

Please note:
Legally binding is exclusively the original German version!

**Study and examination regulations
for the postgraduate master course Paper Technology
at the University of Applied Sciences - Munich University of Applied Sciences**

from 01.09.2004

(as amended by the Seventh Amendment Statute dated 21.05.2021)

On the basis of Art. 13 Para. 1 Sentence 2, Art. 43 Paras. 4 to 6, Art. 58 Para. 1, Art. 61 Paras. 2 and 3, and Art. 66 Para. 1 of the Bavarian University Act (BayHSchG), the University of Applied Sciences Munich enacts the following statutes:

§ 1

Purpose of the study and examination regulations

These study and examination regulations serve to fill out and supplement the Framework Examination Regulations (RaPO) for the Universities of Applied Sciences of October 17, 2001 (BayRS 2210-4-1-4- 1-WFK) and the General Examination Regulations of the Munich University of Applied Sciences of January 29, 2008 in their respective versions.

§ 2

Study Goal

- (1) ¹The master's degree program in Paper Technology, which is subject to fees, builds on the knowledge gained from a first university degree qualifying for a profession. ²With the successful completion of this master's program, a further profession-qualifying university degree is acquired.
- (2) ¹The master's program provides students with in-depth chemical and engineering knowledge in order to carry out the industrial production of paper and board in an economical, resource-saving and sustainable manner as well as to develop and design processes for the production of paper and board. ²Through practice-related project work and the teaching of key qualifications, students should be enabled to take on demanding management, leadership and executive functions in the international paper and board industry. ³The successfully completed master's program can also be the basis for further scientific qualification in a subsequent doctoral program.

§ 3

Qualification for the study

- (1) Qualification requirements for admission to the advanced master's degree program Paper Technology (Continuing Education) are:
 1. ¹Proof of at least 180 ECTS credits and at least six theoretical semesters of study, with an overall examination result of "good".

or better professional degree in process engineering, mechanical engineering, chemistry, printing technology or wood and pulp technology from a German university or equivalent degree. ²Applicants who have completed their first degree in accordance with sentence 1 with an overall examination result of 2.6 to 3.0 must prove their professional suitability within the framework of an aptitude test in accordance with § 4 Para. 3 of these regulations. The aptitude test serves to verify additional requirements specific to the master's degree program.

2. Proof of at least one year of relevant, qualified work experience after completion of the degree program mentioned in No. 1 or the equivalent degree mentioned there.
3. Evidence of a good command of written and spoken English. This proof can be provided by:
 - a) TOEFL test (Test of English as a Foreign Language) with above-average score (according to current Internet-based test: at least 80 points),
 - b) IELTS (International English Language Testing System) test with at least a 5.5 average,
 - c) Foreign language certificate UNiCert® II or III English or DAAD table and DAAD test of HM with result/equivalent to min. B2,
 - d) Bachelor's or Master's degree completely in English or
 - e) One-year qualifying study abroad experience in an English-speaking country.

The language certificate required according to sentences a) to c) must not be older than two years. The proof of language proficiency can be submitted until the end of the 1st semester. In cases of doubt, the examination board will decide.

- (2) The qualification criteria mentioned in para. 1 nos. 2 and 3 must be proven no later than one semester after the start of the master's program in the case of a full-time program, and no later than one year after the start of the master's program in the case of a part-time program.
- (3) The Examination Commission (§ 9) shall decide on the equivalence of university degrees or equivalent degrees according to Paragraph 1 No. 1, of language skills according to Paragraph 1 No. 3, and in cases of doubt concerning Paragraphs 1 to 3, taking into account Art. 63 Paragraph 1 BayHSchG.

