
Study and Examination Regulations
for the Bachelor's Programs of
Hochschule Ravensburg-Weingarten (RWU)
University of Applied Sciences
as of June 23rd, 2022

On March 31st, 2022, pursuant to Sect. 8 (5) in conjunction with Sect. 30 (1) and Sect. 32 of the Baden-Württemberg Higher Education Act (Landeshochschulgesetz - LHG) of January 1st, 2005 (law gazette, page 1 et seq.) as amended from time to time, the Senate of Hochschule Ravensburg-Weingarten University of Applied Sciences enacted the following changes to the Study and Examination Regulations in compliance with Sect. 19 (1) No. 9 LHG.

The Rector has approved the Study and Examination Regulations pursuant to Sect. 32 (3) sentence 1 LHG.

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§ 1 Scope of Application and Structure

- (1) The present Study and Examination Regulations apply to the following Bachelor's programs:
1. Energy and Environmental Engineering
 2. Business Administration and Management
 3. Mechanical Engineering
 4. Automotive Engineering
 5. Electrical Engineering and Information Technology
 6. Business Informatics
 7. Applied Computer Science
 8. Industrial Engineering (Technology Management)
 9. Social Work
 10. Applied Psychology
 11. Automotive Engineering PLUS Teaching Post
 12. Computer Science/Electrical Engineering PLUS Teaching Post
 13. Health Economics
 14. Business Informatics PLUS Teaching Post
 15. Nursing
 16. Physical Engineering
 17. E-Mobility and Green Energy
 18. Digital Design
 19. Internet and Online-Marketing
- (2) The academic year is divided into semesters commencing on May 01st and September 01st, respectively. The date on which the course of study can actually be commenced is laid down for each study program in the Admission Regulations.
- (3) The provisions as laid down in the General Part (A) shall apply unless otherwise stipulated in the special Study and Examination Regulations of the individual study programs.

A. General Part

§ 2 Objective of the Study, Purpose of the Examination, Academic Degree

- (1) The Bachelor study program aims to convey specialized knowledge and skills corresponding to Level 1 of the German Qualifications Framework for Higher Education Degrees enabling the students to take up skilled employment develop their personality and pursue academic work.
- (2) The Bachelor's examination terminates the studies by conferring a professional qualification in the following study programs:
 1. Energy and Environmental Engineering
 2. Business Administration and Management
 3. Mechanical Engineering
 4. Automotive Engineering
 5. Electrical Engineering and Information Technology
 6. Business Informatics
 7. Applied Computer Science
 8. Industrial Engineering (Technology Management)
 9. Social Work
 10. Applied Psychology
 11. Automotive Engineering PLUS Teaching Post
 12. Computer Science/Electrical Engineering PLUS Teaching Post
 13. Health Economics
 14. Business Informatics PLUS Teaching Post
 15. Nursing
 16. Physical Engineering
 17. E-Mobility and Green Energy
 18. Digital Design
 19. Internet and Online-Marketing.
- (3) The examination is meant to establish that the student has achieved the objectives defined for his program.
- (4) Successful pass of the Bachelor's examination leads to the award of an academic degree, i.e.
 1. Bachelor of Engineering (B.Eng.) for the study programs
 - E-Mobility and Green Energy,
 - Electrical Engineering and Information Technology,
 - Energy and Environmental Engineering,
 - Automotive Engineering,
 - Automotive Engineering PLUS Teaching Post,
 - Mechanical Engineering,

A. General Part

- Industrial Engineering (Technology Management).
2. Bachelor of Science (B.Sc.) for the study programs
 - Applied Computer Science,
 - Applied Psychology,
 - Computer Science/Electrical Engineering PLUS Teaching Post,
 - Internet and Online-Marketing,
 - Digital Design,
 - Physical Engineering,
 - Business Informatics,
 - Business Informatics PLUS Teaching Post.
 3. Bachelor of Arts (B.A.) for the study programs
 - Business Administration and Management,
 - Health Economics,
 - Nursing,
 - Social Work.

§ 3 Official Length of Program, Organization of Studies

- (1) The official length of program including the time provided for completing the Bachelor's thesis and passing all examinations is laid down in the Study and Examination Regulations of the individual study programs.
- (2) At all stages, the study has a modular structure. A module denotes an individual course or a group of courses with a coordinated thematic and chronological structure to which a certain number of ECTS is assigned depending on the workload required for successful participation. These ECTS are not awarded for mere attendance, but as a rule only if proof of a specific accredited examination can be provided. Assignment of the ECTS is effected in compliance with the ECTS (European Credit Transfer System), **with one credit point corresponding to the sixtieth part of the student's annual workload (30 hours)**. The Reference Book of Modules of the individual study program completes the Study and Examination Regulations of the study program in question. It provides detailed information, among others, about the examinations as laid down in the Study and Examination Regulations. The Reference Book of Modules shall be approved by the Faculty Council in consultation with the Academic Commission. The Faculty Council may assign the head of study program with the task of approving the Reference Book of Modules.
- (3) Courses can also be offered in the form of e-learning. Should a major part or the entire course be taught in this form, a decision by the responsible Faculty Council will be required. Upon decision by the Faculty Council concerned, courses can also, on a case-by-case basis, be taught in English.
- (4) Upon decision of the responsible Faculty Council, the sequence and the type of modules/courses and examinations as laid down in the Study and Examination Regulations for the individual study programs can, in particular cases, be changed for one academic semester and for compelling reasons if this is imperative to ensure the orderly running of the study program. The reasons for the changes must be documented.
- (5) Transitional provisions for new Study and Examination Regulations for the individual study programs must be agreed upon in the Faculty Council in consultation with the Academic Commission.

A. General Part

- (6) **The attendance of courses can be made compulsory if and only if the students' presence is absolutely necessary to build the competence.** Compulsory attendance is documented in the Reference Book of Modules for the respective module.

§ 4 Pre-University Internship

- (1) As a rule, the pre-university internship, if required in the Study and Examination Regulations for the respective study program, should be completed prior to the commencement of the study program, but evidence must be provided by the end of the third subject-related semester at the latest. The examination entitlement and admission to the study program will expire if the pre-university internship has not been completed by the end of the 3rd subject-related semester unless the student cannot be held responsible for his failure to observe the deadline. In the event of an objection, the Central Examination Board will decide if the student will be held responsible for missing the deadline. The Student Examination Office will verify if a confirmation by the head of the Internship Office exists. Evidence of completion of the pre-university internship must also be provided by students commencing their studies at University of Applied Sciences Ravensburg-Weingarten in a higher subject-related semester due to the transfer of ECTS and study periods. In such case, the head of the Internship Office will fix the deadline for completion of the pre-university internship.
- (2) During the pre-university internship, the intern will work in suitable firms or government agencies (training institutions or companies) to acquire practical knowledge and skills from the occupational field of his study program. A completed vocational training in the relevant occupational area of the study program or an activity equivalent to the pre-university internship can be recognized as a pre-university internship.
- (3) Periods of school education, vacations, times of illness and other times of absence are not considered as internship for the purpose of these regulations. For the pre-university internship to be recognized, the training institution or company must issue a confirmation of internship stating the times worked and the fields of activity. Vacations, sick days and other days absent must be shown separately.
- (4) Upon request by the student, the head of the Internship Office of the respective study program shall decide upon the recognition of the pre-university internship.

§ 5 Compulsory Practical Semester

- (1) The sixth-months' **Compulsory Practical Semester shall comprise practical activities from the student's line of profession (at training institution or company) as well as accompanying academic courses at the University held as block courses.** The weekly/daily attendance time at the training institution or company may be flexible as agreed between the student and the company/institution offering the placement. However, for the Compulsory Practical Semester to be recognized with regard to examination requirements, the student must give evidence of at least 95 full-time attendance days in accordance with the regulations in place for the specific training company/institution. A higher number of full-time attendance days necessary for the Compulsory Practical Semester to be recognized as complying with the examination requirements may be defined in the Special Part hereof. For students entitled to use §§ 28 to 30 of the present regulations, the required full-time attendance days can be extended over a period of two semesters. Lack of evidence or failure to achieve the required number of attendance days will not affect the compulsory nature of the practical semester.

A. General Part

During their Compulsory Practical Semester, students will usually be supervised by a professor for a time period of 4 hours. The Compulsory Practical Semester may not be completed prior to the 5th semester unless otherwise stipulated in the Study and Examination Regulations of the respective study program. Any preponement will be subject to written approval by the head of the competent Examination Board.

- (2) The University will cooperate with the companies and institutions offering the placement in all issues **concerning the student's work**-related practical education. During the Compulsory Practical Semester, accompanying academic courses will be provided according to the Study and Examination Regulations of the respective study program.
- (3) Students must draw up written reports on their training during the Compulsory Practical Semester and have them confirmed by the training institution or company. At the end of the Compulsory Practical Semester, the training institution/company will issue a proof of activity stating the type and the content of the activity, beginning and end dates of the training period, full-time attendance days in accordance with the regulations in place for the specific training company/institution as well as times of absence. On the basis of the training report and the proof of activity, it will be determined if the students have successfully completed their Compulsory Practical Semester. Should the Compulsory Practical Semester not be recognized as successfully completed, it may be repeated once, with the head of the Internship Office of the respective study program being responsible for the decision.
- (4) **It is the student's** responsibility to obtain a placement for the Compulsory Practical Semester. The student must propose the training institution or company and obtain the approval of the head of the Internship Office; in case of doubt, the final decision lies with the Examination Board.
- (5) The University will establish Internship Offices for the various study programs. These Internship Offices will be responsible for the organisational aspects of the Compulsory Practical Semester, the coordination of the training contents and for maintaining the relationship with the training institutions and companies.
- (6) The student will conclude a training agreement with the company or institution offering the placement according to the specimen defined by the Internship Office. A copy of the training agreement must be submitted to the Internship Office prior to the commencement of the Compulsory Practical Semester.
- (7) The training institution or company commits to grant the student a leave of absence of up to ten work days during the Compulsory Practical Semester to prepare and review lectures; holidays are not considered attendance days.
- (8) Subject to prior approval by the head of the Internship Office, the student is allowed to change the training institution or company during the Compulsory Practical Semester provided that such change would be beneficial to the pursuit of the studies or necessary in well-founded exceptional circumstances. In case of doubt, the final decision lies with the Examination Board.

