



for the master's programmes

Materials Chemistry and Catalysis,

Natural Products and Drug Chemistry

and Polymer Science

at the University of Bayreuth

dated 15 September 2023

Article 9 sentence 1 in conjunction with Article 80 para 1 sentence 1 and Article 84 para 2 sentence 1 BayHIG forms the framework for the following regulations issued by the University of Bayreuth.

## Contents

§ 1	Purpose of the master's examination	3
§ 2	Admission to the programme; qualification	3
§ 3	Structure of the programme for full-time students; standard period of study	4
§ 4	Sub-areas of the respective degree programme	5
§ 5	Board of examiners	5
§ 6	Examiners and co-examiners	6
§ 7	Disqualification due to personal involvement; confidentiality	7
§ 8	Credit transfer and recognition	7
§ 9	Times for holding examinations; announcing examination times and examiners	8
§ 10	Elements of the examination	8
§ 11	Forms of examination	8
§ 12	Master's thesis	10
§ 13	Credit point system	12
§ 14	Consideration of protective provisions	12
§ 15	Consideration of special needs of students with disabilities or chronic illness and in special life circumstances	
§ 16	Examination grades	13
§ 17	Final grade	14
§ 18	Passing the master's examination	15
§ 19	Repeating examinations	15
§ 20	Notice of failing the master's examination	16
§ 21	Access to examination documents	16
§ 22	Defects in the examination proceedings	16
§ 23	Non-appearance, withdrawal from examinations, cheating, and policy violations	17
§ 24	Invalidating the master's examination	18
§ 25	Awarding the master's degree; diploma	18
§ 26	Academic advising	19
§ 27	Entry into effect, termination	19
Anne	ex 1: Modular assignment of courses and examinations for the Materials Chemistry and Catalysis programme	20
Anne	ex 2: Modular assignment of courses and examinations for the Natural Products and Drug  Chemistry programme	22
Anne	ex 3: Modular assignment of courses and examinations for the Polymer Science programme	. 24
Anne	ex 4: Aptitude assessment process	26

## Purpose of the master's examination

<sup>1</sup>The master's examination at the end of the degree course of the master's programme

- Materials Chemistry and Catalysis determines whether the candidate has acquired in-depth subject-specific knowledge, particularly with regard to the synthesis, structure, properties and applications of various classes of materials and catalysis;
- Natural Products and Drug Chemistry determines whether the candidate has acquired indepth subject-specific knowledge, particularly with regard to the synthesis, structure and biological activity of natural, active and functional substances;
- Polymer Science determines whether the candidate has acquired in-depth subject-specific knowledge, particularly with regard to the synthesis, characterization, processing, properties and physical understanding of macromolecules

and is able to independently think through the problems of the subject and work on them using scientific methods as well as present research and its results in an understandable way. <sup>2</sup>The master's programmes Materials Chemistry and Catalysis, Natural Products and Drug Chemistry and Polymer Science are taught in English.

<sup>3</sup>Upon the candidate's passing of the master's examination, the University of Bayreuth, by way of the Faculty of Biology, Chemistry & Earth Sciences, awards the academic degree "Master of Science" (abbreviated as M.Sc.)

#### § 2

## Admission to the programme; qualification

- (1) Prerequisites for admission to the master's programmes Materials Chemistry and Catalysis, Natural Products and Drug Chemistry and Polymer Science are:
  - a bachelor's degree in Chemistry or Polymer and Colloid Chemistry, Biochemistry or Sustainable Chemistry & Energy or Physics or Materials Science and Engineering or Biology or Food and Health Sciences at the University of Bayreuth or a teaching-related bachelor's degree with Chemistry as a major subject at the University of Bayreuth or an equivalent degree,
  - 2. proof of German language skills at level A1 or better of the Common European Framework of Reference for applicants who neither earned their higher education entrance qualification nor their initial degree in the German language; applicants who are unable to provide proof of these skills will be enrolled on the condition that they submit the proof by the end of the second semester of study at the latest; and

- 3. proof of English skills at level B2 or better of the Common European Framework of Reference for Languages for applicants who neither earned their higher education entrance qualification nor their initial degree in the English language.
- 4. the subject-specific aptitude assessment process for the degree programme in accordance with Annex 4.
- ¹The qualifications may not differ substantially in terms of the earned competences from the qualifications referred to in para 1 number 1. ²If there are substantial compensable differences, applicants may be admitted subject to the proviso that, in addition to the assessment components to be completed in the master's programme, they also successfully complete coursework and examinations in the amount of up to 30 credit points in the above-mentioned bachelor's programme by the end of the second semester of study at latest; otherwise, the prerequisites for admission to the programme are deemed not to have been fulfilled. ³The regulations of the respective examination and study regulations for the above-mentioned bachelor's programmes at the University of Bayreuth apply in the currently valid versions. ⁴Art. 86 BayHSchG applies to determining the eligibility of domestic and foreign degrees. ⁵Such decisions as described in sentence 1 to 4 are to be made by the board of examiners established according to § 5.
- (3) <sup>1</sup>If the relevant initial degree certificate is not yet available, confirmation containing the individual grades for all examinations and courses up to the registration deadline must be submitted. <sup>2</sup>Such credit for examinations and coursework must amount to a total of at least 135 ECTS points. <sup>3</sup>Applicants who meet the requirements according to sentence 2 and have successfully completed the procedure for determining the course-specific aptitude according to Annex 4 will be enrolled on condition that they submit the certificate of the relevant first degree by the end of the first semester.
- (4) Upon enrolment in the master's programme in Materials Chemistry and Catalysis, Natural Products and Drug Chemistry or Polymer Science, the student is deemed to have been admitted to the examinations.

## Structure of the programme for full-time students; standard period of study

(1) The standard period of study is four semesters, including the examination periods and the master's thesis.

- (2) Mandatory internships are integrated into the degree programme and should be completed within the standard period of study.
- (3) A total of 120 credit points must be earned in accordance with the European Credit Transfer System (ECTS).
- (4) New students may begin the programme in the winter semester or the summer semester.

# Sub-areas of the respective degree programme

The master's programmes Materials Chemistry and Catalysis, Natural Products and Drug Chemistry and Polymer Science are divided into modules and consist of the modules and module areas listed in Annexes 1 to 3.

