

# Examination Regulations

for

## Sustainable Agriculture B.Sc.

at Rhine-Waal University of Applied Sciences

Dated 31 January 2011

*Please note: this English translation is provided for information purposes only.  
Only the German version published in the Official Notices of Rhine-Waal University of Applied Sciences is legally binding.*

*These examination regulations apply to students who first enrolled in Sustainable Agriculture B.Sc. before winter semester 2012-2013.*

In accordance with Section 2 (4) sentence 1 and Section 64 (1) of the Higher Education Act of North Rhine-Westphalia [Hochschulgesetz – HG NRW] of 31 October 2006 (Law and Regulations Gazette of NRW – GV.NRW. 2006, p. 474), last amended by law on 8 October 2009 (GV.NRW. p. 516), as well as with Section 2 (4) of the Universities of Applied Sciences Establishing Act of 21 April 2009 [Fachhochschuleerrichtungsgesetz 2009] (GV.NRW. 2009, p. 255), the President of Rhine-Waal University of Applied Sciences has issued the following examination regulations:

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## **Section 1**

### **Scope of application**

These examination regulations shall apply to the bachelor's degree programme Sustainable Agriculture of the Faculty of Life Sciences of Rhine-Waal University of Applied Sciences. These examination regulations govern the standard seven-semester mode of study (full time study), the nine-semester cooperative mode of study (co-op), and the nine-semester part-time mode of study for working professionals [berufsbegleitendes Studium].

## **Section 2**

### **Aims and objectives; purpose of examination; degree awarded**

(1) With due regard to the general study objectives outlined in Section 58 HG NRW and on the basis of sound scientific knowledge, this bachelor's programme should convey, in particular, application-oriented content and enable students to apply agricultural, natural scientific, social scientific and economic methods and to develop practical, interdisciplinary solutions to problems within their field. A strong command of the English language is key to achieving success in this degree programme, as it provides the essential basis for this programme's continuous goal of broadening and deepening students' technical language and communication skills.

(2) The bachelor's examination concludes the degree programme and constitutes a first academic and scientific qualification towards a career. The purpose of the bachelor's examination is to assess whether a student has acquired a sound grasp of the scientific principles and methods needed to work as an independent professional in their field of study.

(3) The academic degree "Bachelor of Science", abbreviated as "B.Sc.", shall be awarded for the successful completion of the bachelor's examination.

## **Section 3**

### **Entry requirements**

(1) Admission to a bachelor's programme requires a valid German university entrance qualification, which can be either a general higher education entrance qualification [allgemeine Hochschulreife], or a subject-specific higher education entrance qualification [fachgebundene Hochschulreife], or an entrance qualification to a university of applied sciences [Fachhochschulreife], or other professional qualifications deemed equivalent. Additionally, applicants must meet the English proficiency requirements defined in paragraph (3) and have completed a twelve week pre-study internship within the meaning of paragraphs (4) to (7).

(2) Notwithstanding paragraph (1), sentence 1, an entrance qualification to a university of applied sciences is not required from those applicants who have completed recognised vocational training in Germany and, in accordance with the German Regulations for Entrance to Higher Education for Applicants with Vocational Qualifications [Berufsbildungshochschulzugangsverordnung NRW], thus qualify for direct admission to Rhine-Waal University of Applied Sciences, or from applicants who have successfully completed an entrance examination or a trial period of study as defined in the HG NRW.

(3) Sufficient proficiency in English can be demonstrated by submitting a valid and recognised language certificate equivalent to CEFR level B2.2 (Common European Framework of Reference for Languages). Exempted from this requirement are applicants who have completed seven years of English at a German secondary school and earned a final cumulative mark of at least “good” (2.0 or better) for the subject.

(4) In general, eight weeks of the pre-study internship should be completed before enrolling at Rhine-Waal University of Applied Sciences. All twelve weeks must be completed by the start of the fifth semester, however.

(5) The pre-study internship should be completed at an extramural company, public authority organisation (for-profit or nonprofit) or other institution and in a context relevant to the curriculum. It should familiarise the student with questions and matters relating to agricultural science and engineering, as well as business administration and organisation. The internship can also be extended to the manufacturing/production sector, the service sector or the commercial/trade sector.

(6) Relevant vocational and/or career experience can be counted towards the pre-study internship requirement. The pre-study internship requirement is considered met for those applicants who have earned an entrance qualification to a German university of applied sciences by graduating from a German technical secondary school [Fachoberschule] in Agricultural Science or in a relevant discipline.

(7) Exempt from the preparatory internship requirement are affiliate students from partner universities who are studying for a limited period of time – not to include graduation – at Rhine-Waal University of Applied Sciences.

(8) An applicant is ineligible for admission to this degree programme if he/she was previously deregistered (exmatriculated) from the same programme of study at a university

that is subject to German Basic Law [Grundgesetz] for failing the final attempt at passing an examination deemed mandatory by that institution's examination regulations. Further, an applicant is ineligible for admission to this degree programme if he/she was previously disenrolled from a related or comparable degree programme at a university that is subject to German Basic Law for failing the final attempt at passing an examination deemed mandatory by these examination regulations. A "related or comparable programme of study" is defined as any undergraduate (bachelor's or German 'Diplom') degree programme at a university or university of applied sciences in Germany if that programme's content predominately falls under the umbrella of agricultural science.

#### **Section 4** **Standard period of study; structure of programmes**

(1) The standard period of study for a full-time student, including the practical or study abroad semester, is seven semesters.

(2) This degree programme is divided into modules. As a rule, a "module" refers to a specific group of thematically-related and chronologically coordinated course units, which contribute to a uniform education and qualification goal. The practical semester, study abroad semester, bachelor's thesis and colloquium each constitute individual modules. In accordance with the framework outlined in Section 5 (5), the modules of this programme comprise a total of 210 credit points (hereinafter "CP").

(3) In co-op study, the first part of the separate vocational training programme is completed at a company before commencing with two semesters of study at the University. In the third semester, the second part of the vocational training period begins, later concluding with a vocational qualification examination. Both the vocational training position and the company providing the training must be relevant to the scientific discipline studied in the degree programme. The faculty shall be responsible for determining relevance in this regard. The vocational training portion generally concludes by the start of the fifth semester with a comprehensive examination, in German, conducted by the respective German Chamber of Agriculture.

(4) The part-time mode of study [berufsbegleitendes Studium] allows working individuals to continue their profession while studying on a part-time basis. In this mode of study, the regular content of the first two semesters is taught over the course of four semesters instead. During this time, the part-time student's work week is divided into two days of study at the university and three days at their place of employment.

(5) This degree programme has a total volume of study of 133 credit hours [Semesterwochenstunden – SWS].

(6) Additional information about the structure and progression of the programme, as well as about the type, form and scope of modules, can be found in the study and examination schedule in the annex of these examination regulations. For details about a module's qualification aims, content and most commonly offered mode of examination, please refer to the descriptions in the module guide, which is available in the dean's office for all students and staff to review.

## **Section 5**

### **Structure of the bachelor's examination; credit points**

(1) As specified in the study and examination schedule (annex), the bachelor's examination comprises all module and component examinations [Modulprüfungen and Teilprüfungen – hereinafter collectively referred to as “regular examinations”] and certificates [Testate] that students must complete over the course of their studies; the practical semester or study abroad semester; as well as the final examination phase, which consists of both the bachelor's thesis and the colloquium.

