Regulations governing the Qualification Assessment Process in the Bachelor's degree program Artificial Intelligence (Bachelor of Science) at the Faculty of Engineering at Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) – EFV AI –

February 29, 2024

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:

Contents:

Section 1 Scope, Purpose of the Qualification Assessment Process

[1]In order to start studying the Bachelor's degree program in Artificial Intelligence 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. [2]During the qualification assessment process, applicants must prove that they meet the specific quality requirements of the degree program, are able to take a mathematical approach to investigating methods of artificial intelligence and present technical and data-centric 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

[1]A selection committee shall be responsible for organizing and conducting the qualification assessment process. [2]The selection committee shall consist of one professor as the chairperson and two other members. [3]At least one of the two other members must be a university lecturer pursuant to Section 19 **BayHIG** as their main occupation pursuant to Section 53(4) **BayHIG**, the third member may be a research associate at FAU pursuant to Section 19 **BayHIG** as their main occupation pursuant to Section 53(4) **BayHIG**. [4]Each of the members and one deputy each are appointed by the Faculty Council of the Faculty of Engineering for two years; re-election shall be permitted. [5]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).

Section 3 Admission to the Qualification Assessment Process

(1) [1]The qualification assessment process is held once every academic year for admission in the following winter semester. [2]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). [3]The selection committee may extend the deadline under certain circumstances.

(2) The application shall include:
1. Proof of attaining university entrance qualification
2. Curriculum vitae in English (max. 2 pages)
3. Letter of application in English focusing on the applicant's suitability for the degree program (max. 1 page)
4. Proof of proficiency in English at the level B1+ of the Common European Framework of Reference for Languages (CEFR) (B1+ for language skills, B2 for reading skills).

(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.

Section 4 Details of the Qualification Assessment Process

[1]There are two stages to the qualification assessment process. [2]An overall score is determined from the weighted average of each individual grade. [3]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. [4]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 50%
2. Score for grade in mathematics with a weighting of 50%

(2) [1]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. [2]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). [3]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) [1]Grades pursuant to (1)(2) 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. [2]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. [3]A score of 0 shall be given to grades of 4.1 or below. [4]The scale shall be set in such a way that the lowest possible pass mark for the subject-specific grade shall be awarded 40 points (see **Appendix** for grade scale). [5]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**. [6]If the grades pursuant to (1)(2) cannot be ascertained, the subject-specific grade shall be awarded 40 points.

(4) Applicants shall be considered unsuitable if their total score pursuant to (1) is less than 70; Section 4 (4) shall apply.

(5) 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 (50%)
2. Score for electronic test pursuant to (2) (50%).

(2) [1]The electronic test will be conducted in English via the StudOn Exam platform. [2]The date for the test will be communicated to applicants at least one week in advance via the FAU application portal. [3]The test is carried out as an open book examination, lasts 60 minutes and involves solving problems from mathematics, as well as answering questions about the content covered by the degree program. [4]Further information about the test and about the permitted aids will be communicated to the applicants when the test date is announced.

(3) [1]The electronic text pursuant to (2) is evaluated by a member of the selection committee. [2]For assessing the electronic test, the selection committee can appoint part-time or full-time university lecturers pursuant to Section 19 **BayHIG** working at FAU as their main occupation pursuant to Section 53(4) **BayHIG** or who have retired from FAU as well as research associates pursuant to Section 19 **BayHIG** working at FAU as their main occupation pursuant to Section 53(4) **BayHIG** if they are entitled to set examinations pursuant to Section 12 **ABMPO/TF**. [3]The test shall be assessed pursuant to Section 22 (1) **ABMPO/TF** in conjunction with **Appendix 2**.

(4) [1]Applicants whose total score derived from both stages of the process totals 70 points or above shall be considered suitable. [2]Section 4(4) shall apply to all other applicants.

Section 7 Record

[1]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. [2]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

An unsuccessful qualification assessment process may be repeated one more time, at the soonest at the next date scheduled for the qualification assessment process.

Section 10 Legal Validity

[1]These regulations shall come into effect on March 1, 2024. [2]They shall apply for the first time to prospective students applying to start studying in winter semester 2024/2025.

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)), the subject-specific individual grade (pursuant to Section 5 (1) (2) and Section 5(3)) and the electronic test pursuant to Section 6(1)(2):

Points for university entrance qualification (e.g. grades from final years of senior school in Germany)	Grade of university entrance qualification	Score for average grade for university entrance qualification (pursuant to Section 5 (2))	Score for subject-specific grade in university entrance qualification (pursuant to Section 5(3)) or electronic test (pursuant to Section 6(3))
15	1.0	100	100
	1.1	98	98
	1.2	96	96
14	1.3	94	94
	1.4	92	92
	1.5	90	90
13	1.6	88	88
	1.7	86	86
	1.8	84	84
12	1.9	82	82
	2.0	80	80
	2.1	78	78
11	2.2	76	76
	2.3	74	74
	2.4	72	72
10	2.5	70	70
	2.6	68	68
	2.7	66	66
9	2.8	64	64
	2.9	62	62
	3.0	60	60
8	3.1	58	58
	3.2	56	56
	3.3	54	54
7	3.4	52	52
	3.5	50	50
	3.6	48	48
6	3.7	46	46
	3.8	44	44

	3.9	42	42
5	4.0	40	40
	4.1	38	0
	4.2	36	0
4	4.3	34	0
	4.4	32	0
	4.5	30	0
3	4.6	28	0
	4.7	26	0
	4.8	24	0
2	4.9	22	0
	5.0	20	0
	5.1	18	0
1	5.2	16	0
	5.3	14	0
	5.4	12	0
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

2. Grades from other numerical grading systems are converted on the basis of the modified Bavarian formula; Section 15 (3) sentence 2 **ABMPO/TF** shall apply accordingly.