#### **§ 5**

## **Board of examiners**

- <sup>1</sup>For each degree programme, a board of examiners shall be formed to make the necessary (1) decisions with regard to the admission to the master's programme and the organizational execution of the master's examination. <sup>2</sup>The board of examiners is also responsible for the aptitude assessment process in accordance with Annex 4. 3The board of examiners shall administer the examination proceedings in accordance with the present regulations and make all decisions with the exception of the examinations and the assessment thereof. 4lt shall consist of three members, each having one substitute representative. 5The members of the board of examiners and their substitute representatives are elected by the Faculty Council of the Faculty of Biology, Chemistry and Earth Sciences from among the university lecturers (Art. 19 para. 1 sentences 1 and 3 BayHIG) of the Faculty of Biology, Chemistry and Earth Sciences for a period of three years; members from the Faculty of Mathematics, Physics and Computer Science and from the Faculty of Engineering Science may also be elected for the board of examiners in the master's programme Polymer Science. 6The board of examiners shall elect a chair and deputy chair from among its members. 7In the event that a member is unable to attend or resigns, the Faculty Council shall also determine a fixed order in which the members of the board of examiners shall be represented or permanently replaced by the substitute representatives. 8In the event of the retirement of the chair or the deputy chair of examiners, a decision of the faculty council in accordance with sentence 5 shall be made for the remaining term of office.
- (2) <sup>1</sup>The board of examiners constitutes a quorum if the majority of members are present and entitled to vote after an invitation had been sent to all members at least three days prior to

- the meeting. <sup>2</sup>The decisions taken by the board of examiners in its meetings are to be made on the basis of majority vote. <sup>3</sup>Vote abstention, secret voting, and proxy voting are prohibited. <sup>4</sup>If votes are equally divided among its members, the chairperson shall have the casting vote.
- or she shall convene the meetings of the board of examiners and shall act as chair of its proceedings and decisions. <sup>3</sup>With regard to matters that cannot be postponed, he or she is authorized to make decisions on behalf of the board of examiners. <sup>4</sup>He or she must promptly inform the other members of any such decision at the next meeting at latest. <sup>5</sup>In addition, unless otherwise provided by the present regulations, the board of examiners can transfer (until revoked) the right to perform other duties of the board to the chair. <sup>6</sup>The chair can delegate tasks to members of the board of examiners.
- (4) The board of examiners shall regularly report to the faculty council concerning updates to examination schedules and study periods and may make suggestions for reforming the present regulations.
- (5) <sup>1</sup>Any notices the board of examiners issues under the terms of the present regulations are to be published together with a rationale and information concerning legal remedies available.

  <sup>2</sup>Notices of appeal shall be issued by the president in consultation with the board of examiners.

#### **Examiners and co-examiners**

- (1) <sup>1</sup>Any person who is authorized to administer examinations at institutions of higher education according to 85 BayHIG or HSchPrüferV, as amended, may serve as examiner. <sup>2</sup>Any member of the University of Bayreuth who is a graduate of an equivalent or comparable programme of study may serve as co-examiner.
- <sup>1</sup>If a member of the University of Bayreuth who is an authorized examiner leaves the University, he or she may remain an examiner for a reasonable period. <sup>2</sup>Authorization to administer examinations shall generally remain valid for up to three years.
- (3) <sup>1</sup>Unless otherwise decided by the chair of examiners, the relevant supervisor shall also serve as examiner. <sup>2</sup>If that instructor is not authorized to administer examinations as laid out in sentence 1, the chair of examiners shall appoint an examiner at the beginning of the semester in which the examination is to be held.

# Disqualification due to personal involvement; confidentiality

- (1) Disqualification from consultation and voting on the board of examiners as well as other activities relating to examinations on the basis of personal involvement is governed by Article 51 para 2 BayHIG.
- (2) The non-disclosure obligation that holds for members of the board of examiners, as well as examiners, co-examiners, and anyone else involved in the examination process is governed by Article 26 para 2 BayHIG.

#### § 8

## **Credit transfer and recognition**

- (1) The recognition and crediting of competencies shall be determined in accordance with Art. 86 BayHIG.

$$x = 1+3*(N_{max} - N_d)/(N_{max} - N_{min})$$

where x is the grade to be calculated, N<sub>max</sub> is the highest possible grade, N<sub>min</sub> is the highest passing grade, and N<sub>d</sub> is the actual grade; in this calculation, the grade to be calculated is only given to one decimal place and is not adjusted to fit the grading scale given in § 16. <sup>3</sup>If a conversion according to sentence 2 is not possible, the board of examiners shall determine a corresponding key for the grade conversion. <sup>4</sup>If a grade is not available and cannot be determined, the remark "passed" will be entered; in this case, it will not be included in the calculation of the final grade. <sup>5</sup>The board of examiners in consultation with the relevant representative from the subject area shall decide whether the requirements have been met for credit transfer. <sup>6</sup>If credit transfer is denied, the person concerned can appeal the decision by submitting a request for the University Governing Board to review the decision within four weeks of notification of denial. <sup>7</sup>The University Governing Board shall provide the board of examiners with a recommendation on how to proceed with the request.

- (3) Credit transfer/recognition requests are to be submitted to the board of examiners as soon as possible following enrolment and in any event prior to the start of the initial registration for the relevant module.
- (4) Paragraphs 2 and 3 shall apply mutatis mutandis to the crediting of competencies, subject to the maximum limit pursuant to Art. 86 para 2 sentence 2 BayHIG.

## Times for holding examinations; announcing examination times and examiners

- (1) The module examinations are held promptly following the conclusion of the modules.
- <sup>1</sup>If not listed in Annexes 1-3, examination times and the duration of examinations shall be determined by the relevant examiner and announced university-wide at the the start of the semester. <sup>2</sup>A change of examiner on short notice shall only take place if there are urgent grounds for doing so.
- (3) Students are to register for examinations by the published deadline, according to the process determined by the board of examiners.

#### § 10

# **Elements of the examination**

- (1) The respective master's examination consists of the module examinations listed in Annex 1, 2 or 3 and the master's thesis.
- (2) The examinations serve to demonstrate that the examinee has satisfied the desired learning outcomes of the individual modules.

#### § 11

## Forms of examination

(1) <sup>1</sup>Examinations take the form of written examinations, oral examinations, graded work reports, graded presentations or graded research plans. <sup>2</sup>The possible forms of examination in the modules are given the annex.

- <sup>1</sup>Assessment of examinations is to be carried out according to the process announced by the board of examiners. <sup>2</sup>Notifications will not be sent individually. <sup>3</sup>Students are required to familiarize themselves independently with the terms of the present regulations pertaining to repeating examinations; they are responsible for informing themselves of examination results.
- (3) <sup>1</sup>If an examination is assessed by more than one examiner, the grade shall be determined by taking the average of the grades assigned and truncating (not rounding) the number to one decimal digit. <sup>2</sup>In the case described in para 7, sentence 1 does not apply. <sup>3</sup>If a written examination is assessed as "failed" or "unsatisfactory", it must be assessed by a second examiner.
- <sup>1</sup>Written Examinations are conducted in English or German for a minimum of one hour and a maximum of two hours; the duration of the examination should be appropriate to the requirements of the associated course. <sup>2</sup>The relevant examiner shall decide which resources may be used during the examination. <sup>3</sup>A written record of the examination is to be made. <sup>4</sup>The invigilator shall confirm the accuracy of the record by providing his or her signature. <sup>5</sup>The examination record sheet is to include all aspects of the examination that are relevant to determining the grade.
- (5) <sup>1</sup>If a candidate arrives to the examination late, he or she shall not be given additional time to finish the examination. <sup>2</sup>Candidates may leave the room during an examination if permission is granted by the invigilator. <sup>3</sup>The time and duration of absence are to be noted on the question paper.
- of examiners. <sup>2</sup>The relevant examiner determines the grades for the written examinations under the terms of § 16. <sup>3</sup>An assessment of each written examination shall be provided no later than six weeks after the examination. <sup>4</sup>One graded copy of the written examination shall remain in the records.
- 1 Oral examinations are be held over a period of 30 to 60 minutes, depending on the requirements of the particular course. 2 Oral examinations are conducted in German or English, and are administered by two examiners or one examiner and one co-examiner. 3 One examiner or the co-examiner shall complete an examination record sheet for the oral examination that includes the following: location, start time, and duration of the examination; examination subject-matter and results; names of the examiner and co-examiner; name of the candidate; and any noteworthy incidents. 4 The record sheet is to be signed by the two examiners or by the examiner and co-examiner. 5 The examiners are to determine the grades for performance in the oral examinations under the terms of § 16.