§ 4

Admission and suitability procedure

- (1) ¹Admission to the Master's program in the first semester is possible in the winter semester of an academic year. ²The written application with the required documents can be submitted all year round to the Faculty of Supply and Building Services Engineering, Process Engineering Paper and Packaging, Printing and Media Technology at the Munich University of Applied Sciences.
- (2) The chairperson of the examination board, together with another member, decides whether the qualification requirements for the master's program have been met.
- (3) ¹The aptitude test according to § 3 (1) No. 1 sentence 2 is carried out on the basis of the application in due form and time, the application documents submitted and a 20-40 minute interview to which the applicant is invited (admission interview). ²The subjects of the interview are knowledge of chemistry, mathematics and physics, as well as adequate English language skills. ³The applicant must demonstrate the ability to perform interdisciplinary scientific work and to make decisions based on structured, systematic approaches to solving technical problems.
- (4) ¹The aptitude test is carried out by two professors and/or research assistants or lecturers from the Faculty of Supply and Building Services Engineering, Process Engineering for Paper and Packaging, Printing and Media Technology, who are appointed by the Examination Committee and at least one of whom teaches in the Master's program. ²The aptitude test is passed if both examiners agree on the grade "passed with success".
- (5) ¹A transcript of the aptitude test must be prepared, showing the date and place of the interview, its topics, the names of the candidate, the examiners and the result. ²The minutes must be signed by the examiners.
- (6) Applicants are usually notified of the results of the aptitude test no later than one month before the start of their studies.
- (7) ¹In case of rejection, the application is possible for another date. ²A third application is excluded.

§ 5

Structure of the program and standard period of study

- (1) ¹The advanced master's degree program is offered as a full-time program or as a part-time program.
- (2) ¹The standard period of study of the full-time program is four theoretical semesters including a master's thesis. ²The standard period of study for part-time studies is eight theoretical semesters including a master's thesis.

- (3) In part-time studies, a maximum of 20 ECTS credits may be earned per semester.
- (4) There is no entitlement to the Master's program being carried out if there is an insufficient number of applicants.

§ 6

Crediting of competences acquired elsewhere

- (1) ¹The examination board of the Master's degree program Paper Technology (Continuing Education) decides on the crediting of professional knowledge and skills acquired outside the university sector upon written application by a student. ²The application must be accompanied by written evidence of the examination results and the competences achieved.
- (2) ¹The board of examiners examines the equivalence of the acquired competences on the basis of the submitted evidence in comparison with the study objectives of the module catalog of the aforementioned master's degree program. ²The knowledge and skills acquired outside the university area must essentially correspond to the competencies of a module of the Master's degree program. ³In the case of ambiguities, the student must prove his/her competences acquired outside the university in a 30-minute expert discussion with a professor and a member of the examination board. ⁴A transcript of the discussion must be prepared and signed by the examiners. ⁵The interview is passed if the examiners award the grade "passed with success".
- (3) ¹The Examination Committee informs the Examination Administration of the Munich University of Applied Sciences of the competences successfully completed in the modules of this degree program as well as the ECTS credits to be credited. ²In the case of a rejection of a credit, reasons must be given.
- (4) Competencies acquired outside of higher education may be credited and transferred up to half of the ECTS credits allocated to the master's degree program.
- (5) ¹The periods of study completed at other universities and the university qualifications acquired shall be recognized, provided that no significant differences with regard to the competences acquired can be determined and justified by the examination board.
²Paragraphs 1 to 3 apply analogously with regard to the crediting procedure.

§ 7

Modules and exams

- (1) ¹The modules, their number of hours, the type of courses, the number of ECTS credits, the form and procedure of the examinations, the processing times for written examinations and the duration of oral examinations as well as the grade weights for the formation of the final module grades are specified in the appendix to these study and examination regulations. ²Details are regulated by the study plan.
- (2) The modules are listed as compulsory modules and as subject-specific elective modules.
 1. Compulsory modules are those modules that are mandatory for all students of the master's program.
 2. ¹In the subject-specific elective modules, students must make a certain selection in accordance with these study and examination regulations and the study plan. ²The selected modules are treated as compulsory modules.

§ 8

Study plan

- (1) ¹The Faculty of Supply and Building Services Engineering, Process Engineering Paper and Packaging, Printing and Media Engineering shall draw up a study plan detailing the course of study in order to ensure the courses offered and to inform the students. ²The study plan is decided by the Faculty Council and is to be made public at the university. ³The announcement of new regulations must be made at the latest at the beginning of the lecture period of the semester to which they apply for the first time.
- (2) The curriculum shall contain, in particular, regulations and information on:
 1. the distribution of the semester hours per week and ECTS credits per module and study semester, the type of course as well as the language of instruction and examination in the individual modules if this is not German and this is not conclusively regulated in the appendix,
 2. the catalog of elective compulsory modules that can be chosen by the students of the Master's program, their number of hours and ECTS credits, the type of courses as well as the language of instruction and examination in these modules, if this is not German, as well as the form of the examination required in each case and the processing time for the preparation of written examinations and the duration of oral examinations,
 3. the study objectives and study contents of the individual modules,
 4. more detailed provisions on the form and procedure of the individual examinations.