§ 6 Type and Structure of the Examination

- (1) The Bachelor's examination consists of the examinations in the different modules and the Bachelor's thesis or the Bachelor's module, if the latter is provided for in the Study and Examination Regulations of the respective study program.

A. General Part

- (2) A module encompasses defined competences to be acquired and, as a rule, concludes with a single accredited academic achievement/examination. Nature, form and scope of the accredited academic achievement/examination for the individual modules are laid down in the Study and Examination Regulations of the respective study program. Detailed information on the nature and the form of the examination(s) to be taken are given in the Reference Book of Modules.

§ 7 Scope of the Examination, Intermediate Assessment, Deadlines for Academic Achievements during the Course of the Studies

- (1) Insofar as the official course of the studies is observed, the students will normally take a maximum of six examinations per semester according to § 6 hereof.
- (2) At the end of the first year of study, an intermediate assessment will take place covering the academic achievements of the first two semesters as specified in the Study and Examination Regulations of the respective study program, worth 60 ECTS.
- (3) Students must have passed all parts of the intermediate assessment, with the exception of maximum ten ECTS, by the end of the fourth semester of study. However, it is possible that the Study and Examination Regulations of the respective study program provide a different deadline by which all parts of the intermediate assessment, with the exception of maximum ten ECTS, must have been passed. The examination entitlement and the admission to the study program will expire should the student not have obtained all ECTS required for the intermediate assessment, with the exception of ten ECTS, by the end of his/her fourth semester or by the end of the deadline specified in the Study and Examination Regulations of the respective study program unless the student cannot be held responsible for his/her failure to observe the deadline. In the event of an objection, the Central Examination Board will determine if the student is to be held responsible for exceeding the deadline.
- (4) To successfully complete the study program, it is necessary to earn a total of 210 ECTS. ECTS are awarded for passed modules as well as for the successfully accomplished Compulsory Practical Semester, the applicable number of ECTS being defined in the Study and Examination Regulations of the respective study program.
- (5) Students who have not obtained the required number of ECTS by the end of the official length of the program plus three semesters will lose their examination entitlement for the study program concerned, unless they cannot be held responsible for their failure to observe the deadline. If the student is to be held responsible for exceeding the deadline will be determined by the Central Examination Board.
- (6) The provisions concerning the academic achievements to be completed for the intermediate assessment override the provisions concerning the repetition of failed examinations.
- (7) In each semester, only examinations for modules taught in same semester and retake examinations will be offered.
- (8) Participation in RWU Master's degree program module examinations up to a maximum of 25 ECTS is permitted if academic achievements amounting to at least 180 ECTS have already been completed. The ECTS earned from Master's degree module examinations do not count towards the Bachelor's examination, but are credited ex officio towards the corresponding Master's examination. Failed attempts will also count towards the Master's examination.

A. General Part

§ 8 Retake of Examinations

- (1) Failed examinations can be retaken twice. The second retake presupposes that the student can provide proof of having consulted the academic advisory service of his/her study program prior to registering for the examination. It is not possible to retake a passed examination.
- (2) Failed compulsory examinations and compulsory examinations deemed failed must be retaken. A module examination cannot be retaken in parts, but only as a whole. The provisions concerning the **retaking of Bachelor's examinations are laid down in § 12.**
- (3) Examinations taking place during the lecture period are deemed commenced once the student has participated in the first test. Students who are unable to sit parts of an examination taking place during the lecture period for reasons they cannot be held responsible for will be given the opportunity to retake the outstanding parts in the next semester in which the module concerned is offered latest in the next but one semester following the semester, in which the partial accredited examination should normally **have been completed. Subject to the candidate's consent, the missing partial examination can be** retaken during the ongoing semester. Place and time of the retake will be determined by the examiner.
- (4) A student may not withdraw from an examination that has already begun. Abandoning an examination that has already begun will be counted as a failed attempt.

§ 9 Forms of Examination, Electronic Examinations

- (1) As a rule, accredited examinations can have the following forms:

- Oral examination
- Written examination
- Written examination during the lecture period
- Other written papers (e.g. term paper, report, seminar paper)
- Multiple choice
- Oral paper
- Presentation
- Laboratory work
- Design
- Practical work
- Poster
- Portfolio
- Colloquium

Further forms of examination can be defined in the Study and Examination Regulations of the individual study programs. Team achievements are admissible.

- (2) Examinations can also be taken in IT-supported form.
- (3) Oral examinations may be conducted by videoconference according to the Ravensburg-Weingarten University guidelines for conducting oral examinations via videoconference.
- (4) As a rule, the examinations will be taken during the examination weeks outside the lecture period of the academic semester.
- (5) The assessment process shall take no longer than four weeks.

A. General Part

§ 10 Oral Examinations

- (1) As a rule, oral examinations shall be taken before at least two examiners or before one examiner and one competent observer, as a group or as an individual examination. Before determining the grade in compliance with § 13, each examiner shall hear the other examiners attending the examination or the competent observer § 19 section 1 shall apply accordingly.
- (2) Oral examinations shall have a duration of at least 20 minutes for each candidate, maximum 30 minutes.
- (3) The major contents and the results of the oral examinations must be laid down in the minutes. The tested candidate must be informed of the result subsequent to the examination.
- (4) Students wishing to take the same examination on an examination date later than the ongoing examination period shall be admitted as listeners unless the tested candidate disagrees. However, such admission will not include consultation and announcement of the examination results.

§ 11 Examinations during the Lecture Period

- (1) Examinations can also be held during the lecture period. In particular, such examinations include portfolio examinations and mid-term written tests. The sum of the individual partial tests completed during the lecture period may not exceed the regular extent of a single examination as defined for the study program. Type, extent, and relative weighting of the individual examination elements are laid down in the module description.
- (2) A portfolio examination consists of several examination elements of different forms. Possible forms of examinations are, in particular, oral exams, oral papers and presentations, written documentations, multiple choice tests, documented practical works, designs or posters.
- (3) A written examination during the lecture period consists of several partial written tests.

§ 11 a Award of Bonus Points

The responsible examiner can, at his/her own discretion, additionally define possibilities of improving the final grade (for example give bonus tasks, presentations and/or practical works) encouraging the **students' continuous participation throughout the lecture. The total of such possibilities may not improve** the final module grade by more than 0.5. A prerequisite for the bonus points to be considered is that the student has passed the accredited examination as laid down in the Study and Examination Regulations of the respective study program. Students shall be informed of these complementary possibilities to improve their final grade at the beginning of the course as well as via the Reference Book of Modules.

§ 12 Bachelor's Thesis

- (1) **The Bachelor's thesis is an accredited examination which shall prove the candidate's ability to solve problems and work on a topic from the subject-matter of his major field of study within a specified period of time using adequate methods. The scope of work for the Bachelor's thesis shall range between six and 12 ECTS with the exact number being laid down in the Study and Examination Regulations of the respective study program.**
- (2) The topic for the Bachelor's thesis will be issued by a professor. The thesis shall be supervised by same professor and another professor. Should the Bachelor's thesis be completed at an institution other than the University, the chairperson of the Examination Board must give his/her consent. It must be ensured that the student be released from work for the purpose of attending the required courses.

A. General Part

- (3) The Bachelor's thesis must be submitted no later than six months after the date of registration. At the request of the student, the Examination Board may typically, in agreement with the supervisor, extend the deadline by up to four weeks if there is a special reason for doing so. In cases of serious hardship, the deadline may be suspended.
- (4) The topic can only be returned once and only within the first two weeks of the completion time. A new topic must be agreed upon without delay, however within 4 weeks at the latest. § 28 section 3 remains unaffected hereof.
- (5) The Bachelor's thesis must be submitted to the Student Examination Office in due time and in two printed copies as well as in electronic form (pdf). The day and time of handing in the paper must be officially recorded. On submittal, the student will be required to assure in writing that he/she has written the thesis independently and that he/she did not use any sources or aids other than those referenced. Non-observance of the time limit fixed for handing in the **Bachelor's** thesis will lead to the paper being graded with **"fail" (5.0)**.
- (6) As a rule, the Bachelor's thesis will be graded by two examiners to be appointed by the Examination Board. Usually, one of the examiners will be the supervisor of the Bachelor's thesis. At least one of the examiners shall be a professor or university lecturer of the faculty concerned. The evaluation procedure shall not exceed four weeks.
- (7) In order to pass their Bachelor's thesis, **candidates will need an overall grade of at least "sufficient" (4.0)**. It is possible to repeat it once, a second repetition being excluded. A new topic for the Bachelor's thesis must be applied for in writing with the chairperson of the Examination Board within a period of two months after notification of the failure. Failure to observe the application deadline will result in the student forfeiting his/her examination entitlement unless he/she cannot be held responsible for the non-observance.

§ 13 Evaluation of Examinations, Non-Observance of Deadlines for Examinations

- (1) The grades for the different examinations accredited will be determined by the examiners involved. The following grades must be used for the assessment of the examinations:

| | |
|------------------|---|
| 1 = very good | An excellent performance |
| 2 = good | A performance well above average requirements |
| 3 = satisfactory | A performance which fulfills all average requirements |
| 4 = sufficient | A performance which meets the requirements despite some shortcomings |
| 5 = fail | A performance which due to considerable shortcomings does not meet the requirements |

To differentiate the evaluation of the examinations, it is possible to use decimal grades in 1/10 increments with 1.0 being the best and 5.0 the worst grade.