- <sup>1</sup>In the case of graded presentations, the candidate's ability to present the state of the art in a subfield of Materials Chemistry and Catalysis, Natural Products and Drug Chemistry and Polymer Science in a comprehensible manner and discuss it. <sup>2</sup>The duration of the presentation is between 20 and 40 minutes. <sup>3</sup>The topic is assigned by the responsible examiner. <sup>4</sup>Presentations are graded by two examiners or one examiner and one co-examiner. <sup>5</sup>The examiners are to determine the grades for performance in the presentation under the terms of § 16.
- (9) ¹In the case of graded work reports (approx. 10 to 30 pages), e.g. minutes in which the experiments carried out in practical research courses are scientifically documented, evaluated and classified are assessed. ²The work report is generally assessed by one examiner. ³The grades for the work reports are determined by the respective examiners in accordance with § 16.
- (10) <sup>1</sup>The research proposal evaluates concepts that present the research question and the planned experimental approach for a scientific project in written form. <sup>2</sup>The research plan has a length of 10 to 20 pages and is presented to the examiner in a twenty-minute lecture followed by a discussion. <sup>3</sup>The provisions of paragraph 9 shall apply accordingly and the weighting shall be as specified in Annex 1, 2 or 3.

#### Master's thesis

- (1) <sup>1</sup>The master's thesis of the candidate should demonstrate that he or she is able to utilize relevant resources and adequately address and write about current issues in the field using scientific methods. <sup>2</sup>The topic may include interdisciplinary issues.
- <sup>1</sup>The chair of examiners shall appoint two reviewers (according to § 6), if possible, taking into account the candidate's wishes. <sup>2</sup>The topic of the master's thesis is issued by an authorized university lecturer in the relevant subject from the Faculty of Biology, Chemistry and Earth Sciences. <sup>3</sup>In the master's programme Polymer Science, the topics of master's theses can also be issued by university lecturers from the Faculty of Mathematics, Physics and Computer Science and the Faculty of Engineering Science who are authorized to conduct examinations.
- <sup>1</sup>The topic for the master's thesis can be issued after the acquisition of at least 45 credit points from completed modules. <sup>2</sup>Record is to be made of the date on which the topic was assigned. <sup>3</sup>The chair of examiners is to be informed in writing.
- (4) <sup>1</sup>The master's thesis is to be integrated into the programme of study and shall correspond to a workload of 900 hours. <sup>2</sup>The master's thesis is to be submitted no later than six months after

the topic was assigned. <sup>3</sup>The chair of examiners may extend this deadline by up to three months at the request of the candidate and after having heard the supervisor if there are reasons beyond the candidate's control; the request is to be submitted before the submission deadline for the master's thesis. <sup>4</sup>If the candidate demonstrates via a medical certificate that he or she was unable to work on the thesis, the deadline is to be extended accordingly. <sup>5</sup>Theses that are not submitted by the stated deadline are to be graded as "nicht ausreichend" ["unsatisfactory"].

- (5) <sup>1</sup>The master's thesis may be written in German or English. <sup>2</sup>The master's thesis shall contain a statement at the end in which the author confirms that he or she wrote the thesis independently and did not make use of any sources or materials that are not cited in the thesis. <sup>3</sup>It shall also be confirmed that the thesis had never before been submitted toward fulfilment of an academic degree.
- <sup>1</sup>The master's thesis must be submitted in electronic form (printable PDF document) by the deadline. <sup>2</sup>Submission is carried out by uploading the document to the form server. <sup>3</sup>The Examinations Office will make a note of the date on which the thesis was submitted.
- <sup>1</sup>The thesis must include a synopsis in German and one in the English language in addition to a table of contents and bibliography. <sup>2</sup>Up to two copies of the master's thesis in typewritten form, bound and paginated, must also be submitted to the examiners by the deadline at the request of the first examiner.
- <sup>1</sup>The candidate may return the topic to the board of examiners once within the first two weeks.

  <sup>2</sup>Paragraphs 1 to 7 also apply when assigning and working on a new topic.
- (9) In exceptional cases, the master's thesis may be completed outside the University of Bayreuth with the approval of the board of examiners, provided that sufficient supervision is ensured by a university lecturer authorized to conduct examinations within the meaning of § 6, and a university lecturer authorized to conduct examinations in the relevant subject area at the University of Bayreuth declares in writing when the thesis is assigned that he or she agrees to undertake the initial assessment in accordance with Paragraph 10.
- (10) <sup>1</sup>The Examinations Office shall forward the thesis to the reviewers appointed. <sup>2</sup>The master's thesis is assessed by two examiners in accordance with § 6. <sup>3</sup>The first reviewer should be the person who has assigned the topic of the thesis. <sup>4</sup>The grades shall be made available no later than two months after submission of the thesis. <sup>5</sup>Each assessor shall provide a recommendation as to whether the thesis is to be accepted or rejected and assign a grade in accordance

- with § 16. <sup>6</sup>In special cases, the board of examiners may call upon an additional assessor, especially if the grades assigned vary by more than one point.
- (11) <sup>1</sup>If different grades are assigned, the grade for the master's thesis shall be the arithmetic mean of the assessments. <sup>2</sup>In this calculation, the grade shall only be given to one decimal place; the remaining digits are to be truncated (not rounded). <sup>3</sup>§ 11 para 2 applies mutatis mutandis. <sup>4</sup>If the master's thesis is deemed "unsatisfactory" (nicht ausreichend), the candidate is considered to have failed the master's examination.
- (12) If the master's thesis is assessed as "unsatisfactory", the board of examiners will inform the candidate accordingly.
- (13) One copy of the master's thesis is to remain on record.

## **Credit point system**

- (1) <sup>1</sup>A record of credit points for completed modules is to be kept by the University of Bayreuth's Examinations Office for each student who is enrolled in the programme of study. <sup>2</sup>The credit points that appear on the transcript are identical with credit points as stipulated in the European Credit Transfer System (see Annex 1, 2 or 3). <sup>3</sup>One credit point corresponds to a workload of 30 hours.
- (2) The credit points for the modules can be found in Annex 1, 2 or 3.

