

DOCTORAL DEGREE PROGRAM IN MEDICAL SCIENCE

Curriculum

Medical University of Graz

Version 20

History of Decisions and Revisions

Version	Date of decision ¹	Date of approval ²	Summary of revisions/date	Effective date
09	4.3.2008	12.3.2008	Implementation of the three-year doctoral program	01.10.2008
10	4.3.2009 17.6.2009	25.3.2009 24.6.2009	Editorial changes, submission of dissertation agreement/interim report	01.10.2009
11	11.5.2011	18.5.2011	Revision of the table of courses, dissertation agreement	01.10.2011
12	4.6.2014	25.6.2014	Implementation of English language in training activities and thesis, introduction of peer reviewed publication as requirement for acceptance of the thesis	01.10.2014
13	10.06.2015	24.06.2015	Curriculum, evaluation of thesis, final public comprehensive oral examination	01.10.2015
14	1.6.2016	22.6.2016	Editorial changes	01.10.2016
15	6.6.2018	20.6.2018	Editorial changes	01.10.2018
16	5.6.2019	26.6.2019	Editorial changes	01.10.2019
17	10.06.2020	24.06.2020	Changes in courses	01.10.2020
18	9.6.2021	23.6.2021	Qualitative admission restrictions; entrance interview	01.10.2021
19	1.6.2022	22.6.2022	Admission requirements, courses	01.10.2022
20	07.06.2024	19.06.2024	Regulation supervisors	01.10.2024

¹ A decision of the Curricular Commission for Doctoral Studies

² Approval of the Senate

Goals

§ 1. Goal and purpose of the Doctoral Degree Program in Medical Science

The Doctoral Degree Program in Medical Science equips students with the skills for conducting independent research so that they may contribute to the advancement of the medical sciences in the field of clinical research or basic research and trains future generations of research scientists in medicine and the life sciences. More information on the educational goals and qualification profile is found in Appendix I.

As the third cycle in the Bologna process, doctoral training integrates education and productive research. Students are regarded as being researchers at the beginning of their careers in line with the European Charter for Researchers.”³

Admission requirements

§ 2. Admission to the Doctoral Degree Program in Medical Science

- (1) Admission to the Doctoral Degree Program in Medical Science requires the completion of a relevant diploma/master's degree program
 - a. in particular in the field of medicine, dentistry, veterinary medicine
 - b. in the field of life sciences or technical studies
 - c. in the field of health sciences
- (2) Admission may also be granted if an equivalent degree program has been completed at a recognized Austrian or foreign tertiary educational institution. To compensate for substantial differences in subjects, supplementary examination may be required. The Rectorate may determine which of these supplementary examinations are required for taking examinations offered in the curriculum of the PhD program.
- (3) Furthermore, admission to the Doctoral Degree Program in Medical Science is also possible on the basis of completion of a bachelor's program with excellent academic results according to § 64 (5) Universities Act 2002, according to the guideline of the Rectorate, especially in cases where the completion of a continuous master study was not possible.
- (4) Individuals who meet the admission requirements according to § 2 (1) or (2) are eligible to apply for one of the advertised dissertation topics offered by the doctoral schools (§ 4). In the admissions interview in the presence of the doctoral school faculty, the candidates present their scientific background and the results of their diploma/master's thesis (or in cases of §2 (3) their bachelor thesis), explain their motivation for starting a doctoral program and discuss the dissertation project they have chosen. The Dean of Doctoral Studies awards the topic to the applicant based on the recommendation made by the faculty of the respective doctoral school.
- (5) If the work on the dissertation topic require the use of patient data, human resources or financial or material resources of the institute/clinical department, approval may only be granted if the director of the relevant institute, division (*Lehrstuhl*), clinical division or clinical department

³ OJ L 75/67 of March 22, 2005, Commission Recommendation of March 11, 2005 on the European Charter for Researchers and a Code of Conduct for the Recruitment of Researchers (2005/251/EC).
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(if there are no clinical divisions) has been informed of the proposed work in writing and has not prohibited it within one month due to a significant impairment of clinical, teaching and research operations. Furthermore, it must be ensured that patient data necessary for the dissertation is made available to the student in an appropriate format without violating data protection regulations.

