

IMPLEMENTATION REGULATIONS

(part of the Teaching and Examination Regulations)

BACHELOR'S DEGREE PROGRAMME

&

MASTER'S DEGREE PROGRAMME

Aerospace Engineering

DELFT UNIVERSITY OF TECHNOLOGY

2023-2024

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Paragraph 1 – Bachelor’s and Master’s degree programmes

Article 1 - The study load

The study load is 180 credits for the Bachelor’s degree programme and 120 credits for the Master’s degree programme. The Master’s degree programme cannot include courses from a student’s Bachelor’s degree programme.

Article 2 - Composition of the degree programme

ONLY FOR BACHELOR’S DEGREE PROGRAMME

1. The table below outlines the general structure of the BSc programme.

BSc Year 1	First-year programme	60 EC
BSc Year 2	Second-year programme	60 EC
BSc Year 3	Minor programme Third-year major programme Design Synthesis Exercise	30 EC 15 EC 15 EC

2. The major phase of the Bachelor’s degree programme consists of core courses plus the Design Synthesis Exercise, totalling 150 credits.
3. In addition to the prescribed major phase of the Bachelor’s degree programme, students must choose a minor.

A minor is a cohesive collection of courses amounting to 30 EC. The primary objective of minors is to broaden knowledge with courses that are not usually provided in a given discipline.

A student may choose a pre-defined minor offered by TU Delft. All pre-defined minors offered by TU Delft have to be accepted by all degree programmes, except minors that overlap with the degree programme concerned (e.g. bridging minors of the degree programme concerned). As a rule, a student may only include one minor in his/her programme.

For the academic year 2023-2024, the Faculty of Aerospace Engineering offers the following thematic minors:

- Airport Development;
- Offshore Wind Energy;
- Space Missions (LDE collaboration, with TU Delft as coordinating university).

The minors have no entry requirements. It is generally assumed that a student’s progress is such that he/she is at the end of his/her second year at the start of the minor. The minor guide states any prior knowledge assumed (e.g. certain mathematics or design knowledge). If a student does not have this knowledge, the student is responsible for catching up. Alternatively, the student is advised to choose a different minor. Application for a minor is compulsory. A second choice may be stated in the registration system, which is intended to be used to cover possible limited capacity in some minors.

A student may, in addition to the broad range of minors provided by TU Delft, also choose a minor amounting to 30 EC composed by a different university degree programme. The Board of Examiners must approve such a minor.

A student may also compose his/her own minor: an individual minor. A minor of this kind must constitute a cohesive (defined as “internally consistent”) programme, provided by a university degree programme, and overall at third-year Bachelor’s degree level. Master’s degree level courses taught at TU Delft are not permitted in a minor. Students may choose online courses from the Credits for MOOCs/Virtual Exchange programme as an exception laid down in the Rules and Guidelines of the Board of Examiners article 22.a. The Board of Examiners must approve the composition of the individual minor. A student must submit his/her request to the Board of Examiners at least two months before the start of the first course, using the ‘individual minor form’ that can be found on the student portal website of the Faculty of Aerospace Engineering. A student must clearly state why he/she considers the package of courses to be cohesive.

The minor can also be used to study at a partner university abroad. Similar regulations exist for a minor abroad as for the individual minor. The requirements for the minor abroad are stated in the digital study guide with course code AE3060. All the courses that have been completed during the exchange period will be registered with a V (voldaan) in Osiris. Also the actual external grades of the courses that have been completed will be registered in Osiris. The credit conversion has been determined by the Board of Examiners.

4. Detailed information about the contents of the Bachelor's degree programme can be found in the digital study guide of the current academic year (www.studyguide.tudelft.nl).

ONLY FOR MASTER'S DEGREE PROGRAMME

1. The Master's degree programme has six tracks:
 1. Aerodynamics & Wind Energy
 2. Control & Operations
 3. Space
 4. Aerospace Structures and Materials
 5. Flight Performance & Propulsion
 6. Rotor Design (European Wind Energy Master (EWEM))
2. Within a track or within a specialisation, students may opt for the additional graduation profile "Technology in Sustainable Development" and/or "Entrepreneurship" as mentioned in Article 4. As of 1 September 2020 registration for annotations is no longer possible. As of 30 September 2022 annotation certificates are no longer issued (see Implementation Regulations from preceding years).
3. Detailed information about the contents of the Master's degree programme can be found in the digital study guide of the current academic year (www.studyguide.tudelft.nl).

