

IMPLEMENTATION REGULATIONS

**MASTER'S DEGREE PROGRAMME
AEROSPACE ENGINEERING**

DELFT UNIVERSITY OF TECHNOLOGY

2013-2014

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Section 1 – Master’s degree programme

Article 1 – The study load

The study load for the Master’s degree programme is 120 credits. The Master’s study programme can not include courses from a student’s BSc programme.

Article 2 – Composition of the Master’s degree programme

1. The Master’s Degree Programme has 5 tracks: (and EWEM MSC)
 1. Aerodynamics & Wind Energy
 2. Control & Operations
 3. Spaceflight
 4. Aerospace Structures and Materials
 5. Flight Performance & Propulsion

Detailed information about the content of the programme can be found in the MSc Study Guide of the current academic year (www.studyguide.tudelft.nl).

2. The track Control & Operation, profile I Control & Simulation has an international profile: the double degree programme with IST Lisbon. This programme is intended for top class students who are able to complete this programme (132 EC) in two years.
3. Within a track or within a specialisation, students may opt for the additional graduation profile "Technology in Sustainable Development" mentioned in Article 4.

Article 3 – Registering the tracks and compiling the examination programme

1. When students register for the MSc programme, they need to indicate their track and specialisation of interest.
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 review in Osiris.
3. No amendments can be made to the track core courses in the study programme. Any amendments made to the profile core courses and elective courses in the study programme should be approved by the relevant track coordinator and the Board of Examiners and then passed on to the Service Desk for processing.
4. Prior to the start of the Final Thesis, students need to present the title, a time schedule and the name(s) of the supervisor(s) of the Final Thesis to the Board of Examiners for approval.
5. Students who opt for the additional graduation profile "Technology in Sustainable Development" need to present their progress overview to the referee of this profile and the Board of Examiners for approval.

Article 4a – The annotation “Technology in Sustainable Development”

1. The examination programme for students who have opted for the additional annotation "Technology in Sustainable Development" must at least include the following:
 - a. a colloquium in Sustainable Development of 5 credits (WM0939TU)

- b. elective courses adding up to a total of at least 10 credits. A maximum of 4 credits can be included in the curriculum as elective courses; the remaining credits (minimum 6 credits) are in addition to the regular curriculum. A complete list of courses can be found at www.odo.tudelft.nl
 - c. a graduation project. Specific to their own disciplines, students are asked to incorporate sustainability issues in their graduation project. Within faculties so-called 'SD referents' with specific expertise will assess the project, at the start and at the end, on the way SD has been tackled in the problem definition, the actual work and the conclusion of the project.
2. If the student has met all the requirements listed above, the annotation "Technology in Sustainable Development" will be listed on the degree certificate.

Article 4b – The annotation "Entrepreneurship"

1. The examination programme for students who have opted for the additional annotation "Entrepreneurship" must at least include the following:
- a. an Entrepreneurship Annotation Week of 2 credits (WM4001TU)
 - b. entrepreneurship-related elective courses adding up to a total of at least 15 credits. A maximum of 4 credits can be included in the curriculum as elective courses; the remaining credits (minimum 11 credits) are in addition to the regular curriculum.
 - c. an Annotation Entrepreneurship Final Thesis of 6-8 credits (WM4003TU). This thesis is related to the student's regular Aerospace Engineering MSc thesis subject. The thesis work is in addition to the standard 42 MSc thesis credits.
2. If the student has met all the requirements listed above, the annotation "Entrepreneurship" will be listed on the degree certificate.

Article 5 – Honours Programme Master

1. Students who complete their BSc programme with a weighed averaged mark of 7.5 or higher within four years are eligible for a special individual programme of 30 credits on top of the Master's degree course: an Honours Programme Master.
2. The Honours Programme Master has to be completed within a period of time not exceeding 36 months. The starting date of the MSc programme is the first MSc interim examination result date, the date of completion of the MSc programme is the MSc Thesis defence date.
3. Students who have successfully completed the Honours Programme Master will receive a special certificate from the university with their degree certificate.
4. Students who fulfil, or will fulfil, the requirements laid down in paragraph 1, and are interested in an Honours Programme Master can send their application to the Director of Education for approval. The content of the Honours Programme Master should be thematically consistent.