(2) As specified in the study and examination schedule, regular examinations and certificates may cover a module as a whole or individual course units therein and thus mark the full conclusion of either the whole module or only a component of the module. Assessment takes place either before or immediately after the final session(s) of the corresponding course unit(s). Full-time students usually complete the practical semester or the study abroad semester in the sixth semester; co-op and part-time students usually in the eighth semester. The bachelor's thesis topic is set at the beginning of the following semester: for full-time students this would be the seventh semester and for dual and work-study students the ninth semester. Thus students are able to complete the final colloquium before the end of the semester.

(3) Degree programmes and examination procedures must be planned in such a way that it is possible to complete bachelor's examination within the standard period of study.

(4) Examination procedures must allow for the rights granted to students under the German Maternity Leave Act [Mutterschutzgesetz], the German Child Benefits and Parental Leave Act [Gesetz zum Elterngeld und zur Elternzeit], as well as the right to a leave of absence for providing care to persons specified in Section 48 (5), sentence 5, HG NRW. In

general, if a candidate requires a change in the timing of examination processes, he/she must submit a written request to the Examination Board.

(5) The bachelor's examination is based on a credit point system. All modules and course units are assigned a value in credit points (CP) in accordance with the European Credit Transfer and Accumulation System (ECTS). The number of CP awarded for a module is based on the prescribed workload that is usually needed to complete the individual course units and the module as a whole. As per the ECTS agreement, one credit point represents a workload for students of approximately 25 to 30 hours. Furthermore, the allocation of credit points is based on the assumption that a student's workload for a full year is equal to 60 CP in total. Credit points are successfully earned for a module when a student fulfils the requirements of the respective examination(s) or certificate(s) therein. Earned credit points are recorded in the student's credit point account, which is maintained on his/her behalf by the Examination Board.

## **Section 6 Examination Board**

(1) An Examination Board shall be established for the purpose of assuming the duties and obligations allocated by these examination regulations. The Examination Board is an independent body of Rhine-Waal University of Applied Sciences, as well as a public authority within the meaning of German administrative procedural law. The Examination Board shall consist of a Chair, a Deputy Chair, and five additional members. The Chair, the Deputy Chair, and two additional members shall be elected by the Faculty Council from among the faculty's professors, one member shall be elected from the faculty's research staff, and the remaining two members from the faculty's student body. The term in office for full-time employees of the university and their representatives shall be four years; the term in office for student members and their representatives shall be one year. Members may be re-elected.

(2) The Examination Board is responsible for ensuring observance of the examination regulations under its jurisdiction. Furthermore, it is responsible for the organisation and proper conduct of examinations. The duties and responsibilities of the deans as outlined in Section 27 (1) HG NRW shall remain unaffected. The Examination Board is responsible, in particular, for ruling on appeals submitted against decisions made during examination procedures. In addition, the Examination Board is responsible for presenting an annual report to the Faculty Council on ongoing trends and developments in examinations and lengths of study. This report shall include corresponding recommendations for reform or alterations to

the examination regulations and curricula. The Examination Board may delegate its everyday duties and tasks to the Chair, but not in the case of rulings on appeals submitted by students.

(3) The Examination Board shall have a quorum when the Chair or Deputy Chair, one or more additional professor, and at least two additional members with voting power are present at a meeting. Furthermore, at least half of the members with voting power in attendance must be professors. The Examination Board shall pass resolutions with a simple majority. In the event of a tie, the deciding vote shall be cast by the Chair. Student members of the Examination Board, as well as the member from the research staff, shall not participate in votes on scientific-pedagogic decisions, in particular decisions relating to the recognition or assessment of examination results or to the appointment of examiners and observers. Furthermore, student members shall not participate in decisions or discussions on issues that relate to their own examinations or to examination questions and/or requirements.

(4) Examination Board members have the right to be present at examinations within the faculty. Student members are prohibited from attending an examination if they are required to sit that same examination on the day in question.

(5) All members of an Examination Board, their proxies, examiners and observers are subject to strict confidentiality requirements. Those members not employed in public service in Germany shall be sworn to secrecy by the Chair of the Examination Board.

(6) Any detrimental decisions made by the Examination Board or its Chair must be communicated to the affected student without delay. Before a decision is final, the student shall have the opportunity to be heard, in accordance with the law.

## **Section 7 Examiners and Observers**

(1) All members of the teaching staff at Rhine-Waal University of Applied Sciences are authorised to proctor/invigilate examinations. In exceptional cases, non-members of the teaching staff may be authorised to proctor/invigilate examinations, provided they have the relevant vocational and occupational experience and this decision is deemed necessary and appropriate for accomplishing the purpose of the examination (as second examiner for a bachelor's thesis, for example). Examiners must possess at least those qualifications being assessed by the respective examination, or equivalent qualifications; this also applies to any qualified observers present during oral examinations. Examiners and observers are



appointed by the Examination Board. They shall carry out their duties without regard to any outside instruction.

(2) The Examination Board is responsible for ensuring that testing obligations are distributed as evenly as possible among examiners.

(3) The Chair of the Examination Board shall notify students of the names of the examiners in a timely manner. Students shall be notified ideally upon admission to the examination, but in general no later than two weeks before the scheduled examination date. Notification by means of public display is sufficient.

### **Section 8 Credit transfer and recognition of prior learning**

(1) Previous periods of study, completed examinations (both passed and failed) and coursework – when completed in an identical programme of study (full or partial) at a university subject to German constitutional law [Grundgesetz] – shall be recognised officially and fully. In the event of previous periods of study, completed examinations (both passed and failed) and coursework that were completed in different programmes of study or at other universities or at state-run or state-recognised vocational colleges subject to German constitutional law, then these shall be recognised where are equivalent; on application, this provision also applies to prior learning completed at universities not subject to German constitutional law.

(2) On application and where sufficient documentation is provided, the University can also transfer credit towards a degree for other relevant skills and qualifications.

(3) The Examination Board is responsible for the decisions on credit transfer as outlined in paragraphs (1) and (2); in case of doubt, the examiner responsible for the modules in question shall be heard first.

### **Section 9 Placement examinations**

(1) Applicants who have acquired the skills and knowledge necessary to successfully complete a degree programme, but by means other than a university degree, are eligible to sit a placement examination [Einstufungsprüfung] and, depending on the results, begin their studies in an advanced semester, provided this does not clash with any applicable regulations for the allocation of places at a university in Germany.

(2) Depending on the results of the placement examination, an applicant may be partially or fully exempted from the pre-study internship requirement in Section 3, or from certain course units and their respective examination or certificate requirements. Candidates shall receive written confirmation for any decisions made in this regard.

(3) Details concerning the type, form and scope of placement examinations are specified in the Placement Examination Regulations of Rhine-Waal University of Applied Sciences.

### **Section 10 Evaluation of examinations**

(1) Examinations are evaluated and differentiated by marks. Marks are awarded by the examiner responsible for the examination in question.

