

Department of Aerospace and Geodesy TUM School of Engineering and Design Technical University of Munich



### TUM School of Engineering and Design Technical University of Munich

## **Degree Programme M.Sc. Aerospace**

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### How to get into the programme

#### (Early) Transition to M.Sc. Aerospace:

- With 140 credits or more obtained in the Bachelor, you're allowed to apply for the M.Sc. Aerospace programme
- NB: For a successful admission, you have to apply regularly via TUMonline and submit all required documents
- The submission of a semester ranking is NOT required for application
- You must submit proof of having completed your Bachelor's degree within one year at the latest after enrollment in the M.Sc. Aerospace programme

#### Application and admission:

- As a graduate of the B.Sc. Aerospace programme, you will be admitted directly to the M.Sc. Aerospace program without having to go through the aptitude assessment procedure
- Nevertheless, you have to upload a complete application and also register in our Tool Master EV (<u>https://masterev.sgb-as.ed.tum.de</u>)
- Your grades are not relevant for admission to the M.Sc. Aerospace programme
- Please note the application deadlines:
- Application period for studies beginning in the winter semester: 01 April 31 May
- Application period for studies starting in the summer semester: 01 September 30 November
- Application via TUMonline is **mandatory**
- For general questions on formal aspects of the application: <a href="mailto:studium@tum.de">studium@tum.de</a>
- For questions specifically about the aptitude assessment procedure: <a href="mailto:applications.asg@ed.tum.de">applications.asg@ed.tum.de</a>

### What to do in the programme

- 2-year (= 4 semesters) full-time study programme
- Max. number of semesters in the programme: 6
- 120 credits to successfully complete the programme

- No fixed curriculum You're free (and required!) to devise your individual study plans:
- Choose from a large number of electives from different subject areas
- Be flexible in the order in which you attend courses (within bounds)

• Schematic example for a study plan:

Semester 1		Semester 2	
Master Module 1	5 ECTS	Master Module 4	5 ECTS
Master Module 2	5 ECTS	Master Module 5	5 ECTS
Master Module 3	5 ECTS	Master Module 6	5 ECTS
Research Practice	11 ECTS	Master Module 7	5 ECTS
Lab Course 1	4 ECTS	Lab Course 2	4 ECTS
		Supplementary Course 1	3 ECTS
		Supplementary Course 2	3 ECTS
Semester 3		Semester 4	
Semester 3 Master Module 8	5 ECTS	<b>Semester 4</b> Master's Thesis	30 ECTS
	5 ECTS 5 ECTS		30 ECTS
Master Module 8			30 ECTS
Master Module 8 Master Module 9	5 ECTS		30 ECTS
Master Module 8 Master Module 9 Master Module 10	5 ECTS 5 ECTS		30 ECTS
Master Module 8 Master Module 9 Master Module 10 Master Module 11	5 ECTS 5 ECTS 5 ECTS		30 ECTS

Master of Science

• The different areas of the programme and the credits allocated to each:



### **Master Modules**

Choose from seven subject areas:

**Core columns (electives)** 

- (1) Total systems (e.g. design of an aircraft, spacecraft or helicopter...)
- (2) Propulsion systems (e.g. motor, flight power unit and gas turbine, space craft power unit...)
- (3) Fluid dynamics/aerodynamics (aerodynamics of aircraft, aeroelastics, aeroacoustics)
- (4) Structure (e.g. finite elements, design and construction of composite structures...)
- (5) Dynamics and control technology (e.g. helicopter flight physics, orbit and flight mechanics...)

#### Additional competencies (electives)

- (6) Course-specific modules (individual aerospace engineering profile)
- (7) Flexibilization in engineering sciences (modules from other TUM departments, e.g. physics, management...)

### **Research Practice**

#### Choose 1 from

#### LRG0002 Term project:

Independent writing of a paper on an engineering problem Indivdual support by supervisor

#### LRG0003 Team project:

Working on a single project within a larger project on which several students are working Supervision of the team by examiner

#### • LRG0004 Practical Research course (NB: not an industrial internship!):

Written documentation about an engineering problem in the form of a report or a scientific poster and presentation of the results

More information: https://wiki.tum.de/x/ywI0N

### Useful links and addresses

- For the module handbook, see TUMonline: <a href="https://campus.tum.de/tumonline/ee/ui/ca2/app/desktop/#/pl/ui/\$ctx/wbstpcs.showSpoTree?\$ctx=design=ca2;header=max">https://campus.tum.de/tumonline/ee/ui/ca2/app/desktop/#/pl/ui/\$ctx/wbstpcs.showSpoTree?\$ctx=design=ca2;header=max</a> <u>&pSJNr=1617&pStStudiumNr=&pStartSemester=&pStpStpNr=4822</u>
- For suggestions for devising your individual study plans, see: <u>https://collab.dvb.bayern/pages/viewpage.action?pageId=73389920#Studienstart/StartingyourstudiesM.Sc.AS-Studienplan</u>
- For general application process via TUMonline: <a href="mailto:studium@tum.de">studium@tum.de</a>
- For specific questions about the aptitude assessment for M.Sc. Aerospace: applications.asg@ed.tum.de
- Contact persons for the M.Sc. Aerospace programme: <u>https://collab.dvb.bayern/x/ntdfB</u>

### Thank you very much for your attention



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# MISSION SPACE VALLEY

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