A. General Part

- (2) If an examination is evaluated by more than one examiner (each examiner evaluates the entire examination), the grade shall be calculated from the average of the grades fixed by each examiner. To determine the grade of an examination where several examiners assess different parts of the examination, the grade shall be determined on the basis of a total number of points to be achieved. If a module examination, by way of exception, consists of several independent tests, then the grade of the academic achievement will be calculated from the average of the grades achieved in the different examinations weighted according to the number of ECTS. The following grades shall be used.

| | |
|--------------------------------|-----------------|
| for an average of up to 1.5 | = very good; |
| for an average from 1.6 to 2.5 | = good; |
| for an average from 2.6 to 3.5 | = satisfactory; |
| for an average from 3.6 to 4.0 | = sufficient; |
| for an average of 4.1 or worse | = fail. |

- (3) For examinations taking place throughout the semester such as portfolio examinations or written examinations held during the lecture period, the grade will be calculated on the basis of the total points achieved in the various examination elements. No individual grades for the examination elements shall be awarded and offset.
- (4) When fixing the grades only the first decimal will be taken into account; all other decimals will be dropped without rounding.
- (5) The overall grade for the degree is calculated on the basis of the module grades achieved during the entire study weighted according to the number of ECTS (weighted arithmetic mean). Ungraded partial tests of a module will not be taken into account for the calculation of the module grades. However, as the weight of these grades contributes to the weight of the entire module, they will affect the calculation of the overall Bachelor grade.
- (6) For outstanding performances (overall grade 1.3 or better), the overall assessment "pass with distinction" ("*mit Auszeichnung bestanden*") will be awarded.
- (7) The final grade as documented in the Diploma Supplement will be awarded as relative grade according to the following table set up by the HRK (*Association of Universities and other Higher Education Institutions in Germany*):

| |
|----------------------------------|
| A the best 10 % of the graduates |
| B the next 25 % of the graduates |
| C the next 30 % of the graduates |
| D the next 25 % of the graduates |
| E the next 10 % of the graduates |

This relative grading system is used if the number of graduates of the past three semesters is at least 30. Otherwise no relative grade will be awarded; instead the grades will be determined as follows:

| |
|----------------------------------|
| A for an average of up to 1.5 |
| B for an average from 1.6 to 2.0 |
| C for an average from 2.1 to 2.5 |

A. General Part

D for an average from 2.6 to 3.5

E for an average from 3.6 to 4.0.

Recognition and conversion of examinations taken abroad will be effected according to § 6 of the statutes concerning the transfer of academic achievements and examinations at the University of Applied Sciences Ravensburg-Weingarten (*Satzung über die Anrechnung von Studien- und Prüfungsleistungen an der Hochschule Ravensburg-Weingarten*) as amended from time to time.

- (8) An examination will also be assessed as "fail" (5.0) if it is not completed within the completion period or time awarded.
- (9) Students must notify the head of the Examination Board without delay and in writing of the reason for exceeding the completion time or the failure to complete the examination furnishing appropriate evidence. In the case of illness, the presentation of a certificate filled in by a doctor and attesting the **inability to sit an exam is required within 14 days. In cases of doubt, a doctor's certificate can be required** from a doctor named by the University. If the reason stated is deemed valid, a new day and time for the examination will be fixed. In such case, the already achieved examination results will be taken into account. For examinations during the lecture period, § 8 section 4 shall apply.

§ 14 Deceit, Breach of Regulations

- (1) Should a candidate try to influence the results of his/her own or another person's examination by deceit or use of unauthorized aids, his/her examination will be graded with "fail" (5.0). Authorized aids are those indicated in the final version of the electronic examination schedule. Students are obliged to inform themselves in this respect. Any disturbance of the orderly course of an examination can lead to the candidate being excluded from continuing the examination by the responsible examiner or supervisor, **in which case the examination will be graded with "fail" (5.0). In severe cases, the Examination Board** can exclude the candidate from taking further examinations.
- (2) The person concerned by the decision may, within a period of one month, request the decision to be reviewed by the Examination Board in compliance with section 1, sentences 1 and 4. Decisions to their disadvantage must be notified to the candidate without delay and in writing stating the reasons and providing information on the legal remedies available.

§ 15 Passing of Examinations

- (1) An accredited examination is deemed to be passed if it has been graded with "fair" (4.0) or better.
- (2) ECTS can only be earned for successfully completed modules.
- (3) The Bachelor's examination is deemed to be passed if the Bachelor's thesis and all the required modules have been passed and if the ancillary conditions as specified in the Special Part hereof are fulfilled.

§ 16 Definite Failure of the Bachelor's Examination

- (1) The Bachelor's examination is deemed definitely failed if
 - the candidate's second attempt at passing the Bachelor's thesis was unsuccessful or deemed unsuccessful
 - the second repetition of a module examination or other accredited examinations has failed
 - the candidate has forfeited his examination entitlement for reason of non-observance of the deadlines.

A. General Part

- (2) The candidate will be notified in writing about his definite failure in the examination and informed about the legal remedies available.

§ 17 Recognition of Study Periods, Academic Achievements and Examinations

- (1) Periods of study, academic achievements and accredited examinations will be transferred without verification of equivalency if the same have been completed at another German institution of higher education of the same type and in the same study program.
- (2) Periods of study, academic achievements and accredited examinations in study programs not covered by section 1 will be accredited in compliance with the statutes concerning the recognition and transfer of academic achievements and examinations as well as competencies acquired at institutions other than institutions of higher education at the University of Applied Sciences Ravensburg-Weingarten (*Satzung über die Anerkennung und Anrechnung von Studien- und Prüfungsleistungen sowie außerhochschulisch erworbenen Kompetenzen an der Hochschule Ravensburg-Weingarten*) as amended from time to time if the competencies acquired do not differ significantly from the academic achievements/accredited examinations to be replaced.

§ 17 a Recognition of Competencies Acquired at Institutions other than Institutions of Higher Education

Competencies acquired at institutions other than institutions of higher education will be accredited in compliance with the University statutes concerning the transfer of academic achievements and examinations as well as competencies acquired at institutions other than institutions of higher education (*Satzung der Hochschule Ravensburg-Weingarten über die Anrechnung von Studien- und Prüfungsleistungen sowie außerhochschulisch erworbener Kompetenzen*) as amended from time to time.

§ 18 Examination Board

- (1) An Examination Board composed of seven members shall be set up for each study program. Members shall be appointed for a four-year term of office.
- (2) The chairperson (Head of study program), his/her deputy, the other members of the Examination Board as well as their deputies shall be appointed by the faculty to which the study program belongs from the ranks of the professors of this faculty as well as from the ranks of the professors of other faculties holding lectures in that study program on a regular basis.
- (3) The head of the Internship Office shall ex officio be member of the Examination Board. It is possible to consult the head of the Central Examination Board, other professors, contract instructors and teachers for special assignments to obtain their opinion. As a rule, the chairperson will be responsible for the day-to-day business of the Examination Board.
- (4) The Examination Board shall ensure that the provisions of the Study and Examination Regulations be adhered to. It will make suggestions for the reform of the syllabus or the study and examination regulations. The Examination Board can entrust the chairperson with some of its tasks.
- (5) The members of the Examination Board shall have the right to attend examinations.
- (6) The members of the Examination Board and their deputies are bound to professional discretion. Insofar as they are not employed in the public sector, they will be committed to confidentiality by the chairperson.

A. General Part

- (7) A Central Examination Office will be created to support the Examination Board. Academic advice will be provided by the vice-rector in charge of student affairs and teaching.
- (8) The Central Examination Board consists of the vice-rector in charge of student affairs and teaching as chairperson, one further vice-rector and the deans. The head of Student Administration will attend the meetings of the Central Examination Board in an advisory capacity. It is possible, on a case-by-case basis, to consult contract instructors or other professors to obtain their opinion. The Central Examination Board can appoint a representative who will be in charge of coordinating the organization and conduct of the academic achievements and examinations.

§ 19 Examiners and Observers

- (1) Apart from professors it is also possible to appoint academic staff members who have been authorized to conduct examinations, and contract instructors as examiners. It is likewise possible to appoint experienced persons who have the necessary academic and professional qualifications to conduct the examination and who possess at least the same (or an equivalent) qualification as the one to be determined through the examination.
- (2) **The examiners' names shall be disclosed in due time.**
- (3) To be appointed observer, it is necessary to possess at least the same or an equivalent qualification as the one to be determined through the examination.
- (4) § 18 section 5 shall apply accordingly to examiners and observers.

§ 20 Responsibilities

- (1) The tasks of the Central Study Committee are as follows:
 1. Recommendations concerning the development of the individual study programs with regard to the guidelines of the Standing Conference of the Ministers for Education and Cultural Affairs (*Kultusministerkonferenz*) and the Accreditation Council.
 2. Coordination to ensure a uniform implementation of the Study and Examination Regulations.
 3. Preparation of the resolutions by the Senate on the Study and Examination Regulations if cross-faculty issues are concerned. The preparation of the resolutions lies primarily with the heads of **study program who are members of the Dean's Office and represented in the Committee** (cf. § 26 (4) Baden-Württemberg Higher Education Act – LHG). Members of the Central Study Committee are: one head of study program of each faculty (cf. § 24 (5) Baden-Württemberg Higher Education Act – LHG), the vice-rector in charge of student affairs and teaching (as chairperson) as well as further members pursuant to §10 (3) of the University of Applied Sciences Ravensburg-Weingarten statutes concerning the quality assurance in study and teaching (*nd Qualitätssicherungssatzung der Hochschule Ravensburg-Weingarten über die Qualitätssicherung in Studium und Lehre*) as amended from time to time.

A. General Part

- (2) The tasks of the Central Examination Board are as follows:
1. Decision on the kind of organization and the conduct of accredited examinations.
 2. Monitoring of the organization and orderly conduct of the examinations.
 3. Decision on applications for compensation of disadvantages.
 4. Decision on study and examination issues in opposition proceedings.
 5. Recommendation on the further development of examination regulations in consideration of the Baden-Württemberg regulation on the accreditation of study programs (*Studienakkreditierungsverordnung*) as amended from time to time.
- (3) The tasks of the examination boards of the individual study programs are as follows:
1. Decision on the consequences of breaches of examination regulations (§ 14).
 2. Decision on pass and fail (§ 14 and § 15).
 3. Decision on the appointment of examiners and observers (§ 19).
 4. In cases of doubt, approval of the training institutions and companies for the Compulsory Practical Semester.
 5. Decision on the admission of examinations and academic achievements, in cases of doubt.
 6. Decision on the transfer of academic achievements and examinations.
 7. Decision on the accreditation of competencies acquired at an institution other than an institution of higher education.
 8. Decision on the issue of Bachelor's theses and the extension of the completion time.
 9. Decision on the invalidity of the Bachelor's examination.
 10. Comment on study and examination issues in opposition proceedings.
 11. Comment with regard to the agreement concerning a deviating course of studies under § 28 section 6 and § 30.
 12. Decision on the extension of the deadline for the completion of the intermediate assessment for students commencing the study program in the third or a later subject-related semester.
- (4) The Central Examination Office is responsible for:
1. Implementation of the decision on the kind of organization and the conduct of accredited examinations,
 2. Management of examination-related documents,
 3. Admission to academic achievements and other examinations,
 4. Preparation and issue of examination-related notifications, attestations, certificates and other documents,
 5. Proceedings concerning examination deadlines and official lengths of program,
 6. Support of the examination boards.
- (5) The Internship Offices are responsible for:
1. Organizational aspects of the Compulsory Practical Semester,
 2. Coordination of the training contents,
 3. Maintenance of relationships to the training institutions and companies,
 4. Approval of the training institutions and companies for the Compulsory Practical Semester,
 5. Decision on the recognition of the pre-university internship,
 6. Decision on the successful pass of the Compulsory Practical Semester.

