



Information on Grade Calculation Master Aerospace Engineering (2021)

Due to the great flexibility in the design of your personal study plan, there is sometimes uncertainty regarding the resulting grade calculation. For this reason, we would like to outline the CP required for the various elective areas and the grade calculation for your degree.

General Information

- Examinations and assessments are based on the → [APB](#) (Allgemeine Prüfungsbestimmungen – General Examination Regulations) of the Technical University Darmstadt and the → [Regulations of the M.Sc. Aerospace Engineering program](#).
- General information regarding performance records and grades can be found in the FAQ section for students → [“Performance Records / Grades”](#):
 - → [GPA calculation on the performance overview](#)
 - → [Transcript of records](#): you can display and print out an overview of your performance yourself at any time in TUCaN in the section Examinations -> Performance Record
 - More information can be also found in the section “Performance Records / Grades” → [“FAQ & Tutorials”](#)
- → [Grading Schemes](#) of the Bachelor- and Master Programs of the Department of Mechanical Engineering

Required Examination Achievements

According to the regulations of the degree program, graded examinations from the following areas are required:

Areas of Study Plan	Description and minimum required credit points of each elective are* <i>*The stated minimum required credit points must be completed for each area.</i>
Tutorial	1 Tutorial (4 CP) A list of tutorials can be found in this → document . Tutorials that are suggested for Aerospace Engineering are in line 8 “Associated study program” declared as “Master Aerospace Engineering recommended”



Projects	<p>12 CP are required, please check for more details in the document → “Notes on study and examination planning” (2.4)</p> <p>2 Advanced Design Projects (ADP) (2 x 6 CP)</p> <p>or</p> <p>1 Advanced Design Project (ADP, 6 CP) and 1 External Project Work (6 CP)</p>
Electives Area (EA)	
Electives Area Ia: Fundamentals (EA-Ia)	<p>minimum of 6 CP are required (1 module from Electives Area Ia – Fundamentals)</p> <p>For more information on available modules please check TUCaN "Courses" > "Registration" > Choose the specific "Electives Area," <u>or</u> use the document → “Module overview in elective areas.”</p> <p>If you take more modules from EA-Ia, overflow** will be considered in EA-II</p>
Electives Area Ib: Digitalisation (EA-Ib)	<p>minimum of 6 CP are required (1 module from Electives Area Ib – Digitalisation)</p> <p>For more information on available modules please check TUCaN "Courses" > “Registration” > Choose the specific “Electives Area” <u>or</u> use the document → “Module overview in elective areas.”</p> <p>If you take more modules from EA-Ia, overflow** will be considered in EA-II</p>
Electives Area II: Core Electives from Mechanical Engineering (EA-II)	<p>minimum of 32 CP are required</p> <ul style="list-style-type: none"> ▪ At least 24 CP must be chosen in the elective area “EA-II Core Electives from Aerospace Engineering” & ▪ further 8 CP might be chosen either in the area “EA-II Core Electives from Aerospace Engineering” or in the area “EA-II Core Electives (other modules)” ▪ Maximum 12 CP from courses offered by a single professor can be considered. <p>For more information on available modules please check TUCaN “Courses” > “Registration” > Choose the specific “Electives Area” <u>or</u> the document → “Module overview in elective areas.”</p> <p>Please note: overflows from EA-Ia &EA-Ib cannot be considered as the required 24 CP of “EA-II Core Electives from Aerospace Engineering” area.</p> <p>If you take more modules from EA-II, overflow** will be considered in “EA-III Electives (other modules)”</p>
Electives Area III: Electives from the Natural Sciences and Engineering (EA-III)	<p>required 18 - 24 CP, the range and requirements depend on the amount of CP you gain in General Studies (6-12 CP):</p> <ul style="list-style-type: none"> ▪ At least 12 CP must be in “EA-III Electives from Aerospace Engineering” & ▪ At least further 6 CP might be chosen either in the area “EA-III Electives from Aerospace Engineering” or in the area “EA-III Electives (other modules)” <p>For more information on available modules please check TUCaN "Courses" > "Registration" > Choose the specific "Electives Area" <u>or</u> use the document → “Module overview in elective areas.”</p>