(2) If multiple examiners are responsible for a single examination, then they shall evaluate the whole examination together, unless otherwise specified below. Where the individual marks are not identical, the final mark shall be determined by averaging the individual marks.

(3) Examinations shall be marked according to the following scale:

1	=	very good	=	excellent;
2	=	good	=	well above average;
3	=	satisfactory	=	average;
4	=	sufficient	=	meets all requirements despite shortcomings;
5	=	failed	=	does not meet requirements due to significant shortcomings.

Marks can be raised or lowered by 0.3 points, providing an additional degree of difference between scores; the marks 0.7, 4.3, 4.7 and 5.3 cannot be awarded.

(4) For marks that fall between two whole numbers, the following ranges shall apply:

1.0 – 1.5	=	very good
1.6 – 2.5	=	good
2.6 – 3.5	=	satisfactory
3.6 – 4.0	=	sufficient

4.1 – 5.0 = failed

Only the first decimal place shall be taken into account; all other decimal places are dropped without rounding.

- (5) An examination is passed if a mark of “sufficient” (4.0) or better was awarded.
- (6) The mark for a module containing multiple examinations shall be calculated by averaging the individual marks earned within that module. The marks shall be weighted by their number of credit points.
- (7) Students shall be informed of the results of written examinations within six weeks. Notification by means of public display is sufficient. Students shall be informed of the results of a bachelor’s thesis within eight weeks. In the case of oral examinations, students shall be notified of results immediately after the conclusion of the examination.
- (8) The final cumulative grade for the bachelor’s examination is supplemented by an ECTS grade, providing a relative indicator of academic performance in addition to an absolute indicator. An ECTS grade does not replace the final mark, but instead allows a student to compare his/her individual performance with the performance of other graduates in the same programme of study. Accordingly, graduates who are among the:

top 10% of their class will receive the grade:	“A”,
the next 25% will receive the grade:	“B”,
the next 30% will receive the grade:	“C”,
the next 25% will receive the grade:	“D”,
and the final 10% will receive the grade:	“E”.

### **Section 11**

#### **Repeat examinations**

- (1) Regular examinations may be repeated two additional times for a total of three attempts. The bachelor’s thesis and the colloquium may each be repeated once. Previous failed attempts at examinations, which were undertaken in a related or comparable programme of study, shall count towards these totals.
- (2) Passed examinations cannot be repeated for a better mark.

(3) Students who do not re-sit a failed examination within two semesters automatically forfeit their right to this particular repeat attempt. Details are outlined in paragraph (4) below.

(4) If a student has not undertaken another attempt to pass a previously failed examination in the time leading up to the final opportunity before the deadline, then that student shall be automatically registered for this final opportunity on a compulsory basis. If the student fails to appear to this examination and cannot provide good reason for his/her absence, then the examination shall be evaluated as “failed” (5.0). The Examination Board must be notified in writing immediately of any mitigating circumstances for missing an examination, and credible evidence must also be provided. In cases of illness, the Examination Board reserves the right to request a corresponding medical certificate from a doctor of the board’s choosing. If the Examination Board recognises the mitigating circumstances provided, then the deadline for repeating the examination shall be extended until the next opportunity to sit that examination. Section 8 (3) of the University Tuition and Charges Act shall also apply to this deadline.

## **Section 12**

### **Withdrawal, Examination Offences, Breach of Regulations**

(1) An examination shall be evaluated as “failed” (5.0) if a student withdraws from an examination in-progress without good reason. Sentence 1 shall also apply to those cases when a student, without good reason, does not submit before the deadline the bachelor’s thesis or an assignment, term paper or project, which had been assigned as an examination.

(2) The Examination Board must be notified immediately and in writing of any mitigating circumstances for withdrawing from an examination or failing to submit an examination before the deadline, and credible evidence must also be provided. In cases of illness, the Examination Board reserves the right to request a medical certificate from a doctor of the board’s choosing. If the Examination Board officially recognises the mitigating circumstances provided, then the student shall be notified that he/she may register for the same examination attempt again.

(3) If a student attempts to alter or manipulate the results of an examination through deception, fraud, usage of any non-permissible aids or reference materials, etc., then the examination in question shall be evaluated as “failed” (5.0). A student who disrupts the due and orderly examination process can be excluded from the remainder of that examination, usually after first receiving a warning from the examiner or exam supervisor; in this case the excluded student shall be awarded the mark “failed” (5.0) for that examination. The reason(s)

for exclusion shall be put on official record. If a student is excluded from an examination, he/she may appeal the decision to the Examination Board. This right also applies to exclusion on the basis of deception, fraud, usage of non-permissible aids or reference materials, etc.

### **Section 13** **Purpose, scope and types of regular examinations**

(1) The purpose of regular examinations is to assess whether a student has acquired proficiency in the contents and methods of specific subject areas, and can independently and correctly apply the acquired knowledge and skills.

(2) The requirements for a module examination are based on the contents of the related course unit(s). In general, the contents of an examination shall remain static for no more than three subsequent examination dates.

(3) Regular examinations are designed around learning outcomes and are generally conducted as written examinations (s. Section 16), oral examinations (s. Section 17), or as assignments, term papers or projects (s. Section 18). A combination of these examination types is possible, subject to the approval of the Examination Board.

(4) The Examination Board will specify the type of examination – and duration in the case of written examinations – generally at least two months before the scheduled examination date, in agreement with the examiner(s), and in a uniform and binding manner for all participating students.

### **Section 14** **Entry requirements for regular examinations**

(1) A student shall be entered to a regular examination when he/she:

1. meets the general prerequisites outlined in Section 3; and
2. is officially enrolled as a student or have visiting student status [Zweithörer/in] at Rhine-Waal University of Applied Sciences on the examination date.

(2) In general, an application for entry to an examination must be submitted online via the appropriate platform before the deadline set by the Examination Board, or otherwise in writing to the Chair of the Examination Board.

- (3) The application must include documents proving that the prerequisites in paragraph (1) have been met, provided that these documents were not submitted at an earlier date.
- (4) An application for entry to an examination shall be denied if:
- a. the prerequisites in paragraph (1) have not been met; or
  - b. submitted documents were incomplete and missing documents were not submitted before the deadline set by the Examination Board; or
  - c. the student has previously failed the final permissible attempt for a required examination as per the examination regulations in the same programme of study, or the final attempt at an examination equivalent to the examination specified in the application for entry in a related or comparable programme of study.
- (5) The Chair of the Examination Board, or the Examination Board itself in cases of doubt, shall be responsible for all decisions regarding entry to an examination. Notification by means of public display is sufficient.
- (6) Certificates [Testate] can be earned if the prerequisites listed in paragraph (1) have been met.