A. General Part

§ 21 Provision of the Range of Courses

The University will ensure by the range of courses offered that examinations can be performed within the time limits defined in the present Examination Regulations and that the courses can be offered to the extent necessary.

§ 22 Organization of Examinations

- (1) The decision on the university-wide examination period as well as the related periods of time provided for exam registration and cancellation of an exam registration lies with the Senate. As a rule, the university-wide examination period will, for each semester, commence at the beginning of the lecture-free period. The period provided for exam registration and cancellation of an exam registration is published on the University homepage, under **"University calendar"**. **It is the students' responsibility to inform themselves about the periods of time stated and to register for the examinations.** Exam registration and cancellation of an exam registration is effected electronically via the **University's** campus management system. In exceptional cases, it is possible to register for an examination or cancel an exam registration in writing, within the deadlines provided. Reasons for such exception must be given by the students and evidence must be provided. Non-participation in the examination will be deemed as a cancellation of the registration.
- (2) Students will be notified of the place and time of the individual examinations taking place during the university-wide examination period in the form defined by the Student Examination Office.
- (3) Examinations organized by the examiner himself/herself shall be held during or at the end of the lecture period.

§ 23 Admission to Examinations

- (1) Students may take examinations in accordance with these Examination Regulations if they are enrolled in the corresponding degree program, have not lost their right to take examinations in the degree program or a related degree program with essentially the same content, and have properly registered for the examination. Any additional prerequisites listed in the Study and Examination Regulations of the respective individual study programs must also be fulfilled.
- (2) Students who have already passed the final examination of the corresponding study program will not be admitted.
- (3) Students shall be notified of their admission or non-admission in the form defined by the Student Examination Office.

§ 24 Information about Examination Results

- (1) The examiner will inform the Student Examination Office of the examination results according to the modalities defined for the various examination forms and within the scheduled time frame.
- (2) The Student Examination Office will inform the students of the examination results via an entry in the **University's electronic examination management system.**
- (3) **After passing an examination, the student's account will be credited with the corresponding ECTS.** Provided that it is feasible from an organizational point of view, students can inspect their accounts at any time.

§ 25 Certificates, Bachelor's Diploma

- (1) The student will receive a certificate of the passed Bachelor's examination without delay, if possible, within four weeks. The certificate shall state the major field of study chosen and shall include the modules with the corresponding grades, the topic and the grade of the Bachelor's thesis as well as the overall grade. The certificate shall bear the date of the day on which the last examination was taken and **must be signed by the Rector and the dean of the graduate's faculty.**
- (2) Together with the certificate, the graduate will receive the Bachelor's diploma showing the date of the certificate and certifying the award of the Bachelor's degree pursuant to § 2 section 4. The Bachelor's diploma will be signed by the Rector and bear the official University seal.
- (3) In addition, the graduate will receive a Diploma Supplement in English and German containing a detailed uniform description of the higher education degrees. It provides information on course contents, the study process and the academic and professional qualifications acquired with the degree. The Diploma Supplement will be signed by the head of Student Administration.
- (4) Upon request, the student will receive attestations on passed examinations prior to the delivery of the certificate.
- (5) **The Bachelor's certificate will only be delivered on the condition that an attestation of discharge from administration exists.**
- (6) Upon request, a maximum of five subjects other than the prescribed subjects (additional subjects) will **be shown in the Bachelor's certificate.** The results of these subjects will not be taken into account for the determination of the overall grade.

§ 26 Invalidity of the Bachelor's Examination

- (1) In the event that a candidate has cheated in an examination and should this fact be disclosed only after delivery of the certificate, the grade of the corresponding examination can be rectified pursuant to § 14 section 1. **This may include the particular examination to be declared as "fail" (5.0) and the Bachelor's examination as failed.** The same applies accordingly to the Bachelor's thesis.
- (2) If the student has deliberately wrongfully obtained admission to the examination, the examination will **be declared as "fail" (5.0) and the Bachelor's examination as failed.**
- (3) Before a decision is taken, the person concerned shall be given the opportunity to comment.
- (4) The incorrect examination certificate shall be withdrawn and, if applicable, a new one handed out. The Bachelor's diploma shall also be withdrawn together with the incorrect examination certificate, if the examination was declared "failed" due to the deceit. A decision under section 1 and section 2 is excluded after a period of five years from the date of the examination certificate.

§ 27 Inspection of the Examination Records

- (1) Upon request, the candidate will be granted inspection of his/her written examinations, the relating **examiners' evaluations and the minutes of the examination.**
- (2) The request must be made to the examiner. The examiner shall determine the place and time of the inspection. The inspection shall take place on university premises. The chairperson of the Examination Board is responsible for clarifying any discrepancies.
- (3) The retention periods for examinations and their related documentation are specified in the Guidelines on Document Retention Periods at the Ravensburg-Weingarten University of Applied Sciences.

§ 28 Special Provisions for Students with Family Care Responsibilities

- (1) Students who are entitled to parental leave pursuant to § 15, Paragraphs 1 through 3 of the Federal Parental Benefit and Leave Act (Bundeselterngeld- und Elternzeitgesetz) or who are caring for a close relative as defined in § 7, Paragraph 3 of the Home Care Leave Act (Pflegezeitgesetz) are entitled to avail themselves of the special provisions detailed in Paragraphs 2 through 5. The entitlement comes into or goes out of effect at the end of the semester in which the conditions mentioned in Sentence 1 arise or cease to apply. Entitled persons are required to keep corresponding records and are obliged to provide notification immediately should any of the prerequisites set out in Sentence 1 arise, change, or cease to apply. All notifications are to be addressed exclusively to the Student Examination Office. Different from the Federal Parental Benefit and Leave Act (Bundeselterngeld- und Elternzeitgesetz), students remain eligible until the youngest child to be cared for reaches the age of fourteen. Definitions and determinations of dependency as they relate to eligibility for home care leave are based on §§ 14 and 15 in Volume 11 of the German Social Security Code (Sozialgesetzbuch).
- (2) Students who fall under the category of persons specified in Paragraph 1 are entitled to take some of their examinations after the deadlines stipulated by the individual degree programs' Study and Examination Regulations; the same applies to the deadlines for the completion of academic achievements. The following rules shall apply:
 1. The deadline for retaking an examination may be extended by up to two semesters.
 2. The deadline for the completion of the intermediate assessment, the deadline for starting the Compulsory Practical Semester, and the deadline for completing the Bachelor's examination are extended by half a semester for each semester in which the student falls into the category of eligible persons specified in Paragraph 1. Likewise, the deadline for completing the foundational phase (first 3-4 semesters) of the degree program can also be extended by up to two semesters, the deadline for beginning the Practical Semester may be extended by up to three semesters, and the deadline for completing the advanced phase (final 3-4 semesters) of the degree program can be extended by up to five semesters. The provisions of § 28, Paragraph 2 do not pertain to § 23, Paragraph 2.
- (3) Students may petition their respective Examination Board to extend the deadline (up to twice the original time period) for submitting their Bachelor's thesis. Students must provide credible evidence prior to beginning the thesis that their familial responsibilities will extend up to and beyond the normal submission deadline. If the family care obligations first arise only after having already started the Bachelor's thesis, the student may still petition their respective Examination Board for an extension of up to twice the remaining time, counted from the point when the familial responsibilities first arose. Alternatively, at the student's request, the Bachelor's thesis may be withdrawn and then restarted at a later date after the period of family care obligations is over.
- (4) Insofar as the observance of deadlines for the first examination registration and the retake of examinations are concerned, any illness of the student shall be deemed to be equivalent to an illness of a child under their care.
- (5) Students belonging to the group of people as mentioned in section 1 are entitled to attend courses, sit examinations and use University institutions during a semester off, if the leave of absence has a causal link with their duty of care.
- (6) In justified cases, an application for a change of the form of examination can be filed. The decision on the application will lie with the Central Examination Board.

§ 29 Special Protection during Pregnancy and Lactation

- (1) Pregnant and breastfeeding students are entitled to periods of protection and leave under the German Maternity Protection Act (Mutterschutzgesetz). With respect to the study progress, the claiming of protection periods shall be deemed equivalent to a leave of absence. During such times, students are entitled to attend courses, sit examinations and use the University institutions.
- (2) In the framework of work completed in laboratories or studios, the protective provisions of the Maternity Protection Act shall apply.
- (3) Pregnant students are not obliged to report their pregnancy. It is, however, strongly recommended, in their own interest, that they report their pregnancy to the Student Administration Office as soon as their pregnancy is confirmed. This will provide them with the possibility to use their rights under the Maternity Protection Act. The same applies to breastfeeding students. **A doctor's certificate or a certificate from a midwife must be enclosed.** The pregnancy attestation should include the expected delivery date.
- (4) A compensation of disadvantages according § 30 Sec. 2 and 3 can also be granted on the basis of a pregnancy or lactation.

§ 30 Students with Disabilities or Chronic Illness

- (1) In the case that a student is handicapped by a permanent disability or a chronic illness rendering the completion of courses within the time limits as defined in § 9 particularly difficult, the Central Examination Board may, upon written request, declare an individual study plan to be binding. The individual study plan must comprise at least two academic achievements in each subject-related semester.
- (2) In the case that a candidate is handicapped by a permanent or temporary disability or a chronic illness making it particularly difficult for him/her to sit an examination in the prescribed form, the Central Examination Board may, upon written request, take adequate measures to compensate for the impairment or, if achievement of the aim of the examination can be evidenced in an equivalent manner by any other form of examination, allow a different form. The proof of abilities as required by the performance profile of the examination administered may not be waived.
- (3) Applications under Sec. 1 and 2 have to be submitted to the examination office, which will forward them accordingly to the Central Examination Board. The following evidence must be provided:
 - 1 In the case of a disability a copy of the valid certificate of disability must be enclosed.
 2. A doctor's certificate including the necessary findings and stating the handicaps and their impact on the study or the individual examinations. The form for requesting a compensation for disadvantages made available by the University must be used to this effect. The Central Examination Board may request an attestation by a doctor named by the Board.
 3. When filing an application under section 1, the student must additionally submit a draft of the individual study plan signed by the head of the study program.

