Aerospace Engineering

How do you launch rockets into space? How do you develop a more efficient aircraft engine? How can you make aircraft quieter? How do you design the next generation of satellites? How will you dispose of them when they fail? These are questions you will attempt to answer during the Aerospace Engineering programme, which will turn you into a multidisciplinary engineer, able to excel in the aerospace sector as well as many other industries.

What does the programme look like?

The programme starts off with a series of introductory courses in the field of Aerospace Engineering, as well as general engineering topics such as calculus and mechanics. Quickly you will realise that every course builds upon the foundations provided by previous courses, which requires you to really keep up the pace in order to be successful. Lectures are taught by experienced lecturers and professors, often with an industry background, who use real-life examples to illustrate the importance of their respective disciplines. Extensive group projects are employed to integrate the skills and knowledge you acquired during lectures. The projects invite you to solve meaningful design challenges in a working environment resembling what you might encounter in your future career.

You will study alongside more than 2500 BSc and MSc students at the Faculty of Aerospace Engineering. The Faculty is unique in Europe and enjoys worldwide acclaim. Aside from the theoretical part of the BSc programme, the Faculty is able to offer you access to state-of-the-art facilities over the course of several practicals, including an advanced flight simulator, our own jet aircraft as a flying classroom, subsonic, supersonic and hypersonic wind tunnels and a large laboratory for the development, manufacturing and testing of structures and materials.

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<tr>
<th>Admission requirements</th>
<th>Selection procedure</th>
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<tbody>
<tr>
<td>Language</td>
<td>English</td>
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<tr>
<td>Number of first year students</td>
<td>415</td>
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<tr>
<td>BSA*</td>
<td>63%</td>
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<tr>
<td>Numerus</td>
<td>Yes</td>
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<td>Clausus</td>
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| Average week           | 42 hours           |
| Lectures               | 16 hours           |
| Projects and laboratory courses | 8 hours |
| Self-study/tutorials   | 18 hours           |

* Binding recommendation on continuation of studies
What do you learn?
From the very first day of your studies, you will be able to dive into the specifics of aerospace engineering. While you are also taught the basic engineering sciences such as mechanics and calculus, the programme focuses on how to apply these engineering disciplines to aerospace design problems as soon as possible.

In the first year this occurs mainly in the aerospace design projects, which will take up a significant portion of your weekly schedule.

In the second year, you will learn more about designing systems and processing measurement data. A series of intensive mathematics courses will provide you with the tools required to tackle the aerospace courses. Topics that were discussed briefly in the first year are now explored in depth, providing you with a solid theoretical background in subjects such as aerodynamics and orbital mechanics. The aerodynamics courses are supplemented by two wind tunnel practicals.

The first semester of the third year allows you to broaden the scope of your education by means of a minor programme. You can choose to do this at other TU Delft faculties, at other universities in the Netherlands or at one of our many partner universities abroad.

Your last semester consists of the final BSc courses as well as a flight practical in the faculty’s flying classroom, a Cessna Citation aircraft, which you will use to carry out measurements in flight. Everyone finishes their third year with the Design Synthesis Exercise (DSE). During a ten-week period, you will work with a team of students on an original and relevant design assignment, in many cases commissioned by aerospace companies or research organisations.

Career prospects
- 88% of MSc graduates find a job they like within 6 months after graduating
- 40% become employed in the Aerospace sector
- 60% find a job within other engineering sectors, consultancy or management

MSc tracks
- Aerodynamics & Wind Energy
- Aerospace Structures & Materials
- Control & Operations
- Flight Performance & Propulsion
- Space Flight
- European Wind Energy Master

What is the profile of an Aerospace Engineering student?
- Excellent at acquiring new maths and physics skills at a rapid pace
- Solving multidisciplinary design problems with a group of fellow students
- Being able to study in a very internationally-oriented environment with English as the main language

Number of
BSc students
1323

Number of
MSc students
1263

34% International BSc students

100% English-language

43% International MSc students

18th place for Engineering & Technology

Times Higher Ranking

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