### **Section 15** **Conduct of regular examinations**

- (1) Dates for regular examinations shall be set in such a way that they do not force the cancellation of any course units.
- (2) Students shall be notified of the date of an examination in a timely manner, generally at least two weeks before the examination in question. Notification by means of public display is sufficient.
- (3) For identification purposes, students must present their Rhine-Waal University ID card in addition to an officially recognised photo ID (e.g. passport) upon request by the examiner or proctor/invigilator.
- (4) If a disabled student as defined by Section 3 of the Equal Treatment for Disabled People Act of Germany [Behindertengleichstellungsgesetz] can demonstrate via medical certificate or by other credible means that he/she is not able to sit the examination in its

current form, in part or in full, due to his/her impairment, then the Chair of the Examination Board may permit the student to sit an equivalent examination in a specially arranged form. The Chair of the Examination Board is responsible for ensuring, where possible, that examination requirements do not discriminate against disabled students; in cases of uncertainty, the Chair may request further evidence of impairment from students. Special examination arrangements for disabled students can include in particular:

- extending the duration of examinations / the time allotted to students;
- individual rest periods during a timed examination;
- splitting examinations into smaller parts;
- replacing written examinations with oral examinations, or vice versa;
- using and/or receiving additional aids or reference materials, personal assistance, adapted examination documents or separate testing rooms.

## **Section 16**

### **Written examinations**

(1) The purpose of a written examination [Klausur] is to assess whether students are able, within a set amount of time and with limited help from additional aids or reference materials, to recognise and solve problems in a particular subject area using commonly employed methods and techniques. Written examinations may also be conducted on a computer, subject to the approval of the Examination Board, provided that the technical conditions ensure compliance with all statutory data privacy and protection requirements.

(2) The time allotted to students for a written examination is based upon the number of credit points (CP) for the respective course unit. As a rule, 60 minutes shall be allotted for every two credit hours (SWS).

(3) Written examinations are supervised. The examiner shall determine which, if any, additional aids or reference materials are permissible for an examination.

(4) As a rule, the examination question for a written examination is set by a single examiner. Where justified by subject matter, particularly when multiple disciplines are covered by a single examination, multiple examiners may set the examination question. In this case, examiners shall first jointly define the weighting of the different parts of the examination question.

(5) If a student is repeating a previously failed written examination for the final time permitted by German law, then that final attempt shall be evaluated by two examiners. In all

other cases, evaluation by a single examiner is sufficient. In those cases described in paragraph (4) sentence 2, each examiner shall evaluate, in general, only their respective part of the examination question; sentence 1 shall remain unaffected.

### **Section 17 Oral examinations**

(1) An oral examination shall be conducted before a single examiner in the presence of a qualified observer, or before a panel of examiners as a group or individual examination. In examinations where an observer is present, the observer has a right to be heard before the mark is determined. In examinations before a panel of examiners, the examiners shall jointly evaluate the examination performance.

(2) An oral examination generally lasts at least 30 minutes, but no more than 45 minutes.

(3) A record shall be kept of the main topics and the results of an oral examination, including, in particular, all facts used to justify the awarded mark.

(4) Students intending to sit the same oral examination at a later period of time are permitted to attend another student's examination, provided that there is sufficient space available and the student being tested does not object. Students in attendance are not permitted to be present during subsequent discussions or when the tested student receives his/her mark.

### **Section 18 Assignments, term papers, projects**

(1) Examinations that are assigned as take home assignments, term papers or projects involve narrowly defined tasks that are taken directly from the theory and practice of the subject area being tested. These examinations may also be supplemented with a presentation and/or a question-and-answer discussion at an advanced level. The examination can be conducted as a group examination if each student's individual contribution is recognisable and verifiable to a sufficient degree. The topic and task must be set in such a way that it is possible to complete the assignment, term paper or project within the given deadline.

(2) An assignment, term paper or project must generally be completed within four months. The text portion should not exceed 30 DIN A4 pages in length (not including annexes).



(3) The Chair of the Examination Board or the assigning examiner shall notify students of the task, deadline and submission method for the assignment, term paper or project in writing or by public display.

(4) Section 16 (5) sentences 1 and 2 shall apply accordingly.

(5) When submitting an assignment, term paper or project, students must also include written and signed confirmation that all work – or, in the case of group work, all of the submitting student's respective and appropriately marked individual contribution – was produced independently and made use of no resources or sources other than those which were clearly cited, with quotations duly marked as such.

### **Section 19 Certificates**

(1) The purpose of certificates [Testate] is to attest, in particular, the successful completion of and participation in practical exercises, internships, placements or seminars. Certificates are awarded when a student has regularly and actively participated in the respective course unit and can demonstrate that he/she has sufficiently practised the subject-specific methods and is able to apply the imparted knowledge and skills. Certificates are issued by the instructor responsible for the respective course unit.

(2) Certificates are not subject to formal specifications, nor are they subject to any registration or admission procedures. A number of documents can serve as valid proof that certificate requirements have been sufficiently met, including experiment records, data analysis reports, calculations, programming exercises, constructions, design concepts and sketches, oral presentations and question-and-answer discussions at an advanced level.

(3) Certificates are awarded on a pass/fail basis, do not have a mark and may be repeated an unlimited number of times.

### **Section 20 Practical semester**

(1) The purpose of the practical semester is to expose students to realistic tasks and practical work at a company active in their field of study, thus allowing them to gather valuable work experience towards a future career. In particular, the practical semester should give students the chance to apply knowledge and skills learned during their studies to

practical problems and scenarios, as well as the chance to evaluate and reflect upon their experiences and thus benefit from them in the subsequent phase of their degree.

(2) Full-time students usually undertake the practical semester in the sixth semester; co-op students in the eighth semester. It generally includes 20 weeks of uninterrupted, full-time work at the agreed upon company. A practical semester outside of Germany is also possible.

(3) Students must have acquired at least 89 CP to be eligible for the practical semester.

(4) Examination Boards are responsible for approving applications to undertake the practical semester as well as students' proposed work placement locations. The faculty is responsible for providing a sufficient number of work placement possibilities for students. Nevertheless, students can and should take the initiative and seek out a work placement themselves.

(5) If a student can present proof of multiple failed attempts to secure a work placement, then the faculty is obliged to actively support his/her further search. If the faculty is unable to help the student find a work placement despite all reasonable efforts, then the student may undertake an applied research project at the university instead of an external work placement. In this case, the regulations governing work placements shall apply analogously to the applied research project.

(6) During the practical semester the student will be assigned a mentoring professor by the Examination Board. Where possible, the Examination Board shall take into consideration the student's suggested mentoring professor when coming to a decision. Following the conclusion of the work placement, students are required to compose a written report summarising their experiences.

(7) The mentoring professor shall officially recognise the successful completion of the practical semester via an attestation, providing he/she is confident that the student's duties and responsibilities at the work placement accurately reflected the purpose of the practical semester and that the student accomplished his/her assigned tasks to a satisfactory degree; when making this decision, the mentoring professor shall also take into consideration any certificates and/or letters of recommendation from the placement provider as well as the student's placement report.

(8) If the mentoring professor does not recognise the successful completion of the practical semester, then it may be repeated in full a second and final time.

(9) 30 credit points shall be awarded for the successful completion of the practical semester.

## **Section 21** **Study abroad semester**

(1) Instead of a practical semester, students may also undertake 20 weeks of study at a university outside of Germany. The study abroad semester is intended to serve three purposes in particular:

1. Consolidate and expand the theoretical and practical knowledge in the selected field of study and to take course units in select subject areas and successfully conclude them with examinations.
2. Foster intercultural and international competencies, skills and thinking, particularly in the sense of learning how to work effectively with teachers and students of other nationalities and cultural groups, as well as how to successfully adapt and thrive in an unfamiliar educational system.
3. Improve students' proficiency in the language of the host country.