§ 31 Special Provisions for Elected Student Members in Statutory Bodies and Organs of the University or the Student Services Organization and the Constituted Student Body

- (1) An activity as elected member in statutory bodies or organs of the University or the Student Services Organization and the Constituted Student Body during at least one year may not be taken into account for the calculation of the examination deadlines pursuant to Sect. 32 (6) LHG. The decision lies with the Rector upon the student's request.
- (2) Through their active participation in bodies and organs as mentioned in section 1, the students will acquire core competencies, which can be accredited as partial academic achievement in the framework of a module aiming at conveying such competencies, and up to five ECTS can be granted for this. The decision lies with the Rector upon the student's request.
- (3) The special provisions as laid down in sections 1 and 2 may only be used as an alternative.

B. Special Part

§ 36 Bachelor Study Program Electrical Engineering and Information Technology

(1) Structure of the Study Program

The Bachelor study program Electrical Engineering and Information Technology comprises the basic study period with a duration of two semesters and the main study period which concludes with the **Bachelor's examination in the 7th semester**.

It is possible to graduate this study program including a German vocational training. For detailed regulations see section 7.

For a successful graduation, a practical semester and academic courses worth 180 ECTS are required. The total number of 210 ECTS is made up of six theoretical semesters with 30 ECTS each and one practical semester worth 30 ECTS.

There are two course specialization possible (Study-Focus): automation and communication. The students have to chose one of both with the re-immatriculation for the 4th semester (recorded).

German speaking students, who start in the summer semester, have to chose English in the language module.

(2) Courses

The lectures for students of the english study program will be given in english on a yearly basis, exceptions can be decided by the faculty board (according: General part of the SPO §3.3). The lectures from semester six and seven will be given in german, exceptions can be decided by the faculty board (according: General part of the SPO §3.3).

All courses comprise a proportion of exercise. The required courses as well as the related accredited examinations are shown in the tables.

The following abbreviations are used:

| Type of course | Type of exam | Scope of exam |
|------------------------|--|---|
| V Lecture | B Bachelor's Thesis | SWS Semester hours |
| PR Project | R Seminar Paper and presentation | ECTS ECTS points in compliance with the European Credit Transfer System |
| S Seminar | PF Portfolio | E Medium of instruction is English |
| P Practical, exercises | K(xx) Written examination duration of xx minutes | D Medium of instruction is German |
| | M Oral examination | |
| | PA Practical work (lab, term or seminar paper or project work) | |
| | RPA Practical work documented by a seminar paper and presentation (PF: 50% PA graded and 50% R graded) | |

(3) Elective Modules

The elective modules available are announced by display on the notice board at the beginning of each semester.

If students wish to choose elective modules from the offer of other universities, a special permission by the Examination Committee will be required. Tutorials held by the student can be recognized as elective module, whereby the maximum number of ECTS to be earned is five. The elective modules can be chosen across the specializations (automation or communication) from all subjects of electrical engineering and informatics.

(4) Accredited Examinations

The type of accredited examination and course achievements is shown in the tables 1 to 4. Every accredited examination must be passed. § 8 of the general part of the SPO is still valid. The rating of the examinations is according § 13 of the general part of the SPO.

(5) Practical Semester (Compulsory)

The 5th semester is a practical semester. A prerequisite for beginning the practical semester is that, by the end of the 4th semester, the student has passed examinations of the first two semesters amounting to 60 ECTS. In case of the vocational training version of this study program, the practical semester can be done during the practical phases during the lecture free times in the cooperating companies (see section 7).

During their practical semester, the students shall work on an engineering task from the fields of electrical or automotive engineering, thereby becoming acquainted with the professional requirements, industrial work methods and the operational environment with regard to the planning, development and application of electronic networks and systems.

The fields of work can be as follows:

- Planning and implementation of electronic and information technology systems
- Planning, design and development of electronic circuits
- Testing of networks and systems
- Software development
- Use of computers for the design of circuits and systems (CAD)
- Computer simulations
- Planning, design and development of electric drives
- Planning and implementation of mechatronic systems in automotive engineering

Total duration: 22 weeks with at minimum 95 presence days in the company.

(6) Bachelor's Thesis

Prior to beginning the Bachelor's thesis, all examinations and course achievements of the first four semesters as well as the practical semester must have been completed. The professor assigning the Bachelor's thesis must limit the topic, the task and the extent of the thesis in such way that it can be completed in approx. 360 hours of work corresponding to 12 ECTS. See §12 of the general part of the SPO.

(7) Validity

The curriculum comprises 9 semesters in case of the Vocational Training Study Program and leads at **first to a „certified occupation requiring formal training“** (e.g. Elektroniker/Elektronikerin für Energie- und Gebäudetechnik, Elektroniker/Elektronikerin für Betriebstechnik, Mechatroniker/Mechatronikerin). The semester of the non-vocational training will be integrated into the adapted curriculum Table 5. The curriculum will be completed with training sections from the cooperating companies and the industrial school. For this parts, the companies and the industrial schools will be responsible (the language is German). The compulsory practical semester will be done during the practical phases during the lecture **free times in the cooperating companies. The projects, seminars and the Bachelor's thesis can be done in the cooperating companies.**

(8) Validity

This SPO is valid starting from winter semester 2022/2023.

B. Special Part: Bachelor Study Program Electrical Engineering and Information Technology

Table 1: Bachelor Study Program Electrical Engineering and Information Technology
Basic: for students of the english study program

| Module | Course | Curricular semester assigned | | | | Graded examination |
|--|--|------------------------------|--------------|--------------|--------------|--------------------|
| | | | 1 | 2 | 3 | |
| | | Typ | ECTS/ SWS | ECTS/ SWS | ECTS/ SWS | |
| Electrical Engineering 1: Basics | Analysis of Electric Networks | V | 5/4 | | | K90 |
| Electrical Engineering 2: Electrodynamics | Electrodynamics | V | | 5/4 | | K90 |
| Electrical Engineering 3: Time and Frequency Domains | Circuit Analysis in the Time and Frequency Domains | V | | | 5/4 | K90 |
| Metrology 1: Basics | Metrology 1 | V/2 | | 5/4 | | K90 |
| | Metrology Practical | P/2 | | | | |
| Metrology 2: Advanced | Metrology 2 | V/2 | | | 5/4 | K90 |
| | Electronics Practical: linear Metrology | P/2 | | | | |
| Mathematics 1: Analysis 1 | Analysis 1 with Exercises | V | 5/4 | | | K90 |
| Mathematics 2: Linear Algebra | Linear Algebra with Exercises | V | 5/4 | | | K90 |
| Mathematics 3: Analysis 2 | Analysis 2 with Exercises | V | | 5/4 | | K90 |
| Robotics | Robotics | V+P | | | 5/4 | PF |
| Programming | Programming | V+P | 5/4 | | | K90 |
| Electrical Engineering Practical ¹ | Basic Practical Electrical Engineering 1: Basic Circuits | P/2 | | | 5/4 | PF |
| | Basic Practical Course Electrical Engineering 2: Implementation & Verification | P/2 | | | | |
| Object-Oriented Programming | Object-Oriented Programming | V+P | | 5/4 | | K90 |
| Digital Technology | Digital Technology | V+P | 5/4 | | | K90 |
| Mathematics 4: Statistics and Numeric | Statistics | V+P | | | 5/4 | PF |
| | Numeric | V+P | | | | |
| Computer Technology | Computer Technology | V+P | | 5/4 | | K90 |
| Electronics | Electronics | V | | | 5/4 | K90 |
| Computer-Aided Circuit Design 1 ² | Basic Practical Electrical Engineering: Programming of uC | P/2 | | 5/4 | | PF |
| | Circuit Design Practical | P/2 | | | | |
| Physics Mechanics | Physics Mechanics | V | 5/4 | | | K90 |
| summary ECTS / SWS | | | 30/24 | 30/24 | 30/24 | |

1) Electrical Engineering Practical: only in summer semesters.

2) Computer-Aided Circuit Design 1: only in winter semesters.

B. Special Part: Bachelor Study Program Electrical Engineering and Information Technology

Table 2: Bachelor Study Program Electrical Engineering and Information Technology

Main: for students of the english study program

| Module | Course | Curricular semester assigned | | | | | Graded examination |
|---------------------------------|--|------------------------------|--------------|--------------|--------------|--------------|--------------------|
| | | | 4 | 5 | 6 | 7 | |
| | | Typ | ECTS/ SWS | ECTS/ SWS | ECTS/ SWS | ECTS/ SWS | |
| Digital Signal Processing | Digital Signal Processing | V+P | | | 5/4 | | PF |
| Computer-Aided Circuit Design 2 | Circuit Design | V+P | 5/4 | | | | PF |
| Language | German | V+P | 5/4 | | | | PF |
| Communication Technology | Communication Technology | V | 5/4 | | | | K90 |
| High Frequency Engineering | High Frequency Engineering | V/4 | | | 5/6 | | K90 |
| | High Frequency Engineering Practical | P/2 | | | | | |
| Seminar: Scientific Work | Scientific Work | S+P | | | 5/4 | | RPA |
| Communication networks | Communication networks | V | | | 5/4 | | K90 |
| Power Electronics | Power Electronics | V | 5/4 | | | | K90 |
| Control Engineering | Control Engineering with Exercises | V/4 | | | | 6/6 | K90 |
| | Control Engineering Practical | P/2 | | | | | |
| Microcontroller | Microcontroller | V/2 | | | 5/4 | | RPA |
| | Microcontroller Practical | P/2 | | | | | |
| Automation | Introduction to Automation | V/2 | | | 7/6 | | K90 |
| | SPS-Systems | V/2 | | | | | |
| | SPS-Systems Practical | P/2 | | | | | |
| Modul 1 Study Focus | Compulsory subject 1 on Study Focus | | | | | 5/0 | See table 3 or 4 |
| Modul 2 Study Focus | Compulsory subject 2 on Study Focus | | | | 5/0 | | See table 3 or 4 |
| Elective Module | Elective Module | | 5/0 | | | | See subject |
| Seminar: Main Study | Project-Seminar | PR/2 | 5/2 | | | | RPA |
| Bachelor's thesis | Bachelor's thesis incl. Final Colloquium (15% of grade) | | | | | 12/0 | B + R |
| summary ECTS / SWS | | | 30/18 | 30 | 30/22 | 30/12 | |