Article 6 – Erasmus Mundus European Wind Energy Master, Rotor Design Track

1. Students in the Erasmus Mundus master's Programme in European Wind Energy Master (EWEM) follow the programme required by Erasmus Mundus. This programme requires that students attend at least two of the partner-universities during the two years. At least two universities must be represented by full professors of the involved departments of these universities in the committee in charge of the examination of the thesis.
2. For the EWEM Rotor Design track students can chose one of the following elective profiles:
 - a. Aerodynamics

- b. Structures and Design
 - c. Composites Design Production and Manufacturing
- 3. An individual study programme of students in the EWEM Rotor Design track, elective profile Aerodynamics in their first year consists of:
 - a. Core courses worth 52 EC
 - b. Elective courses worth 8 EC
- 4. An individual study programme of students in the EWEM Rotor Design track, elective profile Structures and Design in their first year consists of:
 - a. Core courses worth 54 EC
 - b. Elective courses worth 6 EC
- 5. An individual study programme of students in the EWEM Rotor Design track, elective profile Composites Design Production and Manufacturing in their first year consists of:
 - a. Core courses worth 54 EC
 - b. Elective courses worth 6 EC
- 6. The courses are followed at the University of Technology Denmark (DTU) the first semester, and at Delft University of Technology (TUD) the second semester.
- 7. For information about the core courses for all elective profiles : see studyguide.tudelft.nl

However, for the edition of 2012-2014, due to the shift of courses lectured in the second semester at TU Delft, a equivalent set of courses for the EWEM programme is in development for a single profile of Structures, Composites Design Production and Manufacturing.

- 8. An individual study programme of all students in the EWEM Rotor Design track, independent of their elective profile, in their second year consists of:
 - a. The thesis project worth 45 EC
 - b. Elective courses worth 15 EC

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 EWEM Examination Board in the second semester (fourth semester of the programme).
- 9. 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 Examinations 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.
- 10. Language and Communication skills (between 3 and 5 EC) and an internship (up to 6 EC) can be chosen in any of the semesters at any of the participating partner universities.
- 11. 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 EWEM Tutor.
- 12. The TU Delft Aerospace Engineering 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, and has passed all study units of the EWEM programme at DTU.

Section 2 Interim examinations and practicals

Article 7 – Practicals and/or exercises

1. The programme teaching takes the form of lectures, practicals and/or exercises.
2. Some practicals and/or exercises must be completed before students participate in the interim examination. This will be indicated in the study guide pertaining to that particular subject.

Article 8 – The types of examinations

1. The interim examinations linked to the different subjects are to be completed as laid down in the study guide pertaining to the subject in question.
2. Interim examinations pertaining to subjects given 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 9 – The frequencies, times and sequences of the interim examinations

1. Written and oral interim examinations are to be completed at the end of the semester or term in which the subject was taught. A resit interim examination opportunity is offered later during the same academic year.
2. Practicals and/or exercises may be completed in the way laid down in the relevant timetables.

Section 3 Entrance Requirements

Article 10 – Entrance requirements for the units of study

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 BSc programme and the first year of the MSc programme. Deviation from the second requirement is possible, but only if approved by the thesis supervisor.

Section 4 Transitional ruling

Article 11 – Interim examinations for old study programmes

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

Transition ruling 2009-2010

Starting September 2009, new grading rules will go into effect: all Aerospace Engineering subjects are rounded off to whole marks. For details, see article 17.5 of the MSc Rules and Guidelines.

Transition ruling 2010-2011

Starting September 2010, a new MSc curriculum will be introduced. See MSc study guide for details.
Starting September 1, 2010, new grading rules will go into effect: a final mark for a subject will be expressed in a whole mark or a half mark. For details, see article 17.5 of the MSc Rules and Guidelines.