Article 3 - Honours Programmes Bachelor's and Master's

ONLY FOR BACHELOR'S DEGREE PROGRAMME

1. Students who have nominally completed all of their first-year Bachelor's degree courses (within the first year) with a weighed averaged mark of 8.0 or higher and who have the ability and ambition to deliver an extra effort during their Bachelor's study, are eligible for a special programme of at least 20 credits on top of the Bachelor's degree course: an Honours Programme Bachelor.
2. The Honours Bachelor students must complete their Bachelor's degree programme and their honours programme nominally within 36 months.
3. A student who has successfully completed the Honours Programme Bachelor will receive a special certificate from the university with their degree certificate.
4. A student who fulfils, or will fulfil, the requirements laid down in Section 1, and is interested in an Honours Programme Bachelor can send his/her application (CV and motivation letter) to the Honours Bachelor coordination team for approval (see [website](#)).
5. When determining the periods of time referred to in Section 2, any delay in completing the programme owing to circumstances that result in the student being eligible for financial support under the TU Delft Profiling Fund Regulations shall be taken into account.

ONLY FOR MASTER'S DEGREE PROGRAMME

1. Students who complete their Bachelor's degree programme with a weighed averaged mark of 7.5 or higher within four years are eligible for a special individual programme of 20 credits on top of the Master's degree course: an Honours Programme Master. Master's degree courses completed in period 1 have to be completed with a weighted average of at least 7.5.

2. The Honours Programme Master has to be completed within a period of time not exceeding 30 months. For students who have started before 1 September 2017 the starting date of the Master's degree programme is the first Master's programme examination date. For students starting on or after 1 September 2017 the starting date of the Master's degree programme is the date of enrolment in the Master's track (see Article 4.5). The date of completion of the Master's degree programme is the Master's thesis defence date. For students who started the Honours Programme Master before 1 September 2014, the Honours Programme Master has to be completed within 36 months.
3. A student who has successfully completed the Honours Programme Master will receive a special certificate from the university with their degree certificate.
4. A student who fulfils, or will fulfil, the requirements laid down in Section 1, and is interested in an Honours Programme Master can send his/her application to the Director of Education for approval (see [website](#)). The content of the Honours Programme Master should be thematically consistent.
5. When determining the periods of time referred to in Section 2, any delay in completing the programme owing to circumstances that result in the student being eligible for financial support under the TU Delft Profiling Fund Regulations shall be taken into account.

Article 4 - Registering the tracks and compiling the examination programme

ONLY FOR MASTER'S DEGREE PROGRAMME

1. When students register for the Master's degree programme, they need to indicate their track and specialisation of interest in MyStudyPlanning. This should be done no later than May 1 when starting in September, and December 1 when starting in February. Placement in a student's preferred track is dependent on the maximum number of places available for each track and may be subject to a placement procedure as per the regulations outlined in the document [Placement Regulations Master's Degree Programme Aerospace Engineering](#). Starting in any of the tracks is only allowed after timely validation of the placement offer that is emailed to the student (see Placement Regulations, art 12.4).
2. At the start of the programme, students need to determine their examination programme in consultation with the relevant track coordinator. This is called the student's progress overview in Osiris. In case a course has a limit on the maximum number of participating students, the capacity of the respective course is stated in the digital study guide. Students who need to take a course with limited capacity as part of their examination programme, either being a mandatory core or profile course or a preferred elective offered by the Faculty of Aerospace Engineering, cannot be excluded from participating in the course. Students who do not have this requirement, but are still willing to take a course with restricted capacity, are accepted by the responsible lecturer on the basis of first come, first served.
3. Any amendments made to the track and profile core courses in the study programme should be approved by the relevant track coordinator and the Board of Examiners. Any amendments made to the elective courses in the study programme should be approved by the relevant track coordinator.
4. Prior to the start of the Master's thesis project, students need to present the title, a time schedule and the name(s) of the supervisor(s) of the thesis project to the Board of Examiners for approval.
5. The official starting date of the Master's degree programme is the date of enrolment in the Master's track. For students starting at the official start of the academic year this is 1 September.

Article 5 - European Wind Energy Master, Rotor Design Track

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1. The European Wind Energy Master (EWEM) programme requires that students attend at least two of the four partner-universities during the two years. At least two universities must be represented in the committee in charge of the examination of the thesis, as stipulated in the Rules and Guidelines of the Board of Examiners, art. 25c.
2. For the EWEM Rotor Design track students can choose one of the following elective profiles:

- a. Aerodynamics
 - b. Structures and Composites
3. In the first year ,an individual study programme of students in the EWEM Rotor Design track, independent of their elective profile, consists of:
 - a. Core courses
 - b. Elective courses
 The courses are followed at the University of Technology Denmark (DTU) in the first semester, and at Delft University of Technology (TUD) in the second semester.
 4. In the second year, an individual study programme of students in the EWEM Rotor Design track, independent of their elective profile, consists of:
 - a. Core courses
 - b. Elective courses
 - c. The thesis project
 The courses are followed at the University of Technology Denmark (DTU) in the first semester (third semester of the programme), and at any (associate) partner institution as chosen by the student and approved by the track coordinators from TUD and DTU in the second semester (fourth semester of the programme).
 5. Students are required to complete a minimum of 30 EC of courses at TUD and 45 EC of courses at DTU.
 6. For information about the core courses for all elective profiles, see www.studyguide.tudelft.nl and <https://www.tudelft.nl/ewem>.
 7. The thesis project is the final study unit of the programme and serves to prove that the student acquired the academic competences of a Master of Science. The project involves a research or design task with sufficient academic level. The project may be executed within a research programme at one of the partner universities involved in this track, or in a suitable research institute or company, as approved by the EWEM Executive Board. The project must be executed with a systematic approach and should include all phases of a research or design project: analysis, modelling, implementation/construction and validation/evaluation. The student executes the thesis project independently, with guidance of at least two supervisors, one of them from the scientific staff of TU Delft, and one from the scientific staff of DTU.
 8. As part of the study programme students can choose an internship in industry (or 'Professional Training') (up to 6 EC). Language courses can also be followed, but as additional courses only (i.e. on top of the 120 EC).
 9. In addition to the recommended electives, students can choose other courses from the total available list of the four EWEM partner universities, in agreement with the local academic EWEM coordinator and after official approval by the track coordinators.
 10. The TU Delft Aerospace Engineering Master's degree will be awarded if a student has earned for all study units of his or her individual study programme of the EWEM programme at TU Delft a mark that is greater than or equal to 6.0, and has passed all study units of the EWEM programme at DTU.

Paragraph 2 – Examinations and practicals

Article 6 - Practicals and/or exercises

1. The programme's teaching takes the form of lectures, practicals and/or exercises.
2. Some practicals and/or exercises must be completed before students participate in the examination. This will be indicated in the respective course overviews in the study guide.

Article 7 - The types of examinations

1. The examinations linked to the different courses are to be completed as laid down in the respective course overviews in the study guide.

2. Examinations pertaining to courses offered by other programmes are to be completed in the way stipulated by or on behalf of the Teaching and Examination Regulations laid down by the relevant programme.

Article 8 - The frequencies, times and sequences of the examinations

1. Written and oral examinations are to be completed at the end of the period or semester in which the course was taught. A resit examination opportunity is offered later during the same academic year. Some courses have a different assessment method (weekly tests or written exams during the period). For more information see www.studyguide.tudelft.nl.

Note: the Master's degree course AE4ASM517 has no resit possibility.

2. Practicals and/or exercises may be completed in the way laid down in the relevant timetables.

Paragraph 3 – Entrance requirements

Article 9 - Entrance requirements for the units of study

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1. First-year entrance requirements

If students have to meet a specific entry requirement before starting a course, this requirement shall be published in the digital study guide. If students are allowed to take an examination only after successfully completing a number of computer assignments, this will be published in the digital study guide.

2. Second-year entrance requirements

AE2111-I: the entrance requirements are: 45 EC of the first year of the programme (BSA), including the first-year project AE1111-I.

AE2224-I: the entrance requirements are: 45 EC of the first year of the programme including the first-year projects AE1111-I and AE1222-I. The number of credits is based on the results up to and including the first examination period (October).

3. Third-year entrance requirements

For the academic year 2023-2024 Fall DSE AE3200 (November session):

- First year completed;
- Second year completed
- Fourth-year student or higher;
- Selection for the Fall DSE takes place on the basis of results up to and including the fifth examination period (August) of the academic year 2022-2023.

For the academic year 2023-2024 Spring DSE AE3200 (April session):

- First year completed;
- Second year completed;
- Selection for the Spring DSE takes place on the basis of results up to and including the second examination period (January) of the academic year 2023-2024.

Registering for the Fall DSE starts in May (week 4.3) and finishes in September (week 1.1). Registering for the Spring DSE start in November (week 2.3) and finishes in February (week 3.1).

The registration process and its deadlines will be announced via Brightspace and on the AE Student Portal website. There will be no e-mails sent to announce the registration process. It is the responsibility of the student to be informed about the relevant messages and take appropriate action. Failing to register on time automatically implies that a student will not be admitted to the DSE.

AE3212-I and AE3212-II: for entrance requirements see digital study guide.

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1. If students have to meet a specific requirement before starting a unit of study, this requirement shall be published in the digital study guide.
2. A candidate may not start the final graduation phase (thesis project) before having successfully completed the Bachelor's degree programme and the first year of the Master's degree programme. Deviation from the second requirement is possible in exceptional circumstances, but only if approved by the thesis supervisor and track coordinator.
3. In exceptional circumstances, the student can request to complete the internship after the thesis via the Internship Office.

Paragraph 4 – Transitional ruling

Article 10 - Transitional ruling

Additional transition ruling can be found as separate transition document(s) to be retrieved from the Board of Examiners [webpage](#) of the Aerospace Engineering student portal.

Article 11 - Examinations for old study programmes

If a new study programme is drawn up for a certain year of study, then examinations for the units of study of the old programme that are discontinued will be set twice in the academic year following the year in which the units were taught for the last time.