B. Special Part: Bachelor Study Program Electrical Engineering and Information Technology

Table 3: Bachelor Study Program Electrical Engineering and Information Technology
Main: Study Focus Communication for students of the english
study program (2 out of x)

| Module | Course | SS or WS | | | Accredited examination |
|------------------------------------|------------------------------------|----------|--------------|--------------|------------------------|
| | | | ECTS/ SWS | ECTS/ SWS | |
| | | Typ | SS | WS | |
| Internet Applications | Internet Applications | V+P | 5/4 | | PF |
| Communication Systems | Communication Systems | V | 5/4 | | K90 |
| Automotive Electronics Controls | Automotive Electronics Controls | V | | 5/4 | K90 |
| Intelligent Transportation Systems | Intelligent Transportation Systems | V | 5/4 | 5/4 | M |
| Selected Topics | Special Topics - see announcements | V+P | announcement | announcement | announcement |
| Seminar: Communication | Project-Seminar: Communication | P | 5/4 | 5/4 | M |
| summary ECTS / SWS | | | 20/16 | 15/12 | |

Table 4: Bachelor Study Program Electrical Engineering and Information Technology
Main: Study Focus Automation for students of the english
study program (2 out of x)

| Module | Course | SS or WS | | | Graded examination |
|---|---|----------|--------------|--------------|--------------------|
| | | | ECTS/ SWS | ECTS/ SWS | |
| | | Typ | SS | WS | |
| Introduction to Power Train Engineering | Introduction to Power Train Engineering | V+P | 5/4 | | K90 |
| Real-Time Programming | Real-Time Programming | V/2 | 5/4 | 5/4 | K90 or PF |
| | Real-Time Programming Practical | P/2 | | | |
| Selected Topics | Special Topics - see announcements | V+P | announcement | announcement | announcement |
| Seminar: Automation | Project-Seminar: Automation | P | 5/4 | 5/4 | M |
| summary ECTS / SWS | | | 15/12 | 10/8 | |

Table 5: Bachelor Program Electrical Engineering and Information Technology
Curriculum Vocational Training Variant (German only)

| Semester | Unternehmen | Hochschule | Abschluss |
|----------|---------------------|--------------------|--------------|
| 1 | Vertrag/Vorstellung | | |
| 2 | Ausbildung | | |
| 3 | | 1. Theoriesemester | Grundstudium |
| 4 | | 2. Theoriesemester | Grundstudium |
| 5 | | 3. Theoriesemester | Hauptstudium |
| 6 | | 4. Theoriesemester | Hauptstudium |
| 7 | Praxis | | |
| 8 | | 6. Theoriesemester | Hauptstudium |
| 9 | Bachelorarbeit | 7. Theoriesemester | B. Eng. |

§ 47 Bachelor Study Program Physical Engineering

(1) Structure of the Study Program

The study program has a modular structure. Content and structure are described in Table 1 and Table 2. The study program comprises two study stages.

The first stage is the basic study period and includes the midterm examinations pursuant to § 7(2). The courses of the first three semesters are taught in English for students beginning the program in the summer semester and in German for students beginning the program in the winter semester. The second study stage is the main study period. Apart from compulsory and elective subjects, it includes **the compulsory practical semester as well as the Bachelor's examination. All courses of the main study period are offered in German.**

The standard period of study is 7 semesters. 210 ECTS credits are required for a successful graduation. **The study program concludes with the Bachelor's examination. It is also possible to acquire a double degree at a partner university provided a cooperation agreement with this university exists.**

(2) Courses and Accredited Examinations

The courses of the two study stages as well as the related examinations to be passed for successful graduation are shown in Tables 1 to 3 below. The following abbreviations are generally used:

| Type of course | Type of exam | Scope of exam |
|---|--|--|
| V Lecture | B Bachelor's Thesis | SWS Semester hours |
| PRO Project work in combination with a written report and/or presentation | PB Report on practical semester | ECTS Number of credit points required (§3) |
| S Seminar | PF Portfolio | |
| P Practical, exercises | K(xx) Written examination duration of xx minutes | |
| VP Lecture with integrated exercises | D Documentation | |
| | MBK (xx) Written examination accompanying the module, total duration in xx minutes | |
| | PA Practical work in combination with tests | |

The lecturer can, at his/her own discretion determine voluntary examinations, which students can take during the course as partial module examination, in addition to the accredited examinations as stated in Tables 1 to 4. Students must be informed of the decision as well as the type, extent and weighting of the partial module examinations at the beginning of the course, and the faculty shall announce it by display on the notice board. The results of the partial module examinations shall be considered for the module examination in proportion to their weighting.

If a double degree is acquired at a partner university, the required courses will be recognized by the head of the study program in the framework of the recognition process as set forth in the Lisbon Convention.

B. Special Part: Bachelor Study Program Physical Engineering

Compulsory attendance of a course is determined on a case-by-case basis and for the respective semester by the Faculty Council. Attendance can only be made compulsory if this is an indispensable prerequisite for the acquisition of the competence. Irrespective of the foregoing regulations, attendance is compulsory at the opening classes of seminars, when the topics are assigned. Failure to appear at the opening class for the assignment of topics will lead to the student being excluded from participation in the seminar. Also, attendance of laboratory courses is generally compulsory.

(3) Elective Modules

A number of compulsory elective modules as well as individual elective modules is available for the students to determine their profile.

a) Compulsory elective modules

The range of compulsory elective modules (specialization) offered consists of modules from the fields of **"Imaging Technology" and "Mechatronics"** (see Table 3). Students choose one of the two study focuses by the end of the third semester.

In addition to the three modules of the specialization chosen, students must enroll in one module of the other specialization. Whether a compulsory elective module takes place may be subject to a minimum number of participants.

b) Individual elective modules

To determine their individual profile, students must take accredited examinations or perform course work in subjects from the further course offer at Hochschule Ravensburg-Weingarten or another university to the extent of 10 ECTS credits. 5 of these ECTS credits must be earned in the field of natural sciences/engineering and a further 5 credits in a non-technical field.

Prior approval by the Examination Committee will be required if students wish to choose elective modules from the offer of a university other than Hochschule Ravensburg-Weingarten.

Only elective modules, whose content is not identical or where there is only a slight overlap with compulsory subjects may be chosen.

In addition, upon the student's request, the Examination Committee of the study program can, in individual cases, recognize other achievements (e.g. tutorials held, voluntary work ect.), whereby the maximum number of ECTS credits which can be recognized is five.

(4) Compulsory Practical Semester

Students having begun their studies in the summer semester must complete their practical semester in the sixth and those who have started in the winter semester in the fourth curricular semester.

A prerequisite for beginning the practical semester is that the midterm examination according to § 7 (2) has been passed.

The practical semester comprises hands-on activities in a company. These activities must correspond to the occupational profile of the study program. The competencies acquired during the study shall be applied and extended by working on suitable projects in the company. The students shall become acquainted with the professional requirements, work methods and the operational environment and shall work as independently and responsibly as possible in consideration of the specific situation of the company.

During the practical semester, the students are supported by the Interns Office. For the practical semester to be recognized, students are required to provide various achievements. The Interns Office will determine what kind of work must be provided (e.g. preparation of an intermediate or a final report) and also when and in what form. The students are informed accordingly via intranet and at an information session.

B. Special Part: Bachelor Study Program Physical Engineering

At the end of the practical semester, Interns Days are organized to follow up the practical semester and to make the final presentations. Attendance at the Interns Days is compulsory. In exceptional cases and subject to a special permission by the head of the Interns Office, a soundtrack can be added to the final presentation and played instead of participation on the Interns Days. The student must ensure approval of the final presentation by his/her company.

After completion of the internship in the company, the student must submit an activity report on his/her **in-company training to the Interns Office. On the basis of the student's performance** and the activity report, the head of the Interns Office will decide if the student has successfully completed the practical semester.

(5) **Bachelor's** Thesis

Prior to beginning the **Bachelor's** thesis, all examinations and course achievements of the first four subject-related semesters as well as the practical semester must have been successfully completed. The professor assigning the **Bachelor's** thesis must limit the topic, the task and the extent of the thesis in such way that it can be completed in approx. 360 hours of work corresponding to 12 ECTS credits. The thesis must be handed in to the Examination Office of Hochschule Ravensburg-Weingarten no later than six months from the date of issue.

