

**Study and Examination Regulations (Statutes)
issued by the Faculty of Energy and Biotechnology for the
master's degree programme Applied Bio and Food Sciences
at Flensburg University of Applied Sciences
dated: 15 May 2018**

On the basis of § 52 para. 1 of the *Hochschulgesetz* (HSG, Higher Education Act) in the version of the notice dated 5 February 2016 (GVOBl. Schl.-H., page 39), last updated by law as of 10 February 2018 (GVOBl. Schl.-H. page 68) and following the resolution made by the Faculty Board of the Faculty of Energy and Biotechnology on 12 July 2017, the approval of the Senate of FUAS on 17 January 2018 and the permission granted by the President's Office of FUAS on 15 May 2018 the following statutes are issued.

These Study and Examination Regulations refer to the provisions made for all faculties of FUAS as defined in the *Prüfungsverfahrensordnung* (PVO, Principles of Assessment) of FUAS.

§ 1

Objective of studies

The objectives of studies in the Applied Bio and Food Sciences master's degree programme are:

- (1) Enabling students to identify and analyse problems related to the subject of wind engineering, to develop individual solutions that are both academically and technically sound and to successfully turn these solutions into marketable products and services.
- (2) The acquisition of in-depth theoretical and active hands-on knowledge and the ability to apply these to solve complex research problems.
- (3) The development of general skills in methodology and teamwork.
- (4) The ability to apply academic research and writing techniques and work on innovative fields of research independently.

§ 2

Degree

- (1) On the basis of successfully completing the final examinations in this master's degree programme, the following academic degree will be awarded: Master of Science (abbr. M.Sc.)
- (2) The master's degree is a postgraduate degree and formally entitles its bearer to embark on a doctorate.

§ 3

Pre-requisites

- (1) The President's Office grants admission to the master's degree programme based on a recommendation made by an admission committee composed of two members of teaching staff from the programme. The selection committee shall be designated by the body of the programme's teaching staff and confirmed by the Faculty Board of the Faculty

- of Biotechnology. The selection procedure and criteria shall be published in the application information for the degree programme.
- (2) Applicants who have successfully completed a bachelor's degree or German Diplom programme in biotechnology and/or food technology may be admitted to the master's degree programme.
 - (3) Applicants with a degree in a related subject area may be admitted to the master's degree programme under the condition that they take specific modules. These specific modules are to be defined by an admission committee. Proof of successful attendance of these additional modules is prerequisite for the registration to the examinations in the second semester of the programme. Further details are defined under "Specification of the admission requirements" in the annex to these regulations.
 - (4) Applicants whose bachelor's degree was made up of less than 210 credit points can only be admitted to the programme under certain conditions. This condition is defined as follows: The applicant has to successfully complete modules adding up to the difference between the credit points gained in the bachelor's degree and 210 CP. These specific modules are to be defined by an admission committee. Proof of successful attendance of these modules is prerequisite for the registration to the examinations in the second semester of the programme. Further details are defined under "Specification of the admission requirements" in the annex to these regulations.
 - (5) Apart from the prerequisites defined in paragraphs 1 to 4, the following prerequisites need to be fulfilled to gain admission to the degree programme:
 1. a final grade of at least *GUT* [GOOD] awarded for the bachelor's degree or
 2. Proof of relevant professional experience of at least two years after completion of the university degree or
 3. A minimum of two favourable letters of reference from professors of the university/universities previously attended.
 - (6) Applicants have to provide evidence of a satisfactory level of English language skills. The evidence can be provided as follows:
 1. English being the applicant's native language or
 2. By means of a Cambridge First Certificate or
 3. By means of a grade of BEFRIEDIGEND [SATISFACTORY] or 7 points (German grading system) in English on a school leaving certificate issued by a secondary school granting admission to higher education [German *Fachhochschulzugangsberechtigung*] or
 4. By having spent a minimum of five months in an English-speaking country or
 5. by means of a TOEFL test with a score of at least 61 (iBT) or an IELTS result of 5.0 (Overall Band Score) or
 6. By means of a certificate stating that a sufficient number of classes were taught in English during pre-university education or
 7. by completing English language or English-taught modules worth a minimum of 10 CP at university level.

§ 4

Standard duration of studies, credits

- (1) The standard duration of studies for this degree programme is three semesters including the final examination.

