Notes on application for the course of Beng programme Autonomous Vehicle Engineering

In the Bachelor's programme Autonomous Vehicle Engineering admission is determined by an aptitude test procedure, which determines whether, in addition to the basic qualification demonstrated by the acquisition of the university entrance qualification (e.g. secondary school certificate), the suitability for the special qualitative requirements is given, which allows a successful course of studies to be expected.

The aptitude test is carried out by evaluating the following criteria by means of points

1. average grade of the university entrance qualification (HZB) and
2. subject-specific individual grades

The grades listed in the HZB in the subject Mathematics and the two best graded subjects from the natural sciences, including computer science, which were acquired in the last four semesters prior to the acquisition of HZB are used as subject-specific individual grades. These are added together and divided by the (weighted) number of individual grades. The grade for a technical paper or a comparable achievement will not be taken into account.

The following rules apply to the conduct of the evaluation:

1. the HZB grade is converted into an HZB point value

   \[ \text{HZB-point value} = 120 - 20 \times \text{HZB-grade} \]

2. the subject-specific individual grades of the higher education entrance qualification in the subject mathematics and the two best-rated subjects from the natural sciences, including computer science, will be converted into subject-specific point values according to the following formula, insofar as they are shown in the certificate of higher education entrance qualification

   \[ \text{Points} = 100 - 60 \times (N_{\text{opt}} - N)/N_{\text{pass}} \]

   where N is the grade achieved, N_{\text{opt}} the best grade and N_{\text{pass}} the grade just sufficient to pass. If no grade is available for a natural science subject, it is given the pass grade N_{\text{pass}}

3. a total points score is formed from the following values as a weighted average:
   - HZB points score with a weight of 0.5
   - point value of the subject mathematics with the weight 0.3 and
   - the arithmetic mean value of the scores of the natural sciences subjects with a weight of 0.2

If the total score calculated is equal to or greater than 60, suitability is deemed to have been established and admission is granted.