(2) The requirement in Section 20 (3) also applies to the study abroad semester. Additionally, students must show that they have already secured a place in an appropriate exchange to a university abroad. The University is not responsible for assigning places in study abroad exchange programmes to students.

(3) The Examination Board, in conjunction with the faculty's international coordinator, is responsible for determining the suitability of a proposed study abroad exchange within the meaning of the goals listed in paragraph (1) sentence 2.

(4) Section 20 (6) sentences 1 and 2 shall also apply with regards to the assignment of a mentoring professor for students studying abroad.

(5) The mentoring professor shall officially recognise the successful completion of the study abroad semester via an attestation, providing he/she is confident that the aims listed in paragraph (1) sentence (2) were successfully achieved and the student can provide proof that he/she earned at least ten ECTS credit points via passed examinations during the

semester abroad; if the success of the study abroad semester is judged according to other criteria, students may also submit proof of less than ten CP.

(6) If the mentoring professor does not recognise the successful completion of the study abroad semester, then it may be repeated in full a second and final time. In this case, students can also opt instead for a work placement.

(7) 30 credit points shall be awarded for the successful completion of the study abroad semester.

## **Section 22 Bachelor's thesis**

(1) The purpose of the bachelor's thesis is to assess whether students are able to independently develop a practically-oriented research assignment in their subject area that incorporates both complex details and overarching multidisciplinary connections, while using applied research methods and within a set time period. The bachelor's thesis is usually an independent scientific enquiry into the assigned topic, including a detailed analysis and explanation of the results. Where appropriate for a student's subject of study, the bachelor's thesis may also be a term paper focused on relevant technical literature.

(2) The bachelor's thesis can be set and supervised by any professor who is authorised to conduct examinations as per Section 7 (1). On application to the Examination Board, students may request for their thesis supervisor an honorary professor or a lecturer with relevant experience in the corresponding duties and responsibilities. The bachelor's thesis can also be completed at a company, organisation or institution outside of the university, providing that a sufficient level of supervision can be assured and subject to the approval of the Examination Board. Students shall have the opportunity to suggest a subject area for their bachelor's thesis.

(3) The Chair of the Examination Board shall ensure that students are assigned a thesis topic in a timely manner after submission of the application.

(4) The bachelor's thesis can also be admitted as group work if each student's individual contribution fulfils the requirements in paragraph (1) and is clearly distinguishable and thus assessable due to clear delimitation by section, page numbers or other criteria that ensure distinct identification of each student's separate contribution.

(5) As a rule, the text portion of the bachelor's thesis should be between 60 and 150 DIN A4 pages in length (not including annexes). The thesis may also be supplemented with other media, provided they are appropriate and helpful for the documentation of the thesis in accordance with the assigned task. In this case the text portion of the thesis (not including annexes) may have less pages than the minimum requirement defined in sentence 1.

### **Section 23 Admission to the bachelor's thesis**

- (1) Admission to the bachelor's thesis shall be approved for students who:
1. meet the general prerequisites for study outlined in Section 3; and
  2. are officially enrolled as students or maintain visiting student status [Zweithörer/in] as per Section 52 (2) HG NRW at Rhine-Waal University of Applied Sciences for the full duration of the bachelor's thesis; and who
  3. have acquired at least 175 credit points, including those credit points awarded for successfully completing the practical semester or study abroad semester.
- (2) The application for admission to the bachelor's thesis must be submitted in writing to the Chair of the Examination Board. Students must include with their application a declaration of other previous attempts at completing a bachelor's thesis. Furthermore, the application must clearly indicate the name of the examiner who is prepared to set the topic and act as thesis supervisor.
- (3) On written request, a student may withdraw an application for admission to the bachelor's thesis, without loss of an examination attempt, at any time before the official decision regarding the application is announced.
- (4) The Chair of the Examination Board or, in case of doubt, the Examination Board itself, is responsible for decisions regarding admission to the bachelor's thesis. Applications shall be denied when:
- a. the prerequisites listed in paragraph (1) have not been met; or
  - b. submitted documents are missing or incomplete; or
  - c. the student has previously failed the final permissible attempt for a required examination as per the examination regulations in the same programme of study, or the final permissible attempt at passing a bachelor's thesis in a related or comparable programme of study at a university.

**Section 24**  
**Date of assignment and writing the bachelor's thesis**

(1) The bachelor's thesis shall be formally assigned by the Chair of the Examination Board. The date of assignment is defined as the day on which the Chair of the Examination Board notifies the student of the topic set by the thesis supervisor; the date of assignment shall be put on official record.

(2) Students are given a period of three months – from the date of assignment to the submission deadline – to complete the bachelor's thesis. Students are not permitted to submit the bachelor's thesis within the first eight weeks after the date of assignment. The topic and task of the thesis must be set in such a way that it is possible to complete the thesis before the deadline. In exceptional cases, where a sufficiently justified request is submitted before the submission deadline, the Chair of the Examination Board can extend the submission deadline by up to four weeks. The thesis supervisor is to be heard in connection with this request.

(3) Students may request the assignment of a new thesis topic once and without giving reasons, but only within the first four weeks after the date of assignment. If the requesting student is attempting the bachelor's thesis for a second time, he/she may only request a new topic if this was not done during the first attempt.

(4) In the case of a disabled thesis candidate, Section 15 (4) of these regulations shall apply accordingly.

**Section 25**  
**Submission and evaluation of the bachelor's thesis**

(1) The bachelor's thesis must be submitted to the Chair of the Examination Board within the deadline and as a hard copy, in triplicate, and as an electronic copy on a CD-ROM. The date of submission shall be put on official record; if a thesis is submitted via post, the postmarked date shall be used for the date of submission. Students must also include with their thesis a written and signed confirmation that all work – or, in the case of group work, all of the submitting student's respective and appropriately marked individual contribution – was produced independently and made use of no resources or sources other than those which were clearly cited, with quotations duly marked as such.

(2) The bachelor's thesis shall be evaluated by two examiners. One of the examiners shall be the student's thesis supervisor. If the thesis supervisor is an honorary professor or a

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lecturer, then the second examiner must be a professor of the Faculty of Life Sciences. If the marks awarded by the examiners are not identical, but the difference is less than 2.0 points, then the final mark shall be calculated by averaging the two scores. If the difference in scores is greater than or equal to 2.0, then a third examiner shall be appointed by the Examination Board. In this case, the final mark shall be calculated by averaging the two best scores. A final mark of “sufficient” (4.0) or better can only be awarded if at least two of the marks are equal to “sufficient” (4.0) or better. All evaluation decisions shall be justified in writing.

(3) Twelve CP shall be awarded for successfully passing the bachelor’s thesis.

## **Section 26 Colloquium**

(1) The colloquium is an oral defence (or *viva voce*) of the bachelor’s thesis which is evaluated separately from the thesis and must be held no later than two months after the date of submission. The purpose of the colloquium is to assess whether the student is able to orally express the findings of the thesis and their interrelatedness to concepts and ideas both inside and outside of the subject area, to independently justify the findings, and to assess their practical significance. The process of researching and writing the thesis shall also be a topic of discussion. The colloquium can also be conducted in a foreign language, subject to the approval of the Examination Board.