- (2) The workload for each of the first two semesters of the programme is 20 hours per week. The master's thesis is to be written and completed in the third semester of the programme. Students are explicitly encouraged to find a topic for their theses outside FUAS.
- (3) A total of 30 Credit Points (CP) is to be acquired each semester with one CP equalling a workload of 30 hours.

§ 5

Modules and assessment

- (1) The modules and assessment plan is illustrated in the following table.
- (2) The following table defines in which way credit points are assigned to individual modules.

Modules and assessment plan for the master's degree programme Applied Bio and Food Sciences

The following abbreviations are used in the table below:

Teaching method

V	Lecture
T	Tutorial accompanying a lecture
Sem	Seminar
Lab	Laboratory
P	Project
W	Workshop
LDC	Long-distance classes, virtual classes
FT	Field trip
OC	Other classes

Form of assessment

WE (n)	WE (n) Written exam (n hours) in accordance with § 11 PVO
OE	Oral exam in accordance with § 12 PVO
OA	other form of assessment in accordance with § 13 PVO
Other forms of assessment are	
Pres	Presentation
WR	Written report
WT (n)	Written test (n hours)
TD	Technical discussion oral exam
HW	Homework

Type of assessment

Ex	Examination
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Contact hours and credits

hpw	hours per week (in class)
CP	Credit Points

1st semester of the programme						
Module	Class			Assessment		
	Type of assessment	hpw	CP	Type of assessment	Form (hours if applicable)	Pre-requisite
Advanced Bioprocess Engineering	Sem	4	6	Ex	OA (WT(2), WT (1) and Pres, TD)	None
Production Organisms	Sem	4	6	Ex	OA (WT (2), WR, TD)	None
Product Innovations	Sem	4	6	Ex	OA (WT (2), WR and Pres, TD)	None
Industrial Food Processing	Sem	4	6	Ex	OA (WT (2), WR and Pres, TD)	None
Elective Courses ¹⁾		4	6	Ex	¹⁾	None
All modules of the 1st semester of the programme		20	30	5 Ex or 6 Ex		

Please note:

1) Elective Courses: For these modules students must choose from a range of modules offered. The list of modules offered will be updated each semester and will be posted on the notice board of the Dean's Office at the beginning of the new semester. For classes made up of 4 hours per week (in class) (6 CP) an examination (Ex) must be completed in the form of another form of assessment (...). For two classes made up of 2 hours per week (in class) (two times 3 CP) two examinations (Ex) must be completed in the form of another form of assessment (...) for each elective course. The authorised examiners will specify the form the assessment will take within the first four weeks of the official start of the lecture period.

2nd semester of the programme						
Module	Class			Assessment		
	Type of assessment	hpw	CP	Type of assessment	Form (hours if applicable)	Pre-requisite
Research Proposal	Sem	4	6	Ex	OA (WT(2), WT (1) and Pres, TD)	None
Project Theory ²⁾	Sem	4	6	Ex	OA (WT (2), WR, TD)	None
Team Project	P	8	12	Ex	OA (WT (2), WR and Pres, TD)	None
Scientific Conference	Sem	4	6	Ex	OA (WT (2), WR and Pres, TD)	None
All modules of the 2nd semester of the programme		20	30	4 Ex		
Please note: ²⁾ Students can choose from a number of projects in this module. Currently the projects on offer are: Assay Lab, Bio Factory, Innovations Lab, Food Factory as well as to carry out a project with an employer (Project on the job). The list can be updated and will be posted on the notice board of the Dean's Office before the end of each teaching period for the following teaching period in case of an update. §5 of FUAS' Principles of Assessment [Prüfungsverfahrensordnung], and §5 para. 5 in particular, apply in case students participate in a specific project. The number of students working on the same project shall not exceed eight. In case more students apply for a project, the final grade of the bachelor's degree will be the deciding criterion.						

3rd semester of the programme					
Module	Class		Assessment		
	Type of assessment	CP	Type of assessment	Form (hours if applicable)	Pre-requisite
Master's thesis	Thesis and colloquium	30	Ex	Final thesis: 5 months colloquium: 60 minutes	30 CP
Modules of the 3rd semester of the programme		30	1 Ex		

§ 6

Examination language

Classes and examinations in the master's degree programme are to be held in German (§ 6, para. 5, PVO). The person responsible for a module in accordance with the module directory may determine English as the examination language or language of instruction for a module, parts of a module or projects at the beginning of a semester.

