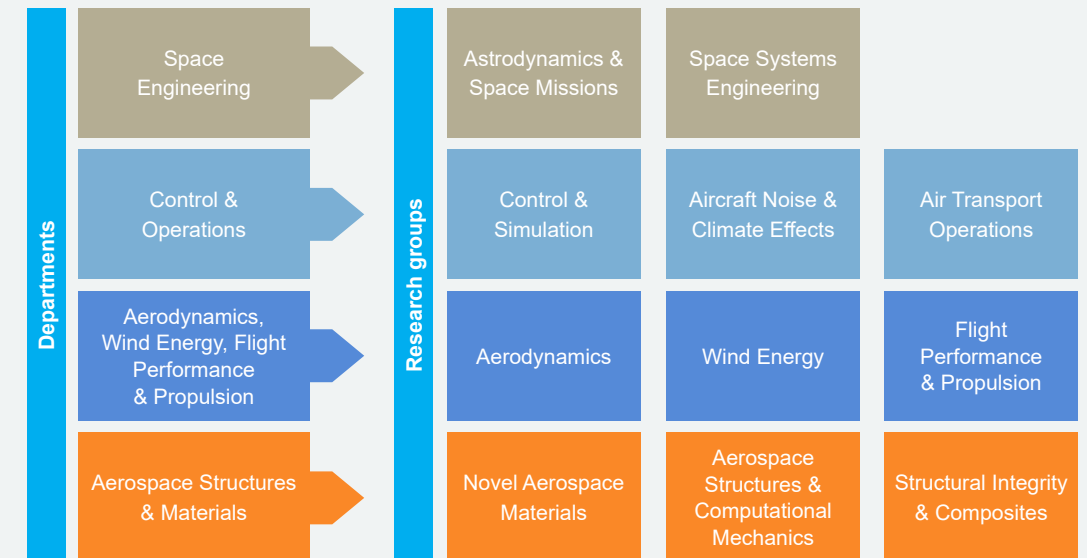


Earth Observation

# Research

**The largest research powerhouse in Europe with a broad set of in-depth disciplines dedicated to aerospace engineering**

- Science
- Engineering
- Design



Approx. 30 PhD defenses per year



Approx. 8 patents per year



160 Staff



1 Graduate School with approx. 290 candidates