B. Special Part: Bachelor Study Program Physical Engineering

Table 1: Bachelor Study Program Physical Engineering
1st study stage

| Module | Course | Curricular semester assigned | | | | Graded examination |
|---------------------------|--|------------------------------|--------------|--------------|--------------|----------------------|
| | | | 1 | 2 | 3 | |
| | | Type | ECTS/ SWS | ECTS/ SWS | ECTS/ SWS | |
| Analysis 1 | Differential and Integral Calculus | VP | 5/4 | | | K90 |
| Linear Algebra | Linear Algebra | VP | 5/4 | | | K90 |
| Analysis 2 | Differential Equations and Vector Analysis | VP | | 5/4 | | K90 |
| Analysis 3 | Series Expansions and Transformations | VP | | | 5/4 | K90 |
| Physics 1 | Mechanics | VP | 5/4 | | | MBK 120 |
| Physics 2 | Electrodynamics | VP | | 5/4 | | MBK 120 |
| Physics 3 | Optics and Waves | VP | | | 5/4 | MBK 120 |
| Physics 4 | Quantum Physics | VP | | | 5/4 | MBK 120 ¹ |
| | Practical Physics | P | | | | |
| Chemistry | Chemistry | VP | 5/4 | | | K90 |
| Foreign Languages | Professional English or German ² | VP | | 5/4 | | PF |
| Materials Science | Materials | VP | | | 5/4 | K90 |
| Design 1 | CAD | P | | 5/4 | | D |
| | Technical Mechanics | VP | | | | |
| Design 2 | Machine Design | VP | | | 5/4 | K90 |
| Electrical Engineering TE | Electrical Engineering | VP | 5/4 | | | MBK 120 |
| Electronics TE 1 | Electronics TE 1 | VP | | 5/4 | | MBK 120 |
| | Practical Electrical Engineering/ Electronics | P | | | | |
| Electronics TE 2 | Electronics TE 2 | VP | | | 5/4 | K90 |
| Computer Science | Basic Principles of Computer Science | VP | 5/4 | | | K90 |
| | Practical Computer Science | P | | | | |
| Software Development | Software Development | VP | | 5/4 | | PA |
| | Practical Software Development | P | | | | |
| summary ECTS / SWS | | | 30/24 | 30/24 | 30/24 | |

1) Examination together with "Optics and Waves"

2) German-speaking students choose Professional English, English-speaking students choose German

3) For the compulsory practical semester, see paragraph 3

B. Special Part: Bachelor Study Program Physical Engineering

Table 2: Bachelor Study Program Physical Engineering
2nd study stage

| Module | Course | Curricular semester assigned | | | | | Graded examination |
|--|--|------------------------------|--------------|--------------|--------------|--------------|--------------------|
| | | | 4 | 5 | 6 | 7 | |
| | | Typ | ECTS/ SWS | ECTS/ SWS | ECTS/ SWS | ECTS/ SWS | |
| Physical Measurement Techniques | Physical Measurement Techniques | VP | 5/4 | | | | K90 |
| Control Engineering | Control Engineering | VP | 5/4 | | | | K90 |
| Digital Technologies | Digital Technologies | VP | 5/4 | | | | K90 |
| Development 1 | Technical Documentation | VP | 5/4 | | | | D |
| | Scientific Working Methods | VP | | | | | |
| Development 2 | Patents | VP | | 5/4 | | | K90 |
| | Techn. Project Management | VP | | | | | |
| Business Administration | Business Administration | VP | | 5/4 | | | K90 |
| Modelling and Simulation | Modelling and Simulation | VP | | 5/4 | | | K90 |
| Microcontrollers | Microcontrollers | VP/3 | | 5/4 | | | PA |
| | Practical Electronics | P/1 | | | | | |
| Spezicalization | 2 subjects from Table 3 | V | 10/0 | 10/0 | | | |
| | 2 subjects from Table 3 | P | | | | | |
| Elective Module Technology | | | | | | 5/4 | |
| Elective Module Non-Tech. | | | | | | 5/4 | |
| Project | Project | PRO | | | | 5/4 | MPA |
| Practical Semester | Interns Seminar | PRO | | | 30/1 | | PB |
| Bachelor's Thesis and Seminar for Bachelor Degree Candidates | Seminar for Bachelor Degree Candidates | S | | | | 15/2 | B |
| | Bachelor's Thesis | B | | | | | |
| summary ECTS / SWS | | | 30/24 | 30/24 | | 30/1 | |

B. Special Part: Bachelor Study Program Physical Engineering

Table 3: Bachelor Study Program Physical Engineering
Compulsory electives of the 4th or 6th curricular semester, respectively

| Module block | Module / Course | Type | ECTS/ SWS | Ungraded examination | Graded examination |
|---|--|------|--------------|-------------------------|-----------------------|
| Specialization Imaging Technology | Imaging and Spectroscopy | VP | 5/4 | | PA |
| | Imaging Technology | VP | 5/4 | | K90 |
| | 3D and Image Processing | VP | 5/4 | | K90 |
| | Course from the Mechatronics specialization | VP | 5/4 | | |
| Specialization Mechatronics | Mechatronics | VP | 5/4 | | K90 |
| | Robotics | VP | 5/4 | | K90 |
| | Microsystems / Optoelectronics | VP | 5/4 | | K90 |
| | Course from the Imaging Technology specialization | VP | 5/4 | | |

§ 48 Bachelor Study Program E-Mobility and Green Energy

(1) Structure of the Study Program

The Bachelor study program E-Mobility and Green Energy comprises the basic study period with a **duration of two semesters and the main study period which concludes with the Bachelor's examination** in the 7th semester.

It is possible to graduate this study program including a German vocational training. For detailed regulations see section 7.

For a successful graduation, a practical semester and academic courses worth 180 ECTS are required. The total number of 210 ECTS is made up of six theoretical semesters with 30 ECTS each and one practical semester worth 30 ECTS.

German speaking students, who start in the summer semester, have to chose Englisch in the language module.

(2) Courses

The lectures for students of the english study program will be given in english on a yearly basis, exceptions can be decided by the faculty board (according: General part of the SPO §3.3). The lectures from semester six and seven will be given in german, exceptions can be decided by the faculty board (according: General part of the SPO §3.3). Subjects from a study focus (Table 3) can be offered in english without the approval of the faculty board.

All courses comprise a proportion of exercises. The required courses as well as the related accredited examinations are shown in tables 1 to 4 below.

The following abbreviations are used:

| Type of course | Type of exam | Scope of exam |
|------------------------|--|---|
| V Lecture | B Bachelor's thesis | SWS Semester hours |
| PR Project | R Seminar Paper and presentation | ECTS ECTS points in compliance with the European Credit Transfer System |
| S Seminar | PF Portfolio | E Medium of instruction is English |
| P Practical, exercises | K(xx) Written examination duration of xx minutes | D Medium of instruction is German |
| | M Oral examination | |
| | PA Practical work (lab, term or seminar paper or project work) | |
| | RPA Practical work documented by a seminar paper and presentation (PF: 50% PA graded and 50% R graded) | |

(3) Elective Modules

The elective modules available are announced by display on the notice board at the beginning of each semester.

If students wish to choose elective modules from the offer of other universities, a special permission by the Examination Committee will be required. Tutorials held by the student can be recognized as elective module, whereby the maximum number of ECTS to be earned is five.

(4) Accredited Examinations

The type of accredited examination and course achievements is shown in tables 1 and 2. Every accredited examination must be passed. § 8 of this SPO is still valid. The rating of the examinations is according § 13 of this SPO.

(5) Practical Semester (Compulsory)

The 5th semester is a practical semester. A prerequisite for beginning the practical semester is that, by the end of the 4th semester, the student has passed examinations of the first two semesters amounting to 60 ECTS. In case of the vocational training version of this study program, the practical semester can be done during the practical phases during the lecture free times in the cooperating companies (see section 7).

During their practical semester, the students shall work on an engineering task from the fields of electrical or automotive engineering, thereby becoming acquainted with the professional requirements, industrial work methods and the operational environment with regard to the planning, development and application of electronic networks and systems.

The fields of work can be as follows:

- Planning and implementation of electronic and information technology systems
- Planning, design and development of electronic circuits
- Testing of networks and systems
- Software development
- Use of computers for the design of circuits and systems (CAD)
- Computer simulations
- Planning, design and development of electric drives
- Planning and implementation of mechatronic systems in automotive engineering

Total duration: 22 weeks with at minimum 95 presence days in the company.

(6) **Bachelor's** Thesis

Prior to beginning the **Bachelor's** thesis, all examinations and course achievements of the first four semesters as well as the practical semester must have been completed. The professor assigning the **Bachelor's** Thesis must limit the topic, the task and the extent of the thesis in such way that it can be completed in approx. 360 hours of work corresponding to 12 ECTS. See §12 of the general part of the SPO.

(7) Vocational Training Study Program

The curriculum comprises 9 semesters in case of the Vocational Training Study Program and leads at **first to a „certified occupation requiring formal training“** (e.g. Elektroniker/Elektronikerin für Energie- und Gebäudetechnik, Elektroniker/Elektronikerin für Betriebstechnik, Mechatroniker/Mechatronikerin). The semester of the non vocational training will be integrated into the adapted curriculum Table 5. The curriculum will be completed with training sections from the cooperating companies and the industrial school. For this parts, the companies and the industrial schools will be responsible (the language is German). The compulsory practical semester will be done during the practical phases during the lecture **free times in the cooperating companies. The projects, seminars and the Bachelor's thesis can be done in the cooperating companies**

(8) Validity

This SPO is valid starting from winter semester 2022/23.

B. Special Part: Bachelor Study Program E-Mobility and Green Energy

Table 1: Bachelor Study Program E-Mobility and Green Energy
Basic: for students of the english study program

| Module | Course | Curricular semester assigned | | | | Graded examination |
|---|--|------------------------------|--------------|--------------|--------------|--------------------|
| | | | 1 | 2 | 3 | |
| | | Typ | ECTS/ SWS | ECTS/ SWS | ECTS/ SWS | |
| Electrical Engineering 1: Basics | Analysis of Electric Networks | V | 5/4 | | | K90 |
| Electrical Engineering 2: Electrodynamics | Electrodynamics | V | | 5/4 | | K90 |
| Electrical Engineering 3: Time and Frequency Domains | Circuit Analysis in the Time and Frequency Domains | V | | | 5/4 | K90 |
| Metrology 1: Basics | Metrology 1 | V/2 | | 5/4 | | K90 |
| | Metrology Practical | P/2 | | | | |
| Mathematics 1: Analysis 1 | Analysis 1 with Exercises | V | 5/4 | | | K90 |
| Mathematics 2: Linear Algebra | Linear Algebra with Exercises | V | 5/4 | | | K90 |
| Mathematics 3: Analysis 2 | Analysis 2 with Exercises | V | | 5/4 | | K90 |
| Robotics | Robotics | V+P | | | 5/4 | PF |
| Programming | Programming | V+P | 5/4 | | | K90 |
| Electrical Engineering Practical ¹ | Basic Practical Electrical Engineering 1: Basic Circuits | P/2 | | | 5/4 | PF |
| | Basic Practical Course Electrical Engineering 2: Implementation & Verification | P/2 | | | | |
| Digital Technology | Digital Technology | V | 5/4 | | | K90 |
| Automotive Engineering | Automotive Engineering | V | | 5/4 | | PF |
| Automotive Engineering: Practical and Computer Aided Design (CAD) | Practical Automotive Engineering | P/2 | | | 5/4 | PF |
| | CAD | P/2 | | | | |
| Electronics | Electronics | V | | | 5/4 | K90 |
| Materials Science | Materials Science | V | | 5/4 | | K90 |
| Machinery Design | Machinery Design | V | | 5/4 | | K90 or PF |
| Computer-Aided Circuit Design 1 ² | Basic Practical Electrical Engineering: Programming of uC | P/2 | | 5/4 | | PF |
| | Circuit Design Practical | P/2 | | | | |
| Physics Mechanics | Physics Mechanics | V | 5/4 | | | K90 |
| summary ECTS / SWS | | | 30/24 | 30/24 | 30/24 | |

1) Electrical Engineering Practical: only in summer semesters.