(2) Admission to the colloquium shall be approved for students who:

1. meet the general prerequisites for study outlined in Section 3; and
2. are officially enrolled in the degree programme as students or have visiting student status [Zweithörer/in] as per Section 52 (2) HG NRW at Rhine-Waal University of Applied Sciences at the time of the colloquium; and
3. have acquired 207 CP.

(3) The application for admission to the colloquium must be submitted to the Chair of the Examination Board. Students shall include with the application a declaration of all previous attempts at completing a post-thesis colloquium. Students may submit an application for admission to the colloquium together with the application for admission to the bachelor’s thesis; in this case, the application shall be approved when the prerequisites in paragraph (2) are met. Additionally, Section 23 (4) shall apply regarding the approval and rejection of an application for admission to a colloquium.

(4) The colloquium shall be conducted as an oral examination before the examiners of the bachelor's thesis, who together shall also evaluate the performance. If the situation outlined in Section 25 (2) sentence 5 arises, then the colloquium shall be conducted with those examiners whose marks were ultimately used to calculate the final aggregate mark for the bachelor's thesis. The colloquium usually lasts for approximately 45 minutes. In all other matters relating to the conduct of the colloquium, the provisions governing the conduct of oral examinations (Section 17) shall apply accordingly.

(5) In the case of a disabled colloquium candidate, Section 15 (4) of these regulations shall apply accordingly.

(6) Three CP shall be awarded for successfully passing the colloquium.

### **Section 27**

#### **Final results of the bachelor's examination**

(1) The bachelor's examination is successfully passed when a student earns a total of 210 credit points.

(2) The bachelor's examination is deemed failed when a student's final permissible attempt at passing a compulsory regular examinations, the bachelor's thesis or the colloquium is evaluated as "failed" (5.0) or otherwise considered to be evaluated as "failed" (5.0). In this case, the affected student shall receive a written declaration informing him/her of the failed bachelor's examination or the irretrievable loss of the right to sit examinations in the same or a related programme in Germany as per Section 11 (1), as well as providing an explanation of available legal recourse. On application, the Examination Board can issue a certificate listing all successfully completed examinations and their final marks as well as the examinations still needed to complete the bachelor's examination. This certificate must clearly show that the disenrolled/exmatriculated student has definitively and irreversibly failed the bachelor's examination or lost his/her right to sit examinations in the same or comparable programme of study in Germany as per Section 11 (1).

### **Section 28**

#### **Final grade certificate, final mark, diploma supplement**

(1) Students shall be promptly issued a final grade certificate [Abschlusszeugnis] upon passing the bachelor's examination, where possible within four weeks after the colloquium. The final grade certificate shall contain a full list of completed modules and awarded marks, a reference to the completed practical or study abroad semester; the topic, mark and names of



examiners for the bachelor's thesis; the mark for the colloquium, and the overall final mark for the bachelor's examination. If credits were transferred from a different institution as described in Section 8, then reference will be made to their origin.

(2) The final mark for the bachelor's examination shall be equal to the weighted average of the individual marks listed in paragraph (1) sentence 2, in accordance with the ranges defined in Section 10 (4). The marks are weighted as follows:

- Average of marks earned in modules based on course units, with each mark weighted by the number of CP for its module: = 80%
- Mark for the bachelor's thesis: = 15%
- Mark for the colloquium: = 5%

(3) The final grade certificate shall be signed by the Chair of the Examination Board and affixed with the official seal of Rhine-Waal University of Applied Sciences. In addition, it shall indicate the date on which the colloquium took place.

(4) In addition to the final grade certificate, each graduate shall receive an official diploma supplement and a transcript of records, both issued in English.

(5) A student who voluntarily withdraws from the university before successfully completing the bachelor's examination may apply for a premature leaving certificate [Abgangszeugnis], which lists all of the examinations completed during the programme of study. Paragraph (3) sentence 1 shall apply accordingly.

## **Section 29**

### **Bachelor's degree certificate**

(1) A bachelor's degree certificate shall be issued to students at the same time as the final grade certificate and bearing the same date of issue. The bachelor's degree certificate certifies the conferment of the bachelor's degree referenced in Section 2 (3).

(2) The bachelor's degree certificate shall be signed by the President of the University, by the dean of the Faculty of Life Sciences, and by the Chair of the Examination Board, as well as affixed with the official seal of Rhine-Waal University of Applied Sciences.

### **Section 30 Additional examinations**

Students may also sit examinations in modules and course units which are not compulsory for their programme of studies. Upon request the results of these examinations can be included on the final grade certificate or the premature leaving certificate, but will not be incorporated into the final mark.

### **Section 31 Inspection of examination records**

(1) Following the end of the examination procedure, a student shall be granted, on application, the opportunity to inspect his/her completed written examinations, the corresponding evaluation sheets of the examiners and the minutes of the examination.

(2) A student must submit an application for the inspection of examination records to the Chair of the Examination Board within one month of the date of issue of his/her final grade certificate, premature leaving certificate or declaration of a failed bachelor's examination. Section 32 of the North Rhine-Westphalian Administrative Procedure Act [Verwaltungsverfahrensgesetz NRW] shall govern students' right to submit a request after expiry of the deadline. The Chair of the Examination Board shall set the time and place for the inspection of examination records.

(3) The opportunity to inspect examination records for a regular examination shall be granted, on application, after that examination has been completed. The application must be submitted within one month after the examination results are announced. Paragraph (2) shall apply accordingly.

### **Section 32 Nullification of examinations**

(1) If a student previously cheated on one or more examination and this becomes known only after the student has been issued a final grade certificate, a premature leaving certificate or a declaration as specified in Section 27 (2) sentence 3, then the Examination Board reserves the right to retroactively nullify the marks for the affected examinations and to declare the bachelor's examination, in part or in whole, as "failed".

(2) If the prerequisites for entry to an examination were not met and it can be shown that this was not due to deliberate deception by the student and this inconsistency becomes known only after the student has been issued a final grade certificate, a premature leaving certificate or a declaration as described in Section 27 (2) sentence 3, then this error shall be

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remedied by the fact that the examination was passed. If the student used deliberate deception to gain wrongful entry to the examination, then the Examination Board shall decide upon any subsequent legal action, taking into account the North Rhine-Westphalian Administrative Procedure Act [Verwaltungsverfahrensgesetz NRW].

(3) The incorrect final grade certificate, premature leaving certificate, bachelor's degree certificate or declaration as specified in Section 27 (2), sentence 3, shall be revoked and, where appropriate, reissued to the holder. The statute of limitations for decisions with regard to paragraph (1) and paragraph (2) sentence 2 is five years after the date of issue for a final grade certificate, premature leaving certificate or declaration as described in Section 27 (2) sentence 3.

### **Section 33 Entry into force**

(1) These examination regulations shall enter into force on the day after their publication in the Official Notices [Amtliche Bekanntmachungen] of Rhine-Waal University of Applied Sciences.

Issued on the basis of a resolution put forth by the President of Rhine-Waal University of Applied Sciences on 8 February 2011 and with official approval granted by the Executive Board on 11 February 2011.

