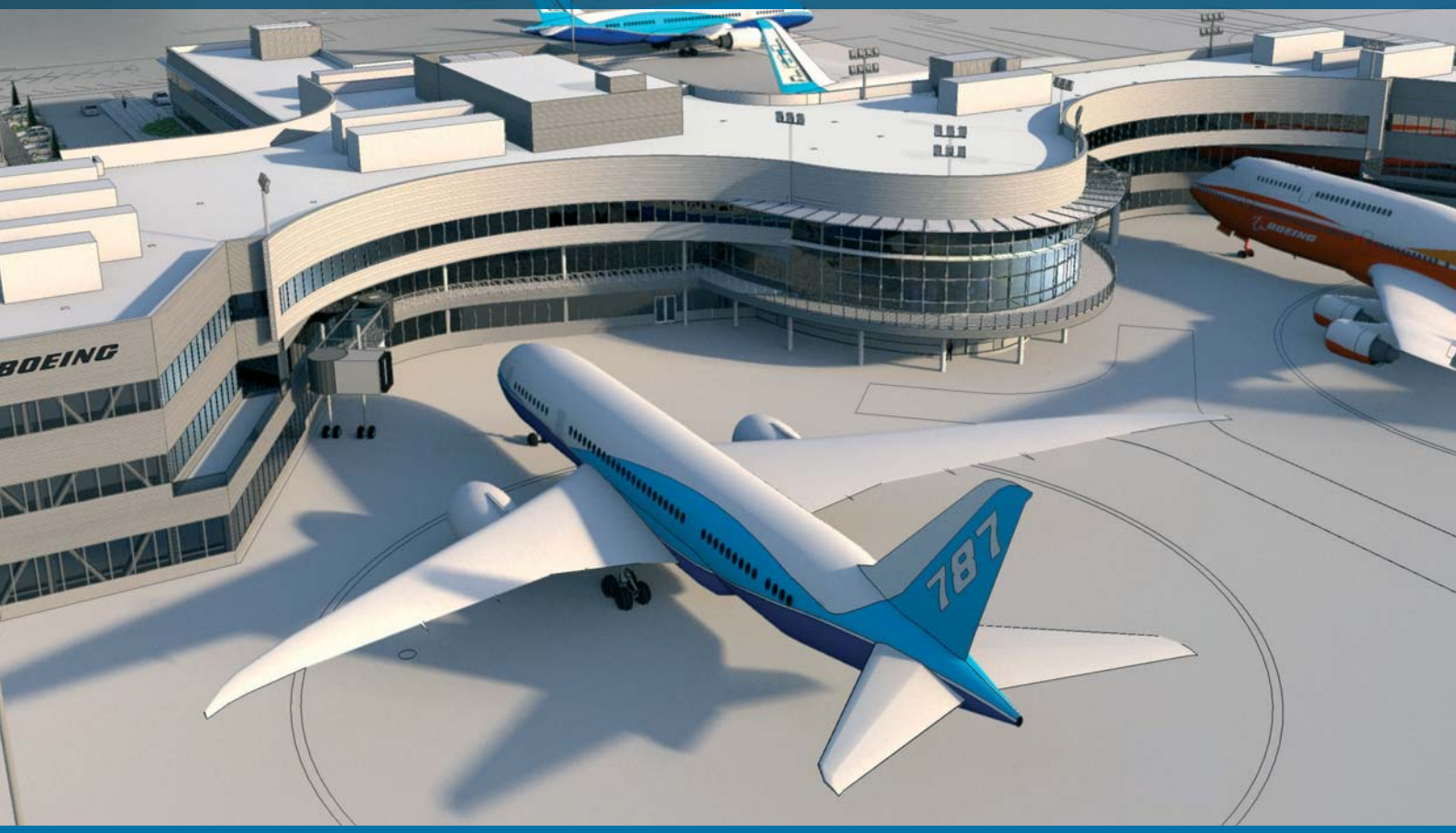
Faculties: Industrial Design Engineering; Civil Engineering and Geosciences;
Electrical Engineering, Mathematics and Computer Science; Aerospace Engineering.

