# Regulations governing the Qualification Assessment Process in the Bachelor's degree program Autonomy Technologies (Bachelor of Science) at the Faculty of Engineering at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU)

- EFV AT -April 26, 2023

Based on Section 9 (1) and Section 89 (4) Bavarian Higher Education Innovation Act (**BayHIG**) of August 5, 2022 in conjunction with Section 34 of the "Verordnung über die Qualifikation für ein Studium an den Hochschulen des Freistaates Bayern und den staatlich anerkannten nichtstaatlichen Hochschulen" (Qualification Regulation on university entrance qualifications by the Free State of Bavaria - Qualifikationsverordnung - **QualVO**), FAU enacts the following regulations:

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## Section 1 Scope, Purpose of the Qualification Assessment Process

<sup>1</sup>In order to start studying the Bachelor's degree program in Autonomy Technologies in the first semester or to join at a later semester, students must fulfill all qualification requirements and pass the qualification assessment process pursuant to these regulations. <sup>2</sup>During the qualification assessment process, applicants must prove that they meet the specific quality requirements of the degree program in STEM subjects, are able to present scientific and technical problems in English clearly, and in a problem-oriented manner and can therefore be expected to successfully complete the degree program.

## **Section 2 Selection Committee**

<sup>1</sup>A selection committee shall be responsible for organizing and conducting the qualification assessment process. <sup>2</sup>For the appointment of this committee, Section 11 of the current version of the General Examination Regulations for the Bachelor's and Master's Degree Programs at the Faculty of Engineering of Friedrich-Alexander-Universität Erlangen-Nürnberg - **ABMPO/TechFak** dated September 18, 2007 shall apply. <sup>3</sup>The affairs of the committee shall be governed by Section 51 **BayHIG** in conjunction with the currently valid version of Section 30 of the Constitution of Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) dated June 20, 2007.

## Section 3 Admission to the Qualification Assessment Process

- (1) <sup>1</sup>The qualification assessment process is held once every academic year for admission in the following winter semester. <sup>2</sup>Applications for admission to the qualification assessment process should be submitted online within the deadlines announced according to local practice for the required semester, using the relevant forms (FAU application portal) and attaching the documents listed in (2). <sup>3</sup>The selection committee may extend the deadline under certain circumstances.
- (2) The application shall include:
  - 1. Proof of attaining university entrance qualification
  - 2. Chronological curriculum vitae in English (in a tabular form, max. 2 pages)
  - 3. Letter of application in English focusing on the applicant's suitability for the degree program (max. 1 pages)
- (3) In order to be admitted to the qualification assessment process, applicants must submit the documents listed in (2) to FAU via the application portal within the deadline.

## Section 4 Details of the Qualification Assessment Process

<sup>1</sup>There are two stages to the qualification assessment process. <sup>2</sup>In each stage, an overall score is determined from the weighted average of each individual grade. <sup>3</sup>Applicants who have obtained at least 70 points after completing the second stage are deemed suitable and shall be provided with official notification to this effect. <sup>4</sup>Applicants who obtain fewer than 70 points in the first or second stage are considered unsuitable and shall receive a letter of rejection giving reasons for the decision and information on legal remedies available.

## **Section 5 First Stage of Qualification Assessment Process**

- (1) During the first stage of the qualification assessment process, a total score shall be derived as a weighted average of the following criteria:
  - 1. Score for the university entrance qualification with a weighting of 60%
  - 2. Score for grade in mathematics with a weighting of 10%
  - 3. Score for grade in physics with a weighting of 10%
  - 4. Score for grade in computer science with a weighting of 10%
  - 5. Score for grade in English with a weighting of 10%.
- (2) <sup>1</sup>The average grade of the applicant's university entrance qualification is converted to a scale of between 0 and 100, with 0 the worst and 100 the best possible score. <sup>2</sup>The scale shall be set in such a way that the lowest possible pass mark for the university entrance qualification shall be awarded 40 points (see **Appendix** for grade scale). <sup>3</sup>In the case of a grade system differing from the grade scale commonly used in Germany, the conversion shall be conducted as set out in Section 2 of the **Appendix**.
- (3) <sup>1</sup>Grades pursuant to (1) nos. 2 and 5 shall be calculated from the arithmetic average of all subject grades for each semester in the final years of senior school (Oberstufe) as stated in the applicant's university entrance qualification. <sup>2</sup>The subject-specific grade of the applicant is converted to a scale of between 0 and 100, with 0 the worst and 100 the best possible score. <sup>3</sup>A score of 0 shall be given to grades of 4.1 or below. <sup>4</sup>The scale shall be set in such a way that the lowest possible pass mark for the subject-specific grade shall be awarded 70 points (see **Appendix** for grade scale). <sup>5</sup>In the case

of a grade system differing from the grade scale commonly used in Germany, the conversion shall be conducted as set out in Section 2 of the **Appendix**. <sup>6</sup>If the grades pursuant to (1) nos. 2 and 5 cannot be determined, the relevant subject-specific grade shall be awarded 70 points.

