

Training Plan, Sample Curriculum, and Comprehensive Examination Requirements for Full-Time (2+2-Year) Doctoral Training

- A minimum of 20 and a maximum of 45 credits can be earned per semester.
- During the first to fourth semesters, students must obtain at least 90 credits; only after earning these 90 credits may they be admitted to the comprehensive examination.
- Over the full eight semesters (2+2 years), students must earn a minimum of 240 credits.
- In the full-time 48-month doctoral programme, a total of 240 credits must be accumulated to obtain the final certificate (absolutorium).
- The issuance of the absolutorium may be requested by e-mail from the PhD Office (office.aokphd@med.u-szeged.hu), upon submission of the credit verification form and the Temporary Academic Record Book, or based on credits recorded in the Neptun system.

[illegible]

Biostatistics Practice	Department of Medical Physics and Informatics Prof. Dr. Tibor Nyári, DSc	20	C*	2	-	-	-	-	-	-	-	2	E3
Scientific communication and publication. Methods, rules, and ethics.	Department of