#### § 14

# **Consideration of protective provisions**

- (1) <sup>1</sup>The utilization of protection periods of the Maternity Protection Act (MuSchG) shall be guaranteed. <sup>2</sup>Upon request, the claiming of parental leave in accordance with the Federal Parental Allowance and Parental Leave Act (Bundeselterngeld- und Elternzeitgesetz), as well as periods for the care of a close relative within the meaning of § 7 para 3 of the Nursing Care Act who is in need of care within the meaning of § 14 and § 15 of the Eleventh Book of the Social Code (Sozialgesetzbuch), shall be guaranteed. <sup>3</sup>The appropriate evidence must be furnished; any changes in status are to be reported immediately.
- (2) <sup>1</sup>If duly requested, periods during which study was impossible or only possible to a limited extent for reasons beyond the student's control shall not be taken into account with regard to the examination schedule. <sup>2</sup>Corresponding evidence must be furnished; medical certificates

must be presented in the case of illness. <sup>3</sup>Any changes in status are to be reported immediately.

#### § 15

# Consideration of special needs of students with disabilities or chronic illness and in special life circumstances

- (1) <sup>1</sup>For the sake of ensuring equal opportunities, the particular needs of examinees with disabilities or chronic illnesses under the terms of the Bavarian Equal Opportunities for Disabled Persons Act are to be appropriately accommodated. <sup>2</sup>Upon written request, the board of examiners shall determine on the basis of the degree of disability or chronic illness in what form the examination is to be taken; alternatively, an extension or other reasonable accommodations may be granted. <sup>3</sup>Proof of the examination disability or chronic illness must be furnished in the form of a medical certificate stating that, due to a long-term or permanent disability or chronic illness, the examination cannot be taken in whole or in part in the intended form. <sup>4</sup>The request is to be submitted together with the examination registration. <sup>5</sup>If the request is submitted later, it shall only be valid for subsequent examinations.
- (2) <sup>1</sup>Students in special circumstances may apply to the board of examiners for reasonable accommodations in examinations in accordance with paragraph 1. <sup>2</sup>The board of examiners shall decide on the existence of a special life situation and the extent of reasonable accommodations.

## § 16

## **Examination grades**

(1) The following grading scale will be used in the assessment of the individual assignments and examinations; the digit to the right of the comma enables a more differentiated assessment between the whole-number values.

"sehr gut" (excellent) = 1,0 or 1,3

"gut" (considerably better than average) = 1,7 or 2,0 or 2,3

"befriedigend" (average) = 2,7 or 3,0 or 3,3

"ausreichend" (fulfils the minimum requirements

despite deficiencies) = 3,7 or 4,0

"nicht ausreichend" (unsatisfactory due

to considerable deficiencies) = 5,0

1 If a greater module examination is made up of multiple examinations, the grade for the module shall be established by calculating the arithmetic mean after weighting the components

based on credit points. <sup>2</sup>In this calculation, the grade shall only be given to one decimal place; the remaining digits are to be truncated (not rounded). <sup>3</sup>Module grades are as follows:

an average of 1,5 or better = sehr gut

an average of 1,6 up to and including 2,5 = gut

an average of 2,6 up to and including 3,5 = befriedigend

an average of 3,6 up to and including 4,0 = ausreichend.

# § 17

## **Final grade**

- (1) <sup>1</sup>The overall grade of the master's examination in the respective degree programme is calculated as the arithmetic mean of the module grades weighted with the credit points according to Annex 1, 2 or 3. <sup>2</sup>In this calculation, the grade shall only be given to one decimal place; the remaining digits are to be truncated (not rounded).
- (2) Candidates who pass the master's examination are to receive a final grade as follows: an average grade of 1,2 or better is "ausgezeichnet", up to 1,5 is "sehr gut", up to 2,5 is "gut", up to 3,5 is "befriedigend", up to 4,0 "ausreichend".
- (3) The certificate or an attached document shall indicate how the final grade was calculated.
- (4) ¹In addition to the degree certificate, an ECTS grading table will be issued as stipulated in the ECTS guidelines in the version dated 6 February 2009. ²This table displays what percentage of programme graduates in a given time frame received the same final grade as described in para 2. ³Those programme graduates who were awarded their diplomas in the previous four semesters shall serve as the reference group as long as it includes at least 30 persons. ⁴The date of the last examination shall be decisive in assigning graduates to a particular semester. ⁵If the minimum number of graduates is not reached, the number of previous semesters is to be extended until the minimum number is reached. ⁶If the programme of study does not yet have as many graduates as the minimum number required of the reference group, an ECTS grading table will be issued as soon as the minimum number is reached. ⁶For degrees awarded before the minimum number is reached, an ECTS grading table will be issued at a later date upon request once the minimum number has been reached. ⁶The graduate's own graduating class is also to be included in the reference group. ⁶The size of the reference group and the time frame is to be included.

# Passing the master's examination

- (1) Passing the master's examination requires a grade of "ausreichend" ["sufficient"] or better for the master's thesis and each module; in addition, all 120 credit points must be earned and all requirements mentioned in § 2 para 2 must be fulfilled.
- 1 If a candidate fails to achieve at least 28 credit points from fully completed modules by the end of the third semester for reasons for which he or she is responsible, the master's examination is deemed to have been failed on the final attempt. Notice shall be sent to inform the candidate that he or she has failed an examination on the final attempt in accordance with § 5 para 5 in conjunction with Article 41 BayVwVfG as amended.
- (3) <sup>1</sup>If a candidate fails to achieve at least 60 credit points from fully completed modules by the end of the fourth semester for reasons for which he or she is responsible, the master's examination is deemed to have been failed on the final attempt. <sup>2</sup>Notice shall be sent to inform the candidate that he or she has failed an examination on the final attempt in accordance with § 5 para 5 in conjunction with Article 41 BayVwVfG as amended.
- (4) <sup>1</sup>If the candidate has not fulfilled the requirements given in para 1 by the end of his or her sixth semester due to reasons under his or her control, then the candidate shall be considered as having failed the master's examination on the first attempt. <sup>2</sup>Examinations that were taken on time and for which the candidate received a passing grade need not be repeated.
- in para 4 sentence 1 for reasons under his or her control, or if all possibilities to repeat the examinations have been exhausted, then the candidate shall be considered as having failed the master's examination on the final attempt. <sup>2</sup>The deadline shall not take into account periods of leave and periods during which the candidate withdrew from study. <sup>3</sup>Paragraph 2 sentence 2 applies mutatis mutandis. <sup>4</sup>The board of examiners may grant the student an extension of the deadline stated in sentence 1 for circumstances beyond his or her control.

#### § 19

## **Repeating examinations**

- (1) Each failed examination may be repeated within the period specified in § 18.
- <sup>1</sup>The master's thesis can be repeated with a new topic if the student receives a failing grade for the thesis. <sup>2</sup>Repeating the master's thesis for a second time is not permitted.

- (3) Voluntarily repeating examinations that were already passed or the master's thesis is not permitted.
- (4) Administrative measures shall be taken to ensure that it is possible to repeat the failed examinations or a failed master's thesis within six months.

# Notice of failing the master's examination

Notice shall be sent to inform the candidate that he or she has failed the master's examination on the final attempt in accordance with § 5 para 5 in conjunction with Article 41 BayVwVfG as amended.

#### § 21

#### Access to examination documents

- (1) Following the conclusion of the examinations process, the candidate may be granted access to his or her graded examination documents including the reviewer's report as well as the record sheets for the examination.
- <sup>1</sup>Such requests are to be made within six months after the degree certificate is awarded. <sup>2</sup>If the candidate was prevented from meeting the deadline in sentence 1 due to reasons beyond his or her control, Article 32 BayVwVfG shall apply.