	Overflows** from the EA-Ia, EA-Ib and EA-II (totaling > 44 CPs) are considered in the EA-III area containing unspecified modules of the compulsory “EA-III Electives (other modules)”.
Required CP for Electives Area	<p>Minimum requirement of EA-Ia + EA-Ib + EA-II \geq 44 CP <i>please additionally mind the AE-specific requirement in EA-II which are described above</i></p> <p>Minimum requirement: EA-Ia + EA-Ib + EA-II + EA-III = 62 to 68 CP <i>please additionally mind the AE-specific requirement in EA-II and EA-III which are described above</i></p>
Studium Generale (General Studies)	Minimum requirement: 6 - 12 CP, for more information please look in section → 2.4 of “Notes on study and examination planning”
Master-Thesis	<p>30 CP; 900 h Workload:</p> <ul style="list-style-type: none"> ▪ Thesis must be completed and submitted within 24 weeks. ▪ Thesis has to be written in English and must be within the subject area of Aerospace Engineering. <p>For more information please also check section → 2.5 of “Notes on study and examination planning”</p>

** Overflows are calculated and processed in TUCaN automatically. Overflows from the Electives Areas Ia and Ib and the Aerospace Engineering courses in the core teaching area (EA-II Aerospace Engineering) are considered in the “EA-II Core Electives (other modules)” with modules of the Compulsory EA-II Core Electives without Aerospace Engineering.” Overflows from the Electives Areas Ia, Ib and II (totaling > 44 CP) are considered in the “EA-III Electives (other modules)” with modules of the Compulsory “EA-III Electives from the Natural Sciences and Engineering without Aerospace Engineering.” In addition, the CP range in the Studium Generale (General Studies) (6-12 CP) section allows for additional 6 CP to be entered from the Compulsory

Calculation of Grades

1. Compulsory areas (scope 16 CP plus 30 CP thesis)

The grades from the areas of thesis, tutorial, and project work are included in the grade calculation according to their number of CP. If an external project work is taken instead of an ADP, only the 6 CP of the graded ADP from this area are included in the overall grade.

2. Mandatory 68 CP from the minimum requirements of the elective areas:

The 62 CP from the **Electives Area EA-Ia, EA-Ib, EA-II, and EA-III** with the best grades are included in the calculation of the overall grade in any case, subject to the above conditions. The best 6 CP from the Studium Generale are also taken into account for the required credit points, but please mind, they are not taken into account for the calculation of the overall grade (GPA).

3. Selection of the flexible 6 CP (balance between EA-III and Studium Generale):



- a. The CP earned beyond point 2, i.e., again relating to **Electives Area EA-Ia, EA-Ib, EA-II, and EA-III** and the Studium Generale, are placed in a common order (highest to lowest) according to grade received.
 - b. Ungraded achievements are at the bottom of this ranking (for example, a 4,0 from the EA-III is higher up in the ranking than an ungraded achievement from the Studium Generale).
 - c. As for equal grades, Studium Generale is subordinate; the grade is ranked below the identical grades from the elective areas.
 - d. The highest-ranked 6 CP in this sequence become part of the “official study program” (total of 120 CP), but are only included in the calculation of the overall grade if they originate from the **Electives Area EA-Ia, EA-Ib, EA-II, and EA-III**. By definition, CP from the Studium Generale are not included in the overall grade.
 - e. Points 2 and 3 thus provide 74 CP for the “official study program,” but at the same time only a maximum of 68 CP for the calculation of the overall grade of the “official study program.” The maximum value of 68 CP may be reduced if ungraded CP are included, for example, in the case of recognitions. In this case, the overall grade is calculated purely mathematically from the corresponding reduced number of CP.
4. **Additional CP**
All additional CP in the sequence from point 3, which have not become part of the “official study program,” will appear in the certificate, but will not influence the calculation of the overall grade.