Kleve, 11 February 2011

Professor Dr Marie-Louise Klotz

President of Rhine-Waal University of Applied Sciences

Curriculum for the bachelor's degree programme **Sustainable Agriculture**

Version from **31 January 2011**

**Annex**

**Study and examination schedule for Sustainable Agriculture B.Sc.**

Modul-Nr.	Module /Subjects	CH	Type						Ex/Prü	CP	Sum CP	WS1	SS2	WS3	SS4	WS5	SS6	WS7
			L/V	S	Tt	E/Ü	LC/Pra	Pro										
SA_1	<b>Agroecology and sustainable development // Agrarökologie &amp; Nachhaltige Entwicklung</b>																	
SA_1.1	Assessing sustainability // Bewertungsmethoden der Nachhaltigkeit	3		3					T	3	5	3						
SA_1.2	Fundamentals of ecology and aspects of agroecology // Grundlagen der Ökologie & Einführung in die Agrarökologie	2	2							2		2						
SA_2	<b>Sustainable learning-learning sustainability // Nachhaltiges Lernen - Nachhaltigkeit lernen</b>																	
SA_2.1	Self management and learning // Selbstmanagement & Lernen	2		1		1			T	2	5	2						
SA_2.2	Sustainability: Concepts, implementation and examples // Nachhaltigkeit: Konzepte, Umsetzung & Beispiele	3		2		1				3		3						
SA_3	<b>Consulting and cross cultural competence // Beratung &amp; Interkulturelle Kompetenz</b>																	
SA_3.1	Communication and consulting // Kommunikation & Beratung	2	1			1			T	2	5	2						
SA_3.2	Cross cultural competence // Interkulturelle Kompetenz	2	1			1				3		2						
SA_4	<b>Climate change and water management // Klimawandel &amp; Wassermanagement</b>																	
SA_4.1	Fundamentals of agricultural climatology and climate change // Grundlagen der Agrarklimatologie & Klimawandel	2	2						P	3	5	2						
SA_4.2	Water management and use // Wassermanagement & Wasserverwendung	2	2							2		2						
SA_5	<b>Economics and logistics // Ökonomie &amp; Logistik</b>																	
SA_5.1	Principles of management and economics // Grundlagen des Managements & der Ökonomie	2	2						P	3	5	2						
SA_5.2	Fundamentals of logistics // Grundlagen der Logistik	2	2							2		2						
SA_6	<b>Agricultural chemistry // Agrikulturchemie</b>											4						
SA_6.1	General and agricultural chemistry // Allgemeine & Agrikulturchemie	4	2					2	P	5	5							

SA\_29: Study abroad or work placement (30 CP) // Auslandsstudiensemester oder Praxissemester (30CP)

SA\_30: Project // Projekt (5 CP); SA\_31: Excursion // Exkursion (5 CP); SA\_32: Bachelor Thesis // Bachelor-Arbeit (12 CP), SA\_33: Colloquium //Kolloquium (3 CP)

Modul-Nr.	Module /Subjects	CH	Type						Ex/Prüf	CP	Sum CP	WS1	SS2	WS3	SS4	WS5	SS6	WS7
			L/V	S	Tt	E/Ü	LC/Pra	Pro										
SA_7	<b>Geocology and soil science // Geoökologie &amp; Bodenkunde</b>																	
SA_7.1	Principles of geology and geocology // Grundlagen der Geologie & Geoökologie	2				2		P	2	5	2							
SA_7.2	Soil science and soil health // Bodenkunde & Bodengesundheit	4	2	1			1		3			4						
SA_8	<b>Food chemistry // Lebensmittelchemie</b>																	
SA_8.1	Organic, bio- and food chemistry // Organische, Bio- & Lebensmittelchemie	4	2				2	P	5	5		4						
SA_9	<b>Analysis and interpretation of data // Analyse &amp; Interpretation von Daten</b>																	
SA_9.1	Maths, statistics and data analysis // Mathematik, Statistik & Datenanalyse	2	1			1		P	3	5		2						
SA_9.2	Geoinformatics, data management and IT // Geoinformatik, Datenmanagement & IT	2	1			1			2			2						
SA_10	<b>Project // Projekt</b>	4		1				P	5	5		4						
SA_11	<b>Biology and biodiversity // Biologie &amp; Biodiversität</b>																	
SA_11.1	Basics of biology, incl. cell biology, genetics, zoology, microbiology // Grundlagen der Biologie, inkl. Zell- & Mikrobiologie, Genetik, Zoologie	2	1				1	P	2	5		2						
SA_11.2	Botany, evolution and biodiversity // Botanik, Evolution & Biodiversität	2	1				1		3			2						
SA_12	<b>Sociological and psychological aspects of sustainable development // Soziologische &amp; psychologische Aspekte nachhaltiger Entwicklung</b>																	
SA_12.1	Sociological aspects of population development and sustainable rural development // Soziologische Aspekte der Bevölkerungsentwicklung & nachhaltige ländliche Entwicklung	2		2				P	2	5		2						
SA_12.2	Environmental psychology and management of human resources // Umweltpsychologie & Personalentwicklung	2		2					3			2						
SA_13	<b>International animal husbandry // Internationale Tierhaltung</b>																	
SA_13.1	Anatomy and physiology // Anatomie & Physiologie	2	1			1		P	2	5		2						
SA_13.2	Animal nutrition and health // Tierernährung & Tiergesundheit	2	2						2			2						
SA_13.3	Animal breeding // Tierzucht	1	1						1			1						

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Modul-Nr.	Module /Subjects	CH	Type						Ex/Prü	CP	Sum CP	WS1	SS2	WS3	SS4	WS5	SS6	WS7
			L/V	S	Tt	E/Ü	LC/Pra	Pro										
SA_14	<b>Energy and agricultural engineering // Energie &amp; Agrartechnologie</b>																	
SA_14.1	Agricultural engineering // Agrar- und Landtechnik	3	2			1			P	3	5			3				
SA_14.2	Energy production and use in agriculture // Energiegewinnung & Energienutzung in der Landwirtschaft	2	2							2			2					
SA_15	<b>Analysis of international land use and cropping systems // Analyse internationaler Landnutzungs- &amp; Pflanzenbausysteme</b>	4	1	3					P	5	5			4				
SA_16	<b>Crop physiology and nutrition // Pflanzenphysiologie und -ernährung</b>																	
SA_16.1	Plant ecophysiology // Ökophysiologie der Pflanzen	2	2						P	2	5			2				
SA_16.2	Plant nutrition, fertilization and waste management // Pflanzenernährung, Düngung und Abfallmanagement	3	2				1			3			3					
SA_17	<b>Crop health // Pflanzengesundheit</b>																	
SA_17.1	Plant health // Pflanzengesundheit	2	2						P	3	5			2				
SA_17.2	Plant breeding and agrobiodiversity // Pflanzenzucht & Agrarbi Diversität	2	2							2			2					
SA_18	<b>Ethics and philosophy in life sciences // Ethik &amp; Philosophie in den Lebenswissenschaften</b>																	
SA_18.1	Basics in ethics and philosophy // Grundlagen der Ethik & Philosophie	2		2					P	3	5			2				
SA_18.2	safety and biomass production // Ethik der Versorgungssicherheit, Lebensmittelsicherheit & Biomasseproduktion	2		2						2			2					
SA_19	<b>International markets, trade and agricultural policy // Internationale Märkte, Handel &amp; Agrarpolitik</b>																	
SA_19.1	International food and flower markets // Internationale Lebensmittel- und Zierpflanzenmärkte	3	2			1			P	3	5			3				
SA_19.2	Agricultural policy // Agrarpolitik	2	2							2			2					
SA_20	<b>Animal Welfare // Tiergerechtigkeit</b>																	
SA_20.1	Ethology and animal rights // Nutztierethologie & Tierschutz	2	1			1			P	2	5			2				
SA_20.2	Animal husbandry // Tierhaltung	2	1			1				3				2				