Minor
Airport **Development (former Airport of the Future)**



Minor

Airport Development

‘The minor ‘Airport Development’ (former Airport of the Future) comprises a major project, in which an existing airport is examined. This examination is done with software that simulates the operations of an airport’

Language	**English**
Start	**September**
Credits	**30 ECTS**
Capacity	**80**

The minor Airport Development is jointly organised by the faculties of Industrial Design Engineering (IDE), Civil Engineering and Geosciences (CEG), Technology, Policy and Management (TPM) and Aerospace Engineering (AE). The minor is aimed at engineering students from all bachelor programmes offered at the TU Delft, who are interested in the design, planning, management and operational aspects of airports.

Why?
An airport operates in a competitive, dynamic, complex, and unpredictable environment. Development and growth of any large airport is to a large extent determined by its ability to balance business realities, long-term expansion requirements, and environmental and social demands. The minor Airport Development is oriented to those engineering students who would like to understand how airports are designed, planned and operated in such a complex and uncertain environment. The issues confronting airports, both at the operational and strategic level, are truly multi-disciplinary in nature. The minor Airport Development is able to cover the entire multidisciplinary field of airport development, planning and operation through clustering of knowledge from various branches of science and technology available within the TU Delft.

Who is this minor for?
The minor Airport Development is designed for all TU Delft students, and students from Leiden and Rotterdam in the following programs: Econometrics and Operational Research (EUR), Informatics & Economy, Molecular Science & Technology, Physics, Astronomy, and Mathematics.

TU Delft

All students are expected to all attain the same level of knowledge and skill (i.e., meet the minor exit qualifications) after completing the minor, regardless of their background. Engineering students from the TU Delft are eligible to enter the minor once 90 ECTS of their respective BSc programme has been completed. Students that do not fully, but nearly, comply with these requirements may apply for admission, but acceptance will be judged and granted on a case by case basis.
www.minors.tudelft.nl

The Programme

The minor covers both the development and operational aspects of the airport system - an airport and its associated subsystems, including its airlines.

Development issues

The minor addresses in detail each of the following development issues:

- Airport geometric design characteristics, including the layout of runways, taxiways and aircraft aprons
- The design of passenger buildings and gate facilities
- Airport logistic systems, notably passenger servicing facilities
- Siting criteria for new airports including terminals
- The planning for ground access to the airport
- Microwave sensors and radars for airport applications

Management issues

It also gives treatment to the operational and management issues of:

- Air traffic management
- Management of congestion and queues (passengers and aircraft)
- Demand management
- Environmental impacts
- Logistic processes
- Ownership and organisational structures
- Airport economics and finance
- Regional transport networks
- Airport strategic planning; policy analysis and uncertainty management

Minor structure

The minor comprises four “blocks” of courses and associated exercises (each block is associated to one particular faculty), and is concluded with a comprehensive capstone project that helps students integrate and apply the multidisciplinary know- ledge and strategies learned in the various courses.

Courses
AE3501 - Air Transportation (3EC Q1)
AE3502 Airport Planning, Design and Operations (4EC Q1)
TB241TA - Logistics 2 (5EC Q1)
CT3080LR - Landside accessibility of Airports (4EC Q1 and 2EC Q2)
AE3503 - Strategic Planning for Airport Systems (6EC Q2)
IO3818 - Designing an Airport (6EC Q2)

Capstone project:

The goal of the capstone exercise is to give students the opportunity to weave together the multidisciplinary elements offered in the four course blocks into an integrated (team) project.

Information
For more information about all courses and projects, see www.studyguide.tudelft.nl

www.tudelft.nl/en/ae/education/minors/airport-development-minor

Contact
Ir. P.C. Roling
P.C.Roling@tudelft.nl
+31 15 27 85132

Delft University of Technology
Faculty of Aerospace Engineering
Kluyverweg 1
2629 HS Delft
The Netherlands

www.facebook.com/TUDelftAerospaceEngineering

@AETUDelft

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