# § 22

## Defects in the examination proceedings

- (1) If it is shown that there were defects in the examination proceedings which influenced the examination results, the candidate or the board on its own initiative shall request that the relevant examinations be repeated.
- (2) Any defects in the examination proceedings are to be reported to the examiner or the chair of examiners without delay, and in general, prior to notice being given of the examination results.
- (3) Claims under the terms of paragraph 1 must be made within six months of the examination's conclusion.

# Non-appearance, withdrawal from examinations, cheating, and policy violations

- (1) <sup>1</sup>Candidates who have registered for an examination may withdraw without providing a rationale by withdrawing by the deadline announced by the board of examiners. <sup>2</sup>If the candidate fails to appear for an examination for which he or she was registered for reasons under his or her control or withdraws subsequent to the deadline stated in sentence 1, he or she will be considered to have failed the examination.
- 1 The grounds for failing to appear or as long as para 1 sentence 1 do not apply for with-drawal must be submitted to the board of examiners without delay and substantiated by prima facie evidence. The same applies to inability to take the examination due to circumstances arising during the examination. Inability to take the examination due to illness must be documented with a medical certificate. If the board of examiners accepts the reasons given, a new examination time is to be offered under the terms of § 9 within six months.
- (3) If withdrawal or failure to appear is caused by reasons beyond the candidate's control, examinations elements completed up to that point are to be recognized.
- (4) <sup>1</sup>If the candidate attempts to influence the result on an examination by cheating or making use of materials that are not permitted, he or she shall be given the grade "nicht ausreichend" ["unsatisfactory"]. <sup>2</sup>Any candidate who causes considerable disruption to the course of an examination may be removed by the invigilator and barred from continuing the examination; in this case, he or she shall be given the grade "nicht ausreichend" ["unsatisfactory"].
- (5) <sup>1</sup>If cheating in the form of plagiarism is detected, the examination will be graded as "nicht ausreichend" ["unsatisfactory"]. <sup>2</sup>The accusation of plagiarism is justified if the examinee has attempted to influence the result of the examination in a way that is favourable to him or her by failing to specifically mark passages taken verbatim from other authors and also explanations of his or her work that are closely based on the thought processes of other authors. <sup>3</sup>The determination shall be made by the relevant examiner or invigilator and shall be recorded in the files. <sup>4</sup>In serious cases or in the case of repetition, the entire module examination can be declared failed and, in particularly serious cases, the right to repeat the examination can also be withdrawn and the entire module examination can be declared failed on the final attempt. <sup>5</sup>The decision on this is taken by the board of examiners. <sup>6</sup>In deciding on the imposition of the sanction, both the quantity of the plagiarism and its significance for the work must be assessed in each individual case.

## Invalidating the master's examination

- (1) If a candidate cheats during an examination and this fact does not come to light until after the degree certificate is issued, the board of examiners may retroactively change the relevant grades accordingly and declare the master's examination to be failed either in part or entirely.
- 1 If the registration requirements for the examinations were not met by the candidate without this having involved any cheating on the part of the candidate, and if this fact does not come to light until after the degree is issued, then this fault shall be considered rectified via the candidate's passing of the master's examination. 2 If the candidate registered by intentionally providing false information, the board of examiners shall decide whether to revoke any unlawful administrative acts on the basis of the general principles of administrative law.
- (3) The candidate shall be permitted to make a statement prior to the decision.
- (4) The inaccurate degree certificate is to be taken away and, if applicable, replaced with a new one.

#### § 25

## Awarding the master's degree; diploma

- (1) <sup>1</sup>Upon the student's request, a diploma and a degree certificate for successful completion of the master's examination are to be issued within four weeks of demonstrating completion of the required module credits. <sup>2</sup>The diploma is to include the title of the programme of study. <sup>3</sup>It is to be signed by the dean and stamped with the seal of the University of Bayreuth. <sup>4</sup>Upon issuance of the diploma, the graduate is given the right to bear the title "Master of Science". <sup>5</sup>This title is to be abbreviated "M.Sc." and placed behind the surname.
- 1 The certificate is to include the title of the programme of study, the final grade, all completed modules, all module examinations undertaken (including credit points and grades achieved), as well as the topic of the master's thesis and the grade received for the thesis. The certificate is to be signed by the chair of examiners. The date to be used is the day of the last examination or the date on which the last graded assignment was submitted. An English translation of the diploma and a Diploma Supplement shall be issued in addition; the Diploma Supplement shall be signed by the chair of examiners. In addition to the certificate, an ECTS grading table is to be issued under the terms of § 17 para 4.
- (3) Revoking the degree "Master of Science" is to be carried out in accordance with the legal regulations (Article 101 BayHIG).

## **Academic advising**

- (1) General student advising is offered by the University of Bayreuth's Student Advising Office.
- (2) For questions concerning the master's programmes Materials Chemistry and Catalysis, Natural Products and Drug Chemistry and Polymer Science, i.e. the structure of the degree program, organization of studies, selection of courses and examination questions, the responsible programme coordinators will advise students.
- (3) <sup>1</sup>In the course of the semester, the programme coordinators shall offer advising for all students enrolled in the master's programme. <sup>2</sup>Advising is recommended especially for the following persons:
  - 1. new students,
  - 2. following failed examination attempts or courses,
  - 3. students who recently failed an examination,
  - 4. students who have considerably less than 30 credit points per semester,
  - 5. students transferring from a different subject, degree programme, or university

#### § 27

# **Entry into effect, termination**

- (1) <sup>1</sup>These regulations go into effect on 16 September 2023. <sup>2</sup>They shall be valid for all students enrolling in these programmes in Summer Semester 2024 or later. All other students are to carry out their studies under the terms of the previous examination regulations for the master's programme Materials Chemistry and Catalysis at the University of Bayreuth, dated 30 March 2009 (AB UBT 2009/024) and last amended on 9 January 2023 (AB UBT 2023/002).
- (2) The Examination and Study Regulations for the Master's Programme Materials Chemistry and Catalysis at the University of Bayreuth dated 30 March 2009 (AB UBT 2009/024), last amended on 09 January 2023 (AB UBT 2023/002), shall cease to apply subject to the provision in para 1 sentence 3.