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SA\_30: Project // Projekt (5 CP); SA\_31: Excursion // Exkursion (5 CP); SA\_32: Bachelor Thesis // Bachelor-Arbeit (12 CP), SA\_33: Colloquium // Kolloquium (3 CP)

Modul-Nr.	Module /Subjects	CH	Type						Ex/Prü	CP	Sum CP	WS1	SS2	WS3	SS4	WS5	SS6	WS7
			L/V	S	Tt	E/Ü	LC/Pra	Pro										
SA_21	<b>Agrotechnology and new agriculture // Agrartechnologie &amp; neue Landwirtschaft</b>																	
SA_21.1	Agrotechnology // Agrartechnologie	2	2						P	2	5				2			
SA_21.2	Bioengineering in agriculture // Biotechnologie in der Landwirtschaft	2	2							2					2			
SA_21.3	Urban and vertical farming // Urbane & vertikale Landwirtschaft	1	1							1					1			
SA_22	<b>Horticulture and agroforestry // Gartenbau &amp; Agroforst</b>																	
SA_22.1	Horticulture // Gartenbau	2	2						P	3	5				2			
SA_22.2	Agroforestry // Agroforstwirtschaft	2	2							2					2			
SA_23	<b>Food processing and human nutrition // Lebensmittelverarbeitung &amp; Ernährung</b>																	
SA_23.1	Human nutrition and sustainability // Menschliche Ernährung & Nachhaltigkeit	2	1			1			P	2	5				2			
SA_23.2	Food processing and food technology // Lebensmittelverarbeitung & Lebensmitteltechnologie	2	2							3					2			
SA_24	<b>Elective module* // Wahlpflichtmodul*</b>	16	8	8						20	20				8	8		
SA_25	<b>Sustainability analysis of international supply chains // Nachhaltigkeitsanalyse internationaler Wertschöpfungsketten</b>	4							P	5	5				4			
SA_26	<b>Ressource economics and risk assessment // Ressourcenökonomie &amp; Risikobewertung</b>																	
SA_26.1	Ressource economics // Ressourcenökonomie	2	2						P	3	5						2	
SA_26.2	Risk assessment and management // Risikobewertung & Risikomanagement	2	2							2							2	
SA_27	<b>Sustainability management and food safety // Nachhaltigkeitsmanagement &amp; Lebensmittelsicherheit</b>																	
SA_27.1	Integrated and sustainability management systems // Integrierte & Nachhaltigkeits-Managementssysteme	2	1			1			P	3	5						2	
SA_27.2	Food safety and food law: regulations, traceability and management // Lebensmittelsicherheit & Lebensmittelrecht: Rechtliche Regelungen, Nachverfolgbarkeit & Management	2	2							2							2	

SA\_29: Study abroad or work placement (30 CP) // Auslandsstudiensemester oder Praxissemester (30CP)

SA\_30: Project // Projekt (5 CP); SA\_31: Excursion // Exkursion (5 CP); SA\_32: Bachelor Thesis // Bachelor-Arbeit (12 CP); SA\_33: Colloquium // Kolloquium (3 CP)

Modul-Nr.	Module /Subjects	CH	Type						Ex/Prü	CP	Sum CP	WS1	SS2	WS3	SS4	WS5	SS6	WS7
			L/V	S	Tt	E/Ü	LC/Pra	Pro										
SA_28	<b>Sustainable strategic decision making and innovation management // Nachhaltige strategische Entscheidungsfindung &amp; Innovationsmanagement</b>																	
SA_28.1	Strategic decision making // Strategische Entscheidungsfindung	2	2					P	3	5					2			
SA_28.2	Innovation processes and management // Innovationsprozesse & Innovationsmanagement	2	1			1			2						2			
	total credit hours / total credit points // Summe Semesterwochenstunden & Credit points	133								155	28	29	27	29	20	30	25	

Distribution	SWS	Total	133	28	29	27	29	20									
	CP	Total	210	32	33	30	35	25	30	25							

\* In Abstimmung mit dem Prüfungsausschuss können maximal 6 SWS / 9 credit points aus dem gesamten Kursangebot der Hochschule Rhein-Waal belegt werden. //

Subject to the approval of the Examination Board, students can earn a maximum of 6 SWS (9 credit points) from modules offered by other degree programmes at Rhine-Waal University of Applied Sciences.



## Elective catalogue for summer semester

Modul-Nr.		SWS	CP	Prü
SA_24.1	Sustainable field-crop and vegetable production // Nachhaltiger Anbau von Feldfrüchten & Gemüse	2	3	P
SA_24.2	Sustainable animal husbandry // Nachhaltige Tierhaltung	2	3	P
SA_24.3	Innovations in and marketing of agricultural products, food and flowers // Innovationen für und Vermarktung von landwirtschaftlichen, gartenbaulichen & Zierpflanzenprodukten	2	3	P
SA_24.4	Sustainable technologies in horticulture // Nachhaltige Technologien im Gartenbau	2	3	P
SA_24.5	Pasture, grassland and fodder production // Weidewirtschaft, Grünland & Futterproduktion	2	3	P
SA_24.6	Soil ecology, soil biology and soil protection // Bodenökologie, Bodenbiologie & Bodenschutz	2	3	P

## Elective catalogue for winter semester

Modul-Nr.		SWS	CP	Prü
SA_24.7	Herd management and health // Herdenmanagement & -gesundheit	2	3	P
SA_24.8	Advanced agricultural engineering and energy harvesting systems // Hochleistungsagrartechnologie & Energieerntesysteme	2	3	P
SA_24.9	Agricultural economics // Agrarökonomie	2	3	P
SA_24.10	Advanced environmental psychology and field methods of consulting // Spezielle Umweltpsychologie & Feldmethoden der Beratung	2	3	P
SA_24.11	Organic farming // Ökologische Landwirtschaft	2	3	P
SA_24.12	Methods in Agroecology // Methoden der Agrarökologie	2	3	P

**Abkürzungen // Abbreviations:**

CH = credit hours per week // SWS = Semesterwochenstunden

WT = winter semester // WS = Wintersemester

ST = summer semester // SS = Sommersemester

Ex = type of examination // Prü = Prüfungsart

CP = credit points (= ECTS-points)

L = Lecture // V = Vorlesung

S = seminar // S = Seminar

Tt = tutorial // Tt = Tutorium

E = exercise // Ü = Übung

LC = lab course // Pra = Praktikum

Pro = project // Pro = Projekt