

## Information on applying for the Computer Science and Artificial Intelligence degree program

In the **Computer Science and Artificial Intelligence** program, admission is determined by an aptitude assessment procedure. The basic qualification is proven by acquiring the university entrance qualification. In addition, the procedure checks other aptitude criteria which are, according to our experience, decisive for a successful graduation:

1. Solid knowledge of mathematics, especially the ability to think abstractly, logically and systematically and to formalize specifications,
2. basic competencies in computer science, natural sciences and technology

*The aptitude assessment is based on the following criteria:*

1. **Final grade** of the university entrance qualification and
2. individual subject-**specific grades**

As individual subject-specific grades, the **grades in Mathematics** and in the **two best-rated subjects from the computer science, natural sciences and technology area** are used, which were acquired in the last four semesters before acquiring the university entrance qualification. Grades for a term paper, a thesis or a comparable achievement are not taken into account.

*The assessment is made according to the following rules:*

1. The final grade of the university entrance qualification (according to the German grading scheme) is converted into a **UEQ-score**

$$\text{UEQ-score} = 120 - 20 * \text{final grade}$$

2. The **subject-specific grades** in mathematics and in the two best-rated subjects from the computer science, natural sciences and technology area are, as far as they are stated in the certificate of the university entrance qualification, converted into S-scores according to the following formula:

$$\text{S-score} = 100 - 60 * (\text{G}_{\text{opt}} - \text{G}) / (\text{G}_{\text{opt}} - \text{G}_{\text{pass}})$$

where G represents the grade achieved,  $\text{G}_{\text{opt}}$  the best possible grade and  $\text{G}_{\text{pass}}$  the grade just good enough to pass. If a subject is not named or no grade is given, the grade  $\text{G}_{\text{pass}}$  will be used.

3. An **overall score** is calculated as a weighted average from the following values:
  - UEQ-score with a weighting of 0.5
  - S-score of mathematics with a weighting of 0.3 and
  - the arithmetic mean value of the S-scores of the computer science, natural sciences and technology subjects with a weighting of 0.2

→ **If the overall score is 60 or higher, aptitude is assumed and approval is granted.**