Annex 1: Modular assignment of courses and examinations for the Materials Chemistry and Catalysis programme

Modules	Credit points	Course type (SWS)**	Semester*	Individual Partial examinations (LP)***
Inorganic Chemistry	I.		•	
<b>C 101</b> Solid-State Inorganic Materials: Nanochemistry	7/9	V(2), P(6/8)	WS	1 exam (5) for V; grading (2/4) for P
C 102 Homogeneous Catalysis	7/9	V(2), P(6/8)	WS	1 exam (5) for V; grading (2/4) for P
<b>C 201</b> Solid-State Inorganic Materials: Properties and Applications	7/9	V(2), P(6/8)	summer	1 exam (5) for V; grading (2/4) for P
C 202 Catalyst Design	7/9	V(2), P(6/8)	summer	1 exam (5) for V; grading (2/4) for P
<b>C 203</b> High Performance Materials for Electrochemical Energy Systems	7/9	V(2), P(6/8)	WS	1 exam (5) for V; grading (2/4) for P
Colloids and Materials				
<b>C 103</b> Electrochemical Energy Systems and Energy Conversion	7/9	V(2), P(6/8)	WS	1 exam (5) for V; grad- ing (2/4) for P
C 104 Colloids and Interfaces****	7/9	V(2), P(6/8)	WS	1 exam (5) for V; grading (2/4) for P
<b>C 204</b> Advanced Methods in the Physical Chemistry of Polymers	7/9	V(2), P(6/8)	summer	1 exam (5) for V; grading (2/4) for P
<b>C 205</b> Materials for Sensors, Catalysis and Energy Conversion	7/9	V(2), P(6/8)	summer	1 exam (5) for V; grading (2/4) for P
Organic Chemistry and Macromolecular	Material	s		
<b>C 105</b> Stereoselective Organic Synthesis	7/9	V(2), P(6/8)	WS	1 exam (5) for V; grading (2/4) for P
C 106 Polymer Synthesis	7	V(2), P(6)	WS	1 exam (5) for V; grading (2/4) for P
C 107 Biomaterials	7/9	V(2), P(6/8)	WS	1 exam (5) for V; grading (2/4) for P
<b>C 206</b> Polymer Architectures and Functionality	7/9	V(2), P6/(8)	summer	1 exam (5) for V; grading (2/4) for P
<b>C 207</b> High-Performance and Specialty Polymers	7/9	V(2), P(6/8)	summer	1 exam (5) for V; grading (2/4) for P
Total	55			
C 210 Research proposal	5	Research proposal (8), S(1),	2nd Semes- ter	1 presentation (2) Grading of the research proposal (3)
C 301 Advanced Laboratory I	15	P(19), S(1)	3rd/4th se- mesters	graded work report
C 302 Advanced Laboratory II	15	P(19), S(1)	3rd/4th se- mesters	graded work report

C 400 Master's Thesis	30	3rd/4th se- mesters	Grading: two grades at 50% each
Total	120		

- \* New students can begin the programme in the winter semester or the summer semester. In the first semester, four modules of 7 CP each are selected, but at least one module each from the areas of "Inorganic Chemistry" (C101-C102), "Colloids and Materials" (C103-C104) and "Organic Chemistry and Macromolecular Materials" (C105-C107). One module may be selected from the other courses offered in this degree programme or other master's programmes in chemistry. In the second semester, three modules with a longer laboratory internship are selected, each worth 9 CP. One of the two Advanced Laboratory Modules (C301 or C302) may also be carried out at a foreign university or as an industrial internship, subject to prior approval by the board of examiners or the chair of examiners.
- \*\* V = Vorlesung (lecture); Ü = Übung (tutorial); S = Seminar (seminar); P = Praktikum (lab/internship). SWS = Semesterwochenstunden (semester hours).
- \*\*\* Exceptions to the examination forms for courses listed here and the weighting of individual examinations is to be announced by the instructor at the beginning of the course.
- \*\*\*\* The examinations for the lectures are conducted either as oral or written examinations. Graded work reports, oral examinations, and graded presentations are used to assess the internships.

# Annex 2: Modular assignment of courses and examinations for the Natural Products and Drug Chemistry programme

Modules*	Credit points	Courses: Type(SWS)**	Semes- ter***	course-related partial ex- aminations (LP)****, *****
Low Molar Mass Natural Products and D	rugs			
<b>B 101</b> Biosynthesis of Natural Products	7	V(2), P(6)	WS	1 exam (5) for V; grading (2) for P
<b>B 102</b> Catalysis and Sustainable Synthesis	7	V(2), P(6)	WS	1 exam (5) for V; grading (2) for P
<b>B 103</b> Stereoselective Organic Synthesis	7	V(2), P(6)	WS	1 exam (5) for V; grading (2) for P
<b>B 104</b> Homogeneous Catalysis	7	V(2), P(6)	WS	1 exam (5) for V; grading (2) for P
<b>B 201</b> Alkaloids - Biosynthesis and Total Synthesis	9	V(2), P(8)	summer	1 exam (5) for V; grading (4) for P
<b>B 202</b> Bioorganic Chemistry	9	V(2), P(8)	summer	1 exam (5) for V; grading (4) for P
<b>B 203</b> Analytics and Screening of Natural Products and Drugs	9	V(2), P(8)	summer	1 exam (5) for V; grading (4) for P
Macromolecular Targets and Structures				
<b>B 105</b> Molecular Modeling	7	V(2), P(6)	WS	1 exam (7); participation in P
B 106 Chemometrics	7	V(2), P(5)	WS	1 exam (7); participation in P
<b>B 107</b> Solid-State Inorganic Materials: Nanochemistry	7	V(2), P(6)	WS	1 exam (5) for V; grading (2) for P
<b>B 204</b> Basics of Bioinformatics	9	V(2), P(8)	summer	1 exam (6) for V; grading (3) for P
<b>B 205</b> Biophysical Chemistry - Multidimensional NMR Spectroscopy of Biomacromolecules	9	V(2), P(7)	summer	1 exam (9); participation in P
<b>B 206</b> (Bio-)Analytics: QM and Metrology in the Chemical Laboratory	9	V(2), P(7)	summer	1 exam (9); participation in P
Total	55			
B 210 Research proposal	5	Research proposal (8), S(1)	2nd se- mester	Presentation (2); Research proposal (3)
B 301 Research Module I	15	P(19), S(1)	3rd semes- ter	Graded work report
B 302 Research Module II	15	P(19), S(1)	3rd semes- ter	Graded work report
		1	1	L

B 400 Master's Thesis	30	4th semes- ter	Grading; two grades at 50% each
Total	120		

- \* Students select four modules from the lecture modules offered in the winter semester (B101-B107) and three modules from the lecture modules offered in the summer semester (B201-B206). One of these lecture modules may be replaced by a lecture module from another chemistry or biology-oriented master's programme. One of the two research modules (B301 or B302) may also be carried out at a foreign university or as an industrial internship, subject to prior approval by the board of examiners or the chair of examiners.
- \*\* V = lecture; S = seminar; P = internship; SWS = semester hours per week.
- \*\*\* The programme can be started in the summer or winter semester.
- Exceptions to the examination forms for courses listed here and the weighting of individual examinations is to be announced by the instructor at the beginning of the course.
- \*\*\*\*\* The examinations for the lectures are conducted either as oral or written examinations. Graded work reports, oral examinations, and graded presentations are used to assess the internships.