- (3) ¹There is no right to claim that all scheduled elective modules are actually offered. ²Similarly, there is no right to demand that courses be held if the number of participants is insufficient.

§ 9

Examination board

- (1) An examination committee consisting of three professors from the Faculty of Supply and Building Technology, Process Engineering Paper and Packaging, and Printing and Media Technology is formed for the postgraduate master's program in Paper Technology.
- (2) The Faculty Council elects the chairperson of the Examination Commission and his/her deputy. The examination board may delegate examination and decision-making powers to its chairperson in accordance with these statutes.

§ 10

Master thesis

- (1) ¹The master thesis is a scientific paper. ²In it, the student should demonstrate that he or she is capable of independently and scientifically working on a demanding task in the field of paper technology and that he or she can develop, evaluate and effectively implement solution strategies.
- (2) ¹The topic of the Master's thesis is issued at the earliest at the beginning of the third semester and at the latest at the beginning of the fourth semester. ²In the case of part-time studies, this period is extended accordingly. ³The issue of the topic requires that in at least 12 of the modules listed in the appendix in lines 1 - 20 the final grade of "sufficient" or better was achieved.
- (3) Professors and lecturers who teach in this Master's program are eligible to act as assignment writers and supervisors for Master's theses.
- (4) ¹The processing time of a Master's thesis from the time the assignment is set to the time of submission is a maximum of six months. ²Upon request of the candidate, the examination board may extend the submission deadline in agreement with the person submitting the assignment. ³The extension of the deadline should not exceed three months.
- (5) ¹If a Master's thesis is assessed with the grade "not sufficient", it can be repeated once with a new topic. ²The new topic must be assigned no later than one month after notification of the result of the failed master's thesis. ³With regard to the processing time, the regulation of paragraph 4 applies.
- (6) The master thesis is to be written in English.

- (7) ¹A Master's thesis can be written as an individual or group thesis. ²In the case of group work, the contribution of each student to be evaluated as an examination performance must be clearly distinguishable on the basis of the specification of sections, page numbers or other criteria that enable a clear assignment and must be able to be evaluated as an individual performance.

§ 11

Evaluation of examination performance and overall examination result

- (1) The differentiated evaluation of the examination performance is carried out with
- the grade numbers: 1.0; 1.3=very good;
1,7; 2,0; 2,3 = good;
2,7; 3,0; 3,3 = satisfactory;
3.7 and 4.0 = sufficient;
5,0 =not sufficient.
- (2) For the calculation of the overall examination result, the final grades of all modules and the grade of the master thesis are weighted according to their respective ECTS credits.
- (3) In the Master's examination certificate, the underlying grade values with one decimal place are added to the final module grades and the grade of the Master's thesis in parentheses.
- (4) The awarding of a relative ECTS grade for the overall examination result follows the procedure specified by the Examination and Internship Department of the Munich University of Applied Sciences and described in more detail in the General Examination Regulations (APO) of the Munich University of Applied Sciences.

§ 12

Master's examination certificate

A certificate is issued for passing the Master's examination in accordance with the Annex to the General Examination Regulations of the Munich University of Applied Sciences.

§ 13

Academic degree

- (1) ¹On the basis of the successful completion of the master's examination, the academic degree of "Master of Engineering", in short form: "M.Eng. is awarded. ²The award of the academic degree requires that the graduate has acquired a total of at least 300 ECTS credits in the undergraduate degree program or in the equivalent degree and in this Master's program.

- (2) The awarding of the academic degree is documented in a certificate according to the respective model in the appendix to the General Examination Regulations of the Munich University of Applied Sciences.

§ 14
Entry into force

These study and examination regulations come into force with effect from March 15, 2004.

Attachment:**Overview of modules and examinations in the postgraduate master's program Paper Technology at the University of Applied Sciences Munich**