Duration of the Doctoral Degree Program in Medical Science

§ 3. Duration

The Doctoral Degree Program in Medical Science is a full-time program that is completed over the course of six semesters and may be attended part-time as required by students who are employed.

Doctoral schools

§ 4. Doctoral schools

(1) The Doctoral Degree Program in Medical Science is structured into doctoral schools.

(2) Scope and name of a doctoral school

Doctoral schools focus on clearly defined yet not too narrow subject areas that are in line with a key research area of the Medical University of Graz.

(3) Members of a doctoral school (Faculty)

Members of a doctoral school (faculty) are qualified university teachers who have completed a habilitation (with *venia legendi* certification), are scientifically active within their respective field, and supervise dissertations. The Dean of Doctoral Studies appoints the members of a doctoral school based on the recommendation of the speaker of the doctoral school. University teachers from other universities may also become members of a doctoral school. If the criteria above are no longer met, membership expires after three years.

In the following points, "doctoral school" also encompasses the faculty of a doctoral school.

(4) Speaker of a doctoral school

The members of a doctoral school elect a speaker and a deputy speaker. The speaker is responsible for the internal coordination of the doctoral school and represents the doctoral school to the university and the public.

(5) Each doctoral school is responsible for providing high-quality training courses in accordance with this curriculum. This includes the design of course content.

(6) Establishment of doctoral schools

A proponent committee submits a proposal for a doctoral school to the Dean of Doctoral Studies. The Dean of Doctoral Studies evaluates the proposal.

The criteria for assessing the applications are:

- Scientific quality of the proposal
- Connection to the strategy of the university
- Future potential of the doctoral school

- International and national networks
- Existing potential (faculty, resources, previous achievements)
- Critical size of the faculty
- Proof of compliance with the prerequisites for supervision and integration of doctoral students in productive working groups

The doctoral schools are established by the Dean of Doctoral Studies upon submission of a scientific concept and a training program and after a statement has been obtained from the Curricular Commission for Doctoral Studies.

(7) Interuniversity doctoral schools can also be established and existing doctoral schools can participate in or propose such doctoral schools. The distribution of teaching responsibilities in accordance with § 5 as well as any further aspects of the collaboration is defined in a cooperation agreement. The procedure is the same as the one set out in (6).

(8) The speakers of the doctoral school submit annual reports to the Curricular Commission for Doctoral Studies and the Dean of Doctoral Studies.

Courses

§ 5. Courses

(1) During the doctoral program, the following courses must be successfully completed (see Table 1):

Fundamentals of scientific research in doctoral studies

In this seminar of 2 semester hours, students of all doctoral schools are introduced to the sequence of their doctoral program and all research-related ethical principles and rules. They obtain important information about the quality criteria that apply to scientific research. The course also demonstrates how their work on the dissertation project is supported by technological and organizational facilities at the Medical University of Graz.

Introduction to the research topic of the respective doctoral school

In this course of 1 semester hour, each doctoral school introduces itself to its candidates and provides information on its field of research, topics and the work methods.

*Fundamentals of scientific research and general skills**

Students must attend a total of 4 semester hours of courses which they can choose among topics such as scientific theory; ethics; use of statistical methods; methods for planning, documentation, evaluation, and (meta)analysis of medical research studies and experiments; writing of scientific papers; presentation skills; university didactics; scientific English; and management of scientific projects. Depending on the selected courses, these are designed as seminars, seminars with exercises or practical courses.

*Dissertation seminar**

Students must complete a total of 6 semester hours of seminars and workshops in the field or a subfield of the dissertation topic.

*Literature clubs and guest lectures**

These courses (seminars) and lectures of 4 semester hours present and critically discuss new findings in the discipline. A confirmation of completed literature clubs and guest lectures must be submitted to the Dean of Doctoral Studies.

Project presentations

In this seminar of 0.5 semester hours, students present reports on their current dissertation project to their fellow students and faculty members of the respective doctoral school for critical discussion. A confirmation of the positively completed project presentations must be submitted to the Dean of Doctoral Studies.

Elective

A maximum of 4 semester hours (courses marked with *) may be completed as electives as long as there exists a thematic connection to the doctoral thesis and the scientific depth is appropriate to the doctoral degree program. Electives can be chosen from a list published at MEDonline of courses offered at the Medical University of Graz or may be completed at another postsecondary educational institution and then approved by the Dean of Study Affairs in a recognition procedure after a positive statement has been obtained from the speaker of the doctoral school.