(4) All other applicants shall proceed to the second stage of the qualification assessment process pursuant to Section 6.

## Section 6 Second Stage of the Qualification Assessment Process

- (1) During the second stage of the qualification assessment process, an overall score shall be derived from the total of the following criteria:
  - 1. Score for university admission qualification (with a weighting of 50%)
  - 2. Score for electronic test pursuant to (2) (with a weighting of 50%).
- (2) <sup>1</sup>The electronic test will be conducted in English via the StudOn Exam platform. <sup>2</sup>The date for the test will be communicated to applicants at least one week in advance via the FAU application portal. <sup>3</sup>The test is carried out as an open book exam, is 60 minutes long, and involves solving problems from mathematics, computer science, physics as well as answering questions on general knowledge about the content covered by the degree program. <sup>4</sup>Further information about the test and about the permitted aids will be communicated to the applicants when the test date is announced.
- (3) <sup>1</sup>Applicants whose total score derived from both stages of the process totals 70 points or above shall be considered suitable. <sup>2</sup>All other applicants shall be considered unsuitable; Section 4 (1)(4), clause 2 shall apply accordingly.

## **Section 7 Record**

<sup>1</sup>An official record shall be produced for both stages of the qualification assessment process, showing the date, duration, and place of the assessment, the names of the applicants and examiners, and the decision of the selection committee in bullet points. <sup>2</sup>The record shall be signed by the chairperson of the committee or their deputy if the chairperson is unable to sign for any reason.

## **Section 8 Adjustments to Examination Arrangements**

Any adjustments to arrangements shall be governed by Section 2 of the **Bavarian Higher Education Admissions Law** in conjunction with the **Bavarian Higher Education Admissions Regulation**.

## **Section 9 Resit Examinations**

Applicants may attempt the qualification assessment process one more time, at the soonest at the next date scheduled for the qualification assessment process.

## **Section 10 Legal Validity**

<sup>1</sup>These regulations shall come into effect on the day after their publication. <sup>2</sup>They shall apply for the first time to prospective students applying to start studying in winter semester 2023/2024.

# **Appendix**

1. The following grade scale is used to determine the score for the average grade for the university entrance qualification (pursuant to Section 5 (2)) and the subject-specific individual grade (pursuant to Section 5 (1) nos. 2 and 3)):

Points for university entrance qualifica- tion (e.g. grades from final years of senior school in Germany)	Grade of university entrance qualifica- tion	Score for average grade for university entrance qualification (pursuant to Section 5 (2))	Score for subject- specific individual grade of the univer- sity entrance qualifi- cation (pursuant to Section 5 (3))
15	1.0	100	100
	1.1	98	99
	1.2	96	98
14	1.3	94	97
	1.4	92	96
	1.5	90	95
13	1.6	88	94
	1.7	86	93
	1.8	84	92
12	1.9	82	91
	2.0	80	90
	2.1	78	89
11	2.2	76	88
	2.3	74	87
	2.4	72	86
10	2.5	70	85
	2.6	68	84
	2.7	66	83
9	2.8	64	82
	2.9	62	81
	3.0	60	80
8	3.1	58	79
	3.2	56	78
	3.3	54	77
7	3.4	52	76
	3.5	50	75
	3.6	48	74
6	3.7	46	73
	3.8	44	72
	3.9	42	71
5	4.0	40	70
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		0
4.2	36	0
4.3	34	0
4.4	32	0
4.5	30	0
4.6	28	0
4.7	26	0
4.8	24	0
4.9	22	0
5.0	20	0
5.1	18	0
5.2	16	0
5.3	14	0
5.4	12	0
5.5	10	0
5.6	8	0
5.7	6	0
5.8	4	0
5.9	2	0
6.0	0	0
	4.4 4.5 4.6 4.7 4.8 4.9 5.0 5.1 5.2 5.3 5.4 5.5 5.6 5.7 5.8 5.9	4.2 36   4.3 34   4.4 32   4.5 30   4.6 28   4.7 26   4.8 24   4.9 22   5.0 20   5.1 18   5.2 16   5.3 14   5.4 12   5.5 10   5.6 8   5.7 6   5.8 4   5.9 2

2. Grades from other numerical grading systems are converted on the basis of the modified Bavarian formula; Section 12 (3) sentence 2 **ABMPO/TechFak** shall apply accordingly.