# Annex 3: Modular assignment of courses and examinations for the Polymer Science programme

Modules*	Credit points	Courses: Type(SWS)	Semes- ter	course-related partial ex- aminations(LP)**, ***
<b>P 101</b> Polymer Synthesis	7	V(2), P(6)	WS	1 exam for V (5); grade for P (2)
<b>P 102</b> Physical Chemistry of Polymers	7	V(2), P(6)	WS	1 exam for V (5); grade for P (2)
P 103***** Colloids and Interfaces	7	V(2), P(6)	WS	1 exam for V (5); grade for P (2)
<b>P 104</b> Polymer Materials and Technology	7	V(2), P(6)	WS	1 exam for V (4); grade for P (2)
<b>P 105</b> Polymer Physics I	7	V(3), Ü(1)	WS	1 exam for V and Ü (100%7)
<b>P 106</b> Organometallic Chemistry and Polymerization Catalysts	7	V(2), P(6)	WS	1 exam for V (5); grade for P (2)
P107 Catalysis and Sustainable Syn- thesis	7	V(2), P(6)	WS	1 exam for V (5); grade for P (2)
<b>P 108</b> Biomaterials	7	V(2), P(6)	WS	1 exam for V (5); grade for P (2)
<b>P 201</b> Polymer Architectures and Functionality	9	V(2), P(8)	summer	1 exam for V (5); grade for P (4)
<b>P 202</b> High-Performance and Specialty Polymers	9	V(2), P(8)	summer	1 exam for V (5); grade for P (4)
<b>P 203</b> Advanced Methods in Physical Chemistry of Polymers	9	V(2), P(8)	summer	1 exam for V (5); grade for P (4)
<b>P 204</b> Current Topics in Colloid-, Poly- mer- and Interface Science	9	V(2), P(8)	summer	1 exam for V (5); grade for P (4)
<b>P 205</b> Polymer Engineering	9	V(2), P(8)	summer	1 exam for V (5); grade for P (4)
<b>P 206</b> Polymer Physics II	9	2V+Ü or 1V+Ü+1P	summer	2 exam (5/5)
<b>P 207</b> Catalyst Design	9	V(2), P(8)	summer	1 exam for V (5); grade for P (4)
<b>P 208</b> Sustainable Polymer Chemistry and Polymer Materials	9	V(2), P(8)	summer	1 exam for V (5); grade for P (4)
Total	55			
<b>P 210</b> Research Proposal	5	Research proposal (5), S (1)	win- ter/sum mer	Presentation (2); Research proposal (3)
P 301**** Advanced Laboratory I	15	P(19), S(1)	win- ter/sum mer	Graded work report

P 302**** Advanced Laboratory II	15	P(19), S(1)	win- ter/sum mer	Graded work report
P 400 Master's Thesis	30		win- ter/sum mer	Grading; two grades at 50% each
Total	120			

- \* Students choose four out of eight proposed modules, which are offered in the winter semester. It is possible to replace one of these modules with a module from the master's programmes Chemistry, Biological Chemistry, Physics, or Engineering Science.
  - Students choose three out of seven proposed modules, which are offered in the summer semester. It is possible to replace one of these modules with a module from the master's programmes Chemistry, Biological Chemistry, Physics, or Engineering Science.
  - Core elective modules are offered within the scope of possibilities and demand. They are to be announced in a suitable form by the chair of examiners based on the board of examiners' decision at the end of the prior semester.
- \*\* Exceptions to the examination forms for courses listed here and the weighting of individual examinations is to be announced by the instructor at the beginning of the course.
- \*\*\* The examinations for the lectures are conducted either as oral or written examinations.

  Graded work reports, oral examinations, and graded presentations are used to assess the internships.
- Modules 301 and 302 can be supplemented by a laboratory internship at a foreign university and/or an industrial internship. It is possible to combine a module with selected modules from the master's programme Polymer Science or corresponding courses from the master's programmes in chemistry, biochemistry, physics, or engineering science.

## **Annex 4: Aptitude assessment process**

## 1. Purpose of aptitude assessment process

<sup>1</sup>In accordance with Art. 90 para 1 BayHIG, qualification for the Master's degree programs in Materials Chemistry and Catalysis, Natural Products and Drug Chemistry and Polymer Science requires proof of aptitude in accordance with the following regulations in addition to the requirements set out in § 2 para 1 numbers 1 - 3. <sup>2</sup>The special qualifications and skills of the applicants should correspond to the broad professional fields of Materials Chemistry and Catalysis, Natural Products and Drug Chemistry, and Polymer Science. <sup>3</sup>Individual aptitude parameters are:

- the ability to work scientifically, or to work according to methods and principles,
- Existing subject-specific knowledge from the first degree in chemistry or polymer and colloid chemistry, biochemistry or sustainable chemistry and energy or related subjects;
- the ability to solve difficult and complex problems,

## 2. Board responsible for the aptitude assessment process

The relevant board of examiners is responsible for preparing and conducting the aptitude assessment process in accordance with § 5 para 1.

#### 3. Process for determining aptitude

3.1 ¹The aptitude assessment process is administered twice annually, in the summer and winter semesters. ²The application for admission to the aptitude assessment process must be submitted online to the University of Bayreuth. ³The online application for admission is made available on the university's website. ⁴The online application for admission must be received electronically by the University of Bayreuth by 15 June for the following winter semester and by 15 January for the summer semester of each academic year (cut-off deadline). ⁵Documents according to no. 3.2.4 and 3.2.5 can be submitted by 15 July for the winter semester or by 15 February for the summer semester.

#### 3.2 The application must include:

- 3.2.1 A cover letter (in English or German) with a maximum 2-page written justification for the choice of the respective master's programme in which it is explained on the basis of which competences the applicant considers himself or herself particularly suitable for the desired degree programme (see no. 5.1.1).
- 3.2.2 CV as supplementary information.
- 3.2.3 A copy of the higher education entrance qualification as supplementary information.

- 3.2.4 ¹The certificate of the relevant initial degree (e.g. bachelor's certificate) with Diploma Supplement. ²If the relevant initial degree certificate is not yet available, confirmation containing the individual grades for all examinations and courses up to the registration deadline must be submitted. ³Such credit for examination elements must amount to a total of at least 135 ECTS points. ⁴A list of modules in the relevant initial degree programme for which no grades can be presented, along with the expected date of examination, is to be included.
- 3.2.5 If available, proof of special qualifications according to no. 5.1.1.1 for the respective degree programme (e.g. vocational training, internships, stays abroad, language skills).
- 3.2.6 If applicable, a request for reasonable accommodations as described in § 15.

## 4. Admission to the aptitude assessment process

- 4.1 Admission to the aptitude assessment process requires that the documents listed in number 3.2 be submitted on time.
- 4.2 The aptitude assessment process (under the terms of number 5) is to be administered to those applicants who fulfil the requirements.
- 4.3 Applicants who are not admitted are to be sent a notice of denial with a rationale and information concerning their right to appeal; number 6.2 sentence 2 applies *mutatis mutandis*.

#### 5. Overview of the aptitude assessment process

- 5.1 First stage of the aptitude assessment process:
- 5.1.1 ¹The committee responsible for conducting the aptitude assessment process uses the submitted application documents to assess whether an applicant is suitable for this master's programme on the basis of their proven qualifications and the specific skills they have demonstrated. ²Two members of the committee examine the submitted documents independently of each other on a scale of 0 to 10 points, with 0 being the worst and 10 the best result to be achieved.³The evaluation process is to be conducted on the basis of the following criteria:
  - 5.1.1.1 <sup>1</sup>The competencies resulting from the documents in accordance with 3.2.1 and 3.2.5 are assessed with a maximum of 5.0 points. <sup>2</sup>The assessment criteria are the extent to which the applicant's career to date demonstrates a pronounced prior knowledge and skills in the fields of Materials Chemistry and Catalysis, Natural Products and Drug Chemistry and Polymer Science and the extent to which there is potential for interdisciplinary and international work. <sup>3</sup>The content of the cover letter in accordance with no. 3.2.1 together with the evidence in accordance with no. 3.2.5 will be assessed according to the following criteria with the maximum achievable points indicated in

#### brackets:

- linguistic expression and logical structure (max. 1 point);
- scientific quality of the argumentation, references to concrete research problems (max. 2 points);
- justification for the choice of degree programme with a clear description of previous knowledge and skills (max. 2 points).
- 5.1.1.2 <sup>1</sup>The subject-specific coursework and examinations from the relevant initial degree programme are to be graded on a scale of "0" to "5.0". <sup>2</sup>Achievements in the field of chemistry, polymer and colloid sciences or biochemistry or physics or materials science and engineering or biology or food and health sciences are deemed to be subject-specific. <sup>3</sup>Non-subject-specific achievements may be taken into account if it can be expected that the student will be able to achieve the objective of the degree programme on the basis of the competencies demonstrated. <sup>4</sup>The awarding of points is described in more detail in No. 9.
- 5.1.2 <sup>1</sup>The applicant's score is calculated from the arithmetic mean of the individual assessments (No. 5.1.1.1 and 5.1.1.2) of the committee members. <sup>2</sup>The score is to be rounded to one decimal place behind the comma.
- 5.1.3 <sup>1</sup>Applicants who have achieved at least seven points will receive confirmation that they have passed the aptitude assessment process. <sup>2</sup>Applicants with an overall score of less than five points have failed the aptitude assessment process and will receive a rejection notice with reasons and information on their right to appeal; no. 6.2 sentence 2 applies accordingly.
- 5.2 Second stage of the aptitude assessment process:
- 5.2.1 ¹The remaining applicants (five to less than seven points) will be invited to an aptitude interview or online test (second stage of the aptitude assessment process). ²The date for the aptitude interview or the online test will be announced at least one week in advance. ³Anyone who does not appear for the scheduled appointment or online test is deemed to have been denied admission. ⁴If a reason beyond the applicant's control prevents him or her from participating in the interview or online test, a new appointment is to be scheduled no later than two weeks prior to the start of lectures upon justified request.
- 5.2.2 Aptitude interview or online test
  - 5.2.2.1 <sup>1</sup>The interview is conducted individually for each applicant. <sup>2</sup>The interview lasts a minimum of 20 and a maximum of 30 minutes and should show whether, on the basis of the applicant's knowledge and skills, it can be expected that he or she will achieve the objective of the degree programme. <sup>3</sup>The interview is to be conducted by at least two members of the committee. <sup>4</sup>Firstly, the applicant's academic and theoretical aptitude

with regard to the requirements of the degree programme is assessed in the interview. <sup>5</sup>The applicant should demonstrate that he or she is able to work on academic issues as part of his or her master's programme (50% of the assessment). <sup>6</sup>Secondly, the applicant's previous knowledge and skills in the area of the respective master's programme are reviewed. <sup>7</sup>The applicant should demonstrate that he or she has dealt with current research issues in chemistry, polymer and colloid sciences or biochemistry or physics or materials science and engineering or biology or food and health sciences (50% of the assessment). <sup>8</sup>In particular, students must be able to recognize and derive relationships using examples of molecular structure-reactivity relationships and structure-property relationships. <sup>9</sup>The subject-specific achievements according to No. 5.1.1.2 count for 50% of the assessment. <sup>10</sup>The decision regarding the aptitude interview is "passed", "failed" or "passed with conditions". <sup>11</sup>If the applicant receives the result "passed with conditions", conditions shall be imposed in accordance with § 2 para 2 sentence 2.

- 5.2.2.2 <sup>1</sup>As an alternative to No. 5.2.2.1, a two-hour online test will be conducted with the applicants. <sup>2</sup>There are questions from the fields of chemistry, polymer and colloid sciences or biochemistry or physics or materials science and engineering (50% of the assessment). <sup>3</sup>The subject-specific achievements according to no. 5.1.1.2 count for 50% of the assessment. <sup>4</sup>The decision regarding the online test is "passed", "failed" or "passed with conditions". <sup>5</sup>If the applicant receives the result "passed with conditions", conditions shall be imposed in accordance with § 2 para 2 sentence 2.
- 5.2.3 <sup>1</sup>Applicants, who have passed the second stage of the aptitude assessment process will receive confirmation. <sup>2</sup>The remaining applicants who have not passed the aptitude assessment process will be sent a notice of denial with a rationale and information on their right to appeal; number 6.2 sentence 2 applies mutatis mutandis.
- 5.2.4 ¹A written record shall be made of the interview, indicating the date, duration, location, name of committee members involved, the names of the applicants, the topics discussed, the assessment of the board members, and the overall outcome as well as any essential reasons for the assessment. ²The essential reasons and topics may be listed in note form. ³The record sheet is to be signed by the committee members who were present.

#### 6. Determining and announcing results

6.1 The course of the aptitude assessment process must be documented; in particular, the decisions of the committee in accordance with the present regulations and the overall outcome must be evident.

- 6.2 <sup>1</sup>Applicants will be informed of the result of the aptitude assessment process in writing. <sup>2</sup>Notices of denial containing a rationale and information concerning the right to appeal are to be signed by the chair of the committee.
- 6.3 Admissions as part of the aptitude assessment process for the master's programmes Materials Chemistry and Catalysis, Natural Products and Drug Chemistry and Polymer Science are valid for all subsequent applications in the respective degree programme, provided that the content and objective of the degree programme have not changed so significantly that the aptitude for this degree programme can no longer be proven on the basis of the aptitude assessment process carried out at an earlier point in time.

## 7. Repeating the process

Applicants who have not provided proof of aptitude for one of the master's programmes Materials Chemistry and Catalysis, Natural Products and Drug Chemistry or Polymer Science can re-register once for the aptitude assessment process.

## 8. Aptitude assessment process for higher semesters

For applicants who wish to enter advanced semesters (university transfer, career changers), nos. 3 to 7 apply accordingly.

## 9. Assessment key

The subject-specific study and examination achievements of the relevant first degree (No. 5.1.1.2) are included in the assessment according to the following table: <sup>2</sup>The performance level is based on the respective average grades or relative grades of the respective institution in the respective subject and year:

POINTS	ASSESSMENT
5,0 – 4,6	excellent
4,5 – 3,5	considerably above average
3,4 – 2,4	above average
2,3 – 1,3	average
1,2 – 0,6	sufficient despite deficiencies

Issued on the basis of decisions made by the University of Bayreuth's Senate on 17 May 2023 and 19 July 2023 and approved by the President of the University of Bayreuth on 12 September 2023, Ref. No. A 3396/11 - I/1.

Bayreuth, 15 September 2023 UNIVERSITY OF BAYREUTH THE PRESIDENT
[seal] [signature]
Professor Dr. Stefan Leible

The present regulations were enacted at the University on 15 September 2023. This was announced on 15 September 2023 by posting a notice at the university. The date of the announcement is 15 September 2023.