Presentation of the dissertation topic and work plan to the Dissertation Committee

In the first semester, the dissertation topic and the work plan is presented to the Dissertation Committee (0.5 semester hours) within a seminar. The doctoral candidate and the Dissertation Committee agree on which courses will be taken in accordance with the curriculum. The speaker of the doctoral school forwards the presentation and a written assessment by the Dissertation Committee to the Dean of Doctoral Studies.

Interim report to the Dissertation Committee

In the third and fifth semesters, written interim reports are prepared and presented to the Dissertation Committee (0.5 semester hours each) within a seminar. The speaker of the doctoral school forwards the interim report and a written assessment by the Dissertation Committee to the Dean of Doctoral Studies.

Public presentation (e.g., Doctoral Day)

During the doctoral program, 2 public presentations (0.5 semester hours each) must be prepared and presented at the Doctoral Day of the Medical University of Graz or at a scientific congress. Active participation in at least one Doctoral Day is mandatory.

Table 1

Suggested semester schedule	Semester-hours
Semester 1	
Fundamentals of scientific research in doctoral studies	2
Introduction to the research topic of the respective doctoral school	1
Presentation of the dissertation topic and work plan to the Dissertation Committee	0.5
Semester 2	
Fundamentals of scientific research and general skills*	2
Dissertation seminar*	2
Semester 3	
Fundamentals of scientific research and general skills*	2
Literature clubs and guest lectures*	2
First interim report to the Dissertation Committee	0.5
Semester 4	
Project presentations	0.5
Dissertation seminar*	2
Literature clubs and guest lectures*	2
Public presentations (scientific congress or Doctoral Day)**	0.5
Semester 5	
Dissertation seminar*	2
Second interim report to the Dissertation Committee	0.5
Semester 6	
Public presentations (scientific congress or Doctoral Day)**	0.5
Total	20

* These courses may be completed as electives.

** Active participation in at least one Doctoral Day is mandatory.

(2) All courses will be held in English. Exempt are courses with a thematic focus that requires German as scientific language.

(3) The courses are proposed by the doctoral schools and approved by the Dean of Doctoral Studies. The courses are designed in accordance with the types of courses specified in the statutes of the Medical University of Graz, in particular seminars, seminars with exercises or practical courses.

(4) At least 50% of the courses must be completed at the Medical University of Graz. The dissertation topic and the interim reports must be presented at the Medical University of Graz.

(5) The successful completion of all courses constitutes the first part of the viva (Rigorosum).

(6) Transitional provisions: The new courses in the first semester ("Fundamentals of scientific research in doctoral studies," "Introduction to the research topic of the respective doctoral school") will replace the previous course ("Fundamentals for graduates in medicine/ dental medicine or science and engineering") starting winter semester 2020/21. If this course has already been successfully completed, it will still be accepted in lieu of the two new courses. Completion of all courses according to curriculum version 16 is also required before registration for the final comprehensive oral examination.

For students who have not yet completed all courses, the following rules apply to the course "Literature clubs, project presentations and guest lectures." If both "Literature clubs, project presentations and guest lectures" courses for a total of 4 semester hours have been completed, proof of a separate "Project presentation" is not required. Instead, proof of two "Public presentations (scientific congress or Doctoral Day)" is required.

If only one "Literature clubs, project presentations and guest lectures" of 2 semester hours has been completed, proof must be provided of the completion of one "Literature clubs and guest lectures" (2 semester hours), one "Project presentation" (0.5 semester hours) and two "Public presentations (scientific congress or Doctoral Day)" that total 1 semester hour.

Dissertation

§ 6. Dissertation

(1) The dissertation provides evidence that the student has acquired the knowledge and ability to successfully conduct scientific research on current issues in an autonomous manner. It must consist entirely of independent original work that the student has produced and written up on his/her own, which is confirmed by the student in a preamble to the dissertation. Furthermore, the student must confirm that the rules of good scientific practice, as set out by the Medical University of Graz, were followed during work on the dissertation and the related publications.

The rules and form of the dissertation are described in detail in the "Guidelines for the Preparation of a Dissertation" and the "Checklist for Students and Supervisors." The submission of a cumulative dissertation is permissible in individual and justified cases, but only after consultation with the Dean of Doctoral Studies and in compliance with the "Guidelines for the Preparation of a Dissertation."

Joint work on a topic by several students is permitted if the doctoral student's personal contribution is clearly defined and each participating doctoral student writes a separate dissertation.

The dissertation must be written in English. Exempt from this rule are dissertations with a thematic focus that requires German as scientific language. An abstract of the dissertation must be submitted in English and German.

(2) At the time of admission to the doctoral program, a dissertation agreement is made which governs the rights and obligations of the supervisor and the student.

(3) During the doctoral program, the student receives supported and is guided by a main supervisor. The main supervisor is responsible for guiding and supporting the doctoral student in his/her independent scientific work. This includes promoting independent scientific publications. Supervision of the student ends upon completion of the final comprehensive oral examination and after four years at the latest. If circumstances so require, the Dean of Doctoral Studies may extend the duration of supervision at the request of the student and with the supervisor's consent.

(4) In accordance with § 103 par. 1 of the Universities Act 2002, qualified university teachers (with *venia legendi* certification) or university professors emeriti at the Medical University of Graz are eligible to be main supervisors provided that they are authorized to teach in the field/subfield of the dissertation topic. Further qualifications for the supervision of a dissertation may also be recognized as a substitute. These mandatory qualifications for the supervisor are defined by DocSchool faculties and must be submitted to the Curriculum Committee for approval.

If in the interest of a particular doctoral thesis the Dissertation Committee includes an expert member of a different university or a non-academic member with *venia legendi*, this person may be assigned as an additional external supervisor.

For each dissertation, the Dean of Doctoral Studies appoints a Dissertation Committee consisting of at least three supervisors that is led by the main supervisor. One member must be from outside the institute, division (*Lehrstuhl*), clinical division or clinical department (if there are no clinical divisions) where the work will be performed. Two members of the committee must have *venia legendi* certification; it suffices if the other members have a doctoral degree in a scientific field. The Dissertation Committee supports and advises the student in the subject area at least once a year in a formal meeting. At this meeting, the doctoral candidate must present an interim report. The Dissertation Committee must provide written comments on the progress of the work in regular intervals and at least once a year. An extraordinary meeting of the Dissertation Committee may be requested by the supervisor, a Dissertation Committee member, the student or the Dean of Doctoral Studies.

(6) It is possible to change supervisors with due reason at any time before the dissertation is submitted. The approval of the Dean of Doctoral Studies is required.

(7) The completed dissertation is submitted to the Dean of Study Affairs by the Dean of Doctoral Studies, who conducts a formal examination of the dissertation according to the “Guidelines for the Preparation of a Dissertation” and the “Checklist for Students and Supervisors.” The Dean of Study Affairs nominates two reviewers. Before the dissertation can be forwarded to the reviewers for evaluation, at least one paper based on the results of the research must have been published, or accepted for publication in an SCI indexed journal with the candidate as the first author. Scientists who hold a teaching qualification (*venia legendi*) or a comparable qualification in the field of the dissertation and do not have any conflict of interest are eligible to be reviewers. The supervisor and members of the Dissertation Committee may not serve as reviewers of the dissertation.

The dissertation must be assessed by the Dean of Study Affairs within two months as “successfully completed” or “unsuccessfully completed.”

(8) The reviewers’ opinions and the grading of the dissertation are provided in writing to the student and the Dissertation Committee.

(9) The student must publish the positively assessed dissertation before being awarded the academic degree in accordance with the regulations of § 86 University Act 2002.

Examination regulations

§ 7. Examination regulations

(1) All courses are subject to ongoing assessment (immanent examination character) and can be completed according to the reported and approved course description e.g. with a written exam, a seminar paper, an oral presentation, or a practical exam. Attendance of at least 80% is required.

(2) The doctoral program is completed with the final comprehensive oral examination in front of a committee and the public).

- (3) The student is entitled to contact the Dean of Study Affairs to register for the final comprehensive oral examination if the following conditions are met:
- a) Completion of all course examinations and courses with ongoing performance assessment
 - b) Approval of the dissertation
- (4) The final comprehensive oral examination includes the defense of the dissertation and an examination in the field or subfield to which the dissertation belongs.
- (5) The Dean of Study Affairs appoints an Examination Board made up of three examiners to conduct the final comprehensive oral examination. One of the members is designated as the chairperson of the Examination Board. Scientists who hold a teaching qualification (*venia legendi*) or a comparable qualification in the field of the dissertation and do not have any conflict of interest are eligible to be examiners. The supervisor and the members of the Dissertation Committee may not serve as examiners.
- (6) The student is informed of the composition of the Examination Board at least four weeks prior to the examination. The time and place of the final examination are published on the website of the Medical University of Graz at least a week before the exam.
- (7) The final comprehensive examination is conducted as a public oral examination by the entire Examination Board and may last no longer than 90 minutes. The examination language is English. The candidate is to begin with a brief presentation of the dissertation and then defend the results obtained in the research (*defensio dissertationis*).
- (8) During the final comprehensive oral examination, the candidate must provide evidence of his/her scientific aptitude and skill and a thorough understanding of the main scientific problems in the field of the dissertation.
- (9) The chairperson of the Examination Board ensures that the final comprehensive oral examination is conducted in an orderly manner and keeps records of the examination. These records should include the name of the student, the subject(s) of the examination, the place and time thereof, the names of the Examination Board members, the questions asked, the grades given, reasons for a negative assessment and any particular incidents.
- (10) The discussion and vote by the Examination Board on the result of the final comprehensive oral examination of all examination subjects is held in a closed session. The decisions of the Examination Board are determined by a majority vote in which the chairperson, who enjoys the same voting rights as the other members, casts the final vote. When casting a vote, each member of the Examination Board should consider the results of the individual examination subjects as well as the overall impression of the final comprehensive oral examination.
- (11) If the Examination Board is unable to reach a decision on a grade, the grades proposed by the members are added, the sum is divided by the number of members and the result is then rounded mathematically to yield a whole number for the final grade. The final comprehensive oral examination is only regarded as being passed if each examination subject pursuant to paragraph 4 has been awarded a grade of at least “satisfactory.” If a grade of “unsatisfactory” is given for more than one examination subject, the final comprehensive oral examination must be repeated in its

entirety. Otherwise the repeat examination is limited to the examination subject that did not receive a passing grade.

Doctoral title and conferral of the doctorate

§ 8. Doctoral title and conferral of the doctorate

The Dean of Study Affairs promptly awards the graduates of the Doctoral Degree Program in Medical Science the title “Doctor of Medical Science” (Latin: “*Doctor scientiae medicae*”, abbreviated “Dr. scient. med.”) in an official written notification regardless of when academic ceremonies in celebration of the conferral of the doctorate are held and no later than one month after successful completion of the final comprehensive oral examination.

“PhD equivalent” should be entered in the Diploma Supplement.

Joint and double degree programs

§ 9. Joint and double degree programs

The Doctoral Degree Program in Medical Science may also be completed as part of a joint or a double degree program. In this case, the student spends at least one year working on his/her dissertation at the partner university. The student must submit an agreement regulating the joint or double degree program between the participating universities and defining the awarding of the university degree as a joint or double degree to the Dean of Doctoral Studies for approval. All work done and exams passed at the partner university that are stipulated in the agreement are recognized automatically.

Jurisdiction and rules of procedure

§ 10. Jurisdiction and rules of procedure

(1) Appeals against decisions by the Dean of Study Affairs may be made to the Federal Administrative Court (Art. 130 par. 1 l (1) B-VG (Federal Constitutional Act) in conjunction with § 46 par. 2 UG (Universities Act 2002)).

(2) The Dean of Doctoral Studies decides in the name of the Dean of Study Affairs on any study matters to the extent stipulated in the curriculum. Any requested written decision will be issued by the Dean of Study Affairs

(3) The General Administrative Procedure Act 1991, Austrian Federal Law Gazette No. 51/1991 as amended, applies to official proceedings regarding this curriculum.

Effective date of the curriculum

§ 11. Effective date of the curriculum

This curriculum enters into effect on October 1, 2024.

Annex I

Educational goals/qualification profile of the Doctoral Degree Program in Medical Science

The graduates are qualified to:

- independently conduct research at an international level
- publish the results of their research in internationally recognized journals
- present and discuss the results of their research at international conferences
- present the results of their research so the public can understand them
- conduct professional discussions with other scientists in English

The graduates understand and follow the ethical guidelines for research (good scientific practice).