§ 7

Thesis

- (1) Students can register for the thesis after having successfully acquired 30 Credit Points (CP). The master's thesis consists of a final thesis and a colloquium.
- (2) Usually, the thesis is to be produced in a time period of five months (§ 23, para. 6, PVO).

- (3) The topic of the thesis may only be withdrawn within a period of four weeks after it has been allocated (§ 23, para. 7, PVO).
- (4) The time period in which the thesis has to be finished may only be extended by a maximum of four weeks. An application for extension has to be filed with the Examination Board not later than 14 days prior to the original deadline (§ 23, para. 8, PVO).

§ 8 Colloquium

- (1) A colloquium is part of the master's degree programme Applied Bio and Food Sciences (§ 26, para. 1, PVO).
- (2) The colloquium is scheduled to take 60 minutes per candidate (§ 26, para. 2, PVO).

§ 9 Composition of the final grade, certificate

The final grade is derived from the weighted individual grades resulting from the examinations and the grade awarded for the master's thesis (the grade for the written thesis counting 70% and the grade for the colloquium counting 30%). The percentage to which a module is weighted into the final grade is determined on the basis of credit points: The credit points of a module are divided by the total credit points of all modules relevant to the final grade (§ 27, para. 4, PVO).

§ 10 Coming into effect

- (1) These Study and Examination Regulations will come into effect on the day after their publication.
- (2) They are effective for all students enrolling in the Applied Bio and Food Sciences master's degree programme at Flensburg University of Applied Sciences starting from the summer semester 2019.
- (3) The modules specified in these regulations will be introduced successively each semester after the coming into effect of these Regulations. Students are entitled to classes being taught and examinations being held only insofar as modules have been introduced already.

Flensburg, 15 May 2018

Prof. Dr.-Ing. Jochen Wendiggensen

Faculty 2 – Energy and Biotechnology,
Flensburg University of Applied Sciences
- The Dean -

ANNEX

Specifications of entry and admission requirements

A.1:

Similar degree programmes as mentioned in §3, para. 3 and 4 are programmes such as

- Biotechnology, Biological Engineering, Bio Process Engineering, Bio Engineering etc.
- Food Technology, Food Engineering, Food Processing, Food Sciences etc.

A.2:

Similar degree programmes as mentioned in §3, para. 3 and 4 must include modules covering content and an amount of credit points as specified below: Basics of mathematics and natural sciences

- Mathematics 10 CP
- Physics 5 CP
- Chemistry (organic/inorganic) 5 CP
- Biochemistry 5 CP
- Biology/Microbiology 5 CP

Basics of engineering sciences

- Fluid Mechanics 5 CP
- Thermodynamics 5 CP
- Heat (and Mass) Transfer 5 CP

Subject-specific basics

- Bio Process Engineering 5 CP
- Food Product Technology 5 CP
- Bio or Food Analytics 5 CP
- Food Microbiology/Hygiene 5 CP

If applicants lack parts of the basics named above in the specified amount of credits, the respective modules will become prerequisites in accordance with §3, para. 3 and 4. If an applicant needs to make up more than 30 Credit Points from these basics, they are not considered eligible for admission.

A.3

To begin with, the criteria specified under A.2 will also be applied to applicants in accordance with §3 para. 4. In order to enable these applicants to acquire additional Credit Points so as to reach 210 Credit Points altogether, the applicants will be allowed to choose modules from the 4th, 5th and 6th semesters of the bachelor's degree programme Biotechnology, Food Technology and Process Engineering or Biotechnology and Process Engineering at Flensburg University of Applied Sciences. The details of which modules applicants may complete must be agreed on with the Selection committee. If the applicant and the Selection committee cannot come to an agreement on the modules to be completed, the committee may order certain modules to be completed.

If the selection committee should come to the decision that the overall number of Credit Points to be acquired as a condition to admission and made up of basics and contents from higher semesters exceeds 40, the applicants are not suitable to be admitted to the programme.

A.4

The modules assigned by the committee must be completed in accordance with the Study and Examination Regulations of the degree programme that they are part of (here this will usually be one of the following bachelor's degree programmes: Biotechnology, Food Technology and Process Engineering or Biotechnology and Process Engineering). There is no guarantee of or entitlement to the assigned modules being offered (a) each semester and (b) in English.