| 1) Lfd. No. | 2) Modules 1 | 3) SWS | 4) ECTS- Credit- points 2 | 5) Type of course 1 | Exams | |
|---|---|-----------|------------------------------------|---------------------------|--|---|
| | | | | | 6) Type of examination and duration of written and oral examinations in minutes 1, 3 | 7) Weighting factors for the formation of the final module grade |
| 1 | Chemical Engineering | 4 | 5 | SU, Ü, Pr, Ex | schrP, 120 - 240 | |
| 2 | Introduction to Paper Technology | 4 | 5 | SU, Ü, Pr, Ex | schrP, 90 - 180 | |
| 3 | Pulp Technology | 2 | 5 | SU, Ü, Pr, Ex | schrP, 90 - 180; 1 StA 4 | schrP: 0.5; StA: 0.5 |
| 4 | Stock Preparation | 2 | 5 | SU, Ü, Pr, Ex | schrP, 90 - 180; 1 StA 4 | schrP: 0.5; StA: 0.5 |
| 5 | Paper Testing | 4 | 5 | SU, Ü, Pr, Ex | schrP, 90 - 180 | |
| 6 | Paper Chemistry | 4 | 5 | SU, Ü, Pr, Ex | schrP, 90 - 180 | |
| 7 | Minerals | 4 | 5 | SU, Ü, Pr, Ex | schrP, 90 - 180 6 | |
| 8 | Automation I | 4 | 5 | SU, Ü, Pr, Ex | schrP, 90 - 180 | |
| 9 | Automation II | 4 | 5 | SU, Ü, Pr, Ex | oralP, 15 - 30 | |
| 10 | Board and Paper Technology I | 4 | 5 | SU, Ü, Pr, Ex | schrP, 90 - 180 6 | |
| 11 | Board and Paper Technology II | 4 | 5 | SU, Ü, Pr, Ex | oralP, 15 - 30 6 | |
| 12 | Coating I | 4 | 5 | SU, Ü, Pr, Ex | schrP, 90 - 180 | |
| 13 | Coating II | 4 | 5 | SU, Ü, Pr, Ex | oralP, 15 - 30 6 | |
| 14 | Project Management and Inter-cultural Communication | 4 | 5 | SU, Ü, Pr, Ex | oralP, 15 - 30 | |
| 15 | General Management I | 2 | 5 | SU, Ü, Pr, Ex | schrP, 90 - 180, 1 StA 4 | schrP: 0.5; StA: 0,5 |
| 16 | General Management II | 4 | 5 | SU, Ü, Pr, Ex | schrP, 90 - 180 | |
| 17 | Statistics and Design of Experiments | 4 | 5 | SU, Ü, Pr, Ex | schrP, 90 - 180 | |
| 18 | Technical Elective 5 | 4 | 5 | SU, Ü, Pr, Ex | 2 exams 5 | Per examination performance : 0.5 |
| 19 | General Elective 5 | 4 | 5 | SU, Ü, Pr, Ex | 2 exams 5 | Per examination performance : 0.5 |
| 20 | Project | 2 | 5 | SU, Ü, Pr, Ex | PA 6 | |
| 21 | Master's Thesis | | 20 | | MA, Col7 | |
| Sum of SWS and ECTS credit points: | | 72 | 120 | | | |

Notes:

- ¹ The details are determined by the Faculty Council in the curriculum.
- ² One ECTS credit corresponds to a workload of 30 working hours.
- ³ In the case of an "insufficient" grade in an examination, the final module grade "not sufficient" is awarded. A final module grade of at least sufficient and an evaluation of the master thesis with the grade "sufficient" or better are prerequisites for passing the master examination.
- ⁴ The student research project is a written paper of at least 15 pages on a given topic, which must be completed during each semester.
- ⁵ ¹The *Technical Elective* module teaches technical and scientific subjects, while the *General Elective* module teaches non-technical subjects. ²The *Technical Elective* and *General Elective* modules are each examined in two examinations, as specified in the curriculum. ³The following forms of examination are possible: 90- to 180-minute written examination, 15- to 30-minute oral examination or a seminar paper with presentation. ⁴Both examinations are weighted in the ratio 0.5 : 0.5 to form the final module grade.
- ⁶ Participation certificates for the internship are written laboratory reports (five to ten pages) with 75% attendance in the internship, which have been evaluated as "successfully completed".
- ⁷ ¹The project work is an in-depth study of at least 30 pages on a topic specified by the respective lecturer or determined in consultation with the student. ²The duration of the work and the deadline are determined by the respective lecturer.
- ⁸ The award of the predicate "passed with success" (m. E. a.) on the colloquium is vo-. The course is a prerequisite for passing the Master's examination.

Abbreviations:

| | | | | | |
|------|---|-------|------------------|-----|------------------|
| ECTS | Credit points according to the European Credit Transfer and Accumulation System | oralP | oral examination | SU | Seminar teaching |
| Ex | Excursion | PA | Project work | SWS | Semester hours |
| Kol | Colloquium | Pr | Internship | Ü | Exercise |
| MA | Master thesis | schrP | written exam | | |