Information on the Doctoral Process at the Faculty of Physics

In addition to the academic supervision of a doctoral thesis, there are some organizational procedures to be followed.

Admission with a Master’s degree

If you want to supervise a doctoral candidate, give them a confirmation of supervision. Under this agreement, up to two authorized examiners undertake to supervise the doctoral candidate in the preparation of a dissertation for a specified period, usually three years. One of the supervisors acts as the prime supervisor. See form https://www.en.physik.uni-muenchen.de/promotion/berechtigung/

Please note the criteria for admission (see below).

The student submits the confirmation of supervision together with the application form and additional documents (certificates) to the dean’s office as described in https://www.en.physik.uni-muenchen.de/promotion/berechtigung/.

On the basis of this application, the dean decides on acceptance as a doctoral candidate, subject to conditions if necessary (see below).

The student can then enroll in the doctoral program.

In addition to the confirmation of supervision, a supervision agreement can also be concluded in which the expectations, obligations and duties of both parties are set out (for details see the doctoral degree regulations).

In addition to the confirmation of supervision, the main admission criterion is the final grade for the Master’s degree. The final grade must be at least good or the student must be among the top 30% of their peer group. For us this means a grade of <=2.5. Grading systems of other countries are converted linearly (so called “Bayerische Formel”).

- With a Master’s in Physics (Astrophysics, Meteorology analogously) from the EU with 5 years BSc + MSc together, admission is usually straightforward.
- With a Master’s degree from a related field (Chemistry, Biophysics, or the like), admission may be possible with conditions.
- With a Master’s degree in Physics of a total of 4 years’ education (e.g. first degree Master or 3 years BSc + 1 year MSc), admission is possible with the same conditions as for admission with an excellent Bachelor’s degree.
Admission with an excellent Bachelor’s degree

Outstanding students with a Bachelor’s degree can be granted direct admission to doctoral studies. Before starting the doctoral project, however, they must first acquire 60 ECTS points from one of the Faculty of Physics’ Master’s programs for further qualification (see below).

The admission requirement is an excellent Bachelor’s degree with “very good,” or placement among the top 10% in the class. If the Bachelor’s degree was obtained outside the EU, the result of a GRE subject test in Physics or Mathematics must also be submitted.

In addition, applicants with a Bachelor’s degree have to provide a confirmation of mentorship from an authorized examiner of the Faculty of Physics. It should include a statement on the quality of the applicant and confirm the willingness of the mentor to advise them on the acquisition of 60 ECTS points. The mentor can combine the confirmation with a possible interest in academic supervision of a Master’s thesis or doctoral project. However, this is not a must. As a general rule, the mentoring commitment expires one year after registration in a Master’s program. If you are willing to take on such a mentorship, send a confirmation of mentorship directly to the dean’s office. See form https://www.en.physik.uni-muenchen.de/promotion/berechtigung/bsc/

The student submits the application form and additional documents (certificates, GRE) to the dean’s office as described in https://www.en.physik.uni-muenchen.de/promotion/berechtigung/ and https://www.en.physik.uni-muenchen.de/promotion/berechtigung/bsc/.

On the basis of this application and your confirmation of mentorship, the dean will decide on the acceptance as a doctoral candidate. This grants admission to one of the Master’s programs of the Faculty of Physics. Within two semesters after registration in such a Master’s program, the doctoral candidate must successfully acquire 60 ECTS points from a Master program at the faculty of physics with an average grade of at least good (grade of <=2.5). Course selection takes place in consultation with the mentor. The doctoral candidate must provide the dean’s office with proof of these necessary qualifications at the end of the two semesters. If this is not done, acceptance as a doctoral candidate expires. In this case, admission to doctoral studies is only possible by successfully completing a regular Master’s program (i.e. including the submission of a Master’s thesis) and a renewed application for acceptance as a doctoral candidate.

Once the doctoral candidate has successfully acquired the 60 ECTS points, they have to find a supervisor for the doctoral project. This can be the previous mentor, or another authorized examiner of the Faculty of Physics. The supervisor prepares a confirmation of supervision. The doctoral student submits this confirmation to the dean’s office together with proof of the 60 ECTS points earned, as described in https://www.en.physik.uni-muenchen.de/promotion/berechtigung/.

If the review of these documents by the dean’s office is successful, the doctoral candidate can start the doctoral project. Enrolment at the LMU in the doctoral program is then possible.

In addition to the confirmation of supervision, a supervision agreement can also be concluded in which the expectations, obligations and duties of both parties are set out (for details see the doctoral degree regulations).

By taking the direct route from a Bachelor degree to a doctorate, the student does not receive a Master’s degree. However, the German salary system may entail serious disadvantages for persons
without a Master’s degree. For this reason, all doctoral candidates with a Bachelor’s degree are advised not to begin with the doctoral project immediately after acquiring the 60 ECTS points, but instead to first complete a Master’s program. Students who choose this route must complete the prescribed curriculum (lectures, practical phases, Master’s thesis, etc.) in full in the respective Master’s program. The research findings obtained as part of a Master’s thesis can be used as a starting point for the subsequent doctoral project and thus form the basis for quicker completion of the doctoral process. However, a dissertation cannot be recognized as a practical phase and Master’s thesis.

Please note: Acceptance as a doctoral candidate does not automatically imply the possibility of employment or classification in a particular salary bracket. Please be sure to clarify this in advance with the supervisor, who in turn will involve the responsible Human Resources department. This applies in particular to doctoral candidates who have chosen direct admission to doctoral studies with a Bachelor’s degree.

Doctoral Examination

Dissertation
A dissertation can be submitted either as a doctoral thesis or as a cumulative dissertation. Other formal requirements are provided on the website.

A cumulative dissertation must be approved by the dean and requires consent of the first supervisor. This can be done informally in the dean’s office. The dean requires a list of published and submitted papers, including in general at least three refereed and accepted first author publications in a high ranking journal.

Admission to Doctoral Examination
The application for admission to the doctoral examination must be submitted in writing to the dean’s office. You can refer the doctoral candidate to the website which specifies the documents required in addition to the dissertation (the requirements, etc. must be fulfilled in due time and proof must be provided).

• A cumulative dissertation requires approval and consent (see above). This must be provided.  
• In addition to the dissertation, etc., the doctoral candidate must submit a proposal for the doctoral committee. Please support the doctoral candidate in this process. External members are possible (for details see the doctoral degree regulations).

Upon admission to the doctoral examination, the dean also appoints the doctoral committee.

Reports and Examination

• The reports of the first and second reviewer should be available within two months after submission of the dissertation. Please note that the doctoral degree examination can be scheduled at the earliest three weeks after submission of both reports.  
• The other members of the doctoral committee receive the reports in circulation and are expected to comment within one week (e.g. accept the dissertation).
• The dissertation is then available for two weeks in the dean’s office together with the reports of the reviewers. Authorized examiners of the faculty can then also comment (for details see the doctoral degree regulations).
• The oral examination, which lasts approximately one hour, is conducted by the doctoral committee (for details see the doctoral degree regulations).

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