2) Computer-Aided Circuit Design 1: only in winter semesters.

B. Special Part: Bachelor Study Program E-Mobility and Green Energy

Table 2: Bachelor Study Program E-Mobility and Green Energy
Main: for students of the English study program

| Module | Course | Curricular semester assigned | | | | | Graded examination |
|---|--|------------------------------|--------------|--------------|--------------|--------------|--------------------|
| | | | 4 | 5 | 6 | 7 | |
| | | Typ | ECTS/ SWS | ECTS/ SWS | ECTS/ SWS | ECTS/ SWS | |
| Digital Signal Processing | Digital Signal Processing | V+P | | | 5/4 | | PF |
| Image Processing | Basic of Image Processing | V+P | | | | 5/4 | PF |
| Language | German | V+P | 5/4 | | | | PF |
| Seminar: Scientific Work | Scientific Work | S+P | | | 5/4 | | RPA |
| Green Energies and Energy Storage | Green Energies and Energy Storage | V/4 | | | | 7/6 | K90 + PA |
| | Practical Environmental and Process Engineering | P/2 | | | | | |
| Power Electronics | Power Electronics | V | 5/4 | | | | K90 |
| Control Engineering | Control Engineering with Exercises | V/4 | | | | 6/6 | K90 |
| | Control Engineering Practical | P/2 | | | | | |
| Microcontroller | Microcontroller | V | | | 5/4 | | RPA |
| | Microcontroller Practical | P | | | | | |
| Seminar: Main Study | Project-Seminar | PR | 5/0 | | | | RPA |
| Introduction to Power Train Engineering | Introduction to Power Train Engineering | V | 5/4 | | | | K90 |
| Real-Time Programming | Real-Time Programming | V | | | 5/4 | | K90 |
| | Real-Time Programming Practical | P | | | | | |
| Profile 1 | Study Focus 1 | | 5/0 | | | | see table 3 |
| Profile 2 | Study Focus 2 | | | | 5/0 | | see table 3 |
| Profile 3 | Study Focus 3 | | | | 5/0 | | see table 3 |
| Elective Module | Elective Module | | 5/0 | | | | see electives |
| Bachelor's thesis | Bachelor's thesis incl. Final Colloquium (15% of grade) | | | | | 12/0 | B + R |
| summary ECTS / SWS | | | 30/12 | 30 | 30/16 | 30/16 | |

B. Special Part: Bachelor Study Program E-Mobility and Green Energy

Table 3: Bachelor Program E-Mobility and Green Energy
Modules: Profiles, Study)

| Module | Course | Curricular semester assigned | | | Graded examination |
|---------------------------------------|------------------------------------|------------------------------|--------------|--------------|--------------------|
| | | | SS | WS | |
| | | Typ | ECTS/ SWS | ECTS/ SWS | |
| Automotive Electronics | Automotive Electronics Controls | V | | 5/4 | K90 |
| Solar Cells, Fuel Cells and Batteries | Photovoltaics | V | | 5/4 | K90 |
| | Batteries and Fuel Cells | V | | | |
| Mathematics 4: Statistics and Numeric | Statistics | V+P | 5/4 | 5/4 | PF |
| | Numeric | V+P | | | |
| Intelligent Transportation Systems | Intelligent Transportation Systems | V | 5/4 | 5/4 | M |
| High Voltage Vehicles | High Voltage Vehicles | V | 5/4 | 5/4 | PF |
| Electric Power Trains | Hybrids in Cars | V | 5/4 | 5/4 | K90 |
| Selected Topics | Special Topics - see announcements | | announcement | announcement | announcement |

Table 4: Bachelor Program E-Mobility and Green Energy
Curriculum Vocational Training Variant (German only)

| Semester | Unternehmen | Hochschule | Abschluss |
|----------|---------------------|--------------------|--------------|
| 1 | Vertrag/Vorstellung | | |
| 2 | Ausbildung | | |
| 3 | | 1. Theoriesemester | Grundstudium |
| 4 | | 2. Theoriesemester | Grundstudium |
| 5 | | 3. Theoriesemester | Hauptstudium |
| 6 | | 4. Theoriesemester | Hauptstudium |
| 7 | Praxis | | |
| 8 | | 6. Theoriesemester | Hauptstudium |
| 9 | Bachelorarbeit | 7. Theoriesemester | B. Eng. |

C. Final Provisions

§ 51 Entry into Force

The present Study and Examination Regulation will become effective on 1 September 2005. Simultaneously, the previous Study and Examination Regulation for the novel Bachelor programs of 19 July 2004 will cease to have effect.

§ 52 Entry into Force of the first Amendment of 13 July 2006

This amendment will become effective on 1 September 2006.

§ 53 Entry into Force of the second Amendment of 16 January 2007

This amendment will become effective on 1 March 2007.

§ 54 Entry into Force of the third Amendment of 26 June 2007

This amendment will become effective on 1 September 2007.

Students enrolled in the Bachelor program "Social Work" who took up their studies in the first semester in the summer semester 2007 can, upon application, complete their study course according to the present amended Study and Examination Regulations. The corresponding application must be filed by the end of the summer semester 2007.

§ 55 Entry into Force of the fourth Amendment of 29 January 2008

This amendment will become effective on 1 March 2008.

§ 56 Entry into Force of the fifth Amendment of 31 March 2008

This amendment will become effective on 1 September 2008.

§ 57 Entry into Force of the sixth Amendment of 26 June 2008

This amendment will become effective on 1 September 2008.

§ 58 Entry into Force of the seventh Amendment of 23 January 2009

This amendment will become effective on 1 March 2009.

§ 59 Entry into Force of the eighth Amendment of 29 June 2009

This amendment will become effective on 1 September 2009.

§ 60 Entry into Force of the ninth Amendment of 27 November 2009

This amendment will become effective on 1 March 2010.

§ 61 Entry into Force of the tenth Amendment of 31 March 2010

This amendment will become effective on 1 March 2010

C. Final Provisions

§ 62 Entry into Force of the eleventh Amendment of 25 June 2010

This amendment will become effective on 1 September 2010.

§ 33 will become effective on 1 September 2009.

§ 63 Entry into Force of the twelfth Amendment of 26 November 2010

This amendment will become effective on 1 December 2010

§ 64 Entry into Force of the thirteenth Amendment of 21 January 2011

This amendment will become effective on 1 February 2011

§ 65 Entry into Force of the fourteenth Amendment of 1 April 2011

This amendment will become effective on 1 February 2011

§ 66 Entry into Force of the fifteenth Amendment of 1 July 2011

This amendment will become effective on 2 July 2011

§ 67 Entry into Force of the sixteenth Amendment of 22 June 2012

This amendment will become effective on 23 June 2012

§ 68 Entry into Force of the seventeenth Amendment of 13 December 2012

This amendment will become effective on 14 December 2012

§ 69 Entry into Force of the eighteenth Amendment of 25 January 2013

This amendment will become effective on 26 January 2013

§ 70 Entry into Force of the nineteenth Amendment of 2 July 2013

This amendment will become effective on 3 July 2013

§ 71 Entry into Force of the twentieth Amendment of 24 January 2014

This amendment will become effective on 25 January 2014

§ 72 Entry into Force of the twenty-first Amendment of 9 April 2014

This amendment will become effective on 10 April 2014

§ 73 Entry into Force of the twenty-second Amendment of 1 July 2014

This amendment will become effective on 2 July 2014

§ 74 Entry into Force of the twenty-third Amendment of 2 July 2015

This amendment will become effective on 3 July 2015

§ 75 Entry into Force of the twenty-fourth Amendment of 30 June 2016

This amendment will become effective on 1 July 2016

C. Final Provisions

§ 76 Entry into Force of the twenty-fifth Amendment of 1 June 2017

This amendment will become effective on 1 September 2017

§ 77 Entry into Force of the twenty-sixth Amendment of 28. June 2017

This amendment will become effective on 1 September 2017.

§ 78 Entry into Force of the twenty-seventh Amendment of 26 October 2017

This amendment will become effective on 1 November 2017

§ 79 Entry into Force of the twenty-eighth Amendment of 28 June 2018

This amendment will become effective on 1 September 2018

§ 80 Entry into Force of the twenty-ninth Amendment of 27 June 2019

This amendment will become effective on 1 September 2019

§ 81 Entry into Force of the thirtieth Amendment of 16 January 2020

This amendment will become effective on 1 March 2020

§ 82 Entry into Force of the thirty-first Amendment of 16 July 2020

This amendment will become effective on 1 September 2020

§ 83 Entry into Force of the thirty-second Amendment of 3 December 2020

This amendment will become effective on 1 March 2021

§ 84 Entry into Force of the thirty-third Amendment of 1 July 2021

This amendment will become effective on 1 September 2021

§ 85 Entry into Force of the thirty-fourth Amendment of 28 October 2021

This amendment will become effective on 1 March 2022

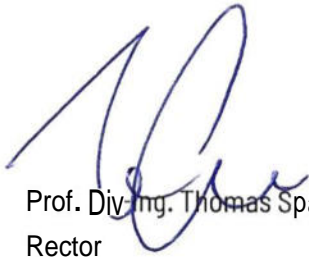
§ 86 Entry into Force of the thirty-fifth Amendment of 23 June 2022

This amendment will become effective on 1 September 2022

D. Implementing provisions

These regulations shall enter into force on the day following their publication.

Weingarten, June 23rd, 2022



Prof. Dr.-Ing. Thomas Spägle
Rector

Weingarten, June 23rd, 2022



Prof. Dr. Sebastian Mauser
Vice-Rector for Student Affairs,
Teaching and Quality Management

For notarization

Posting from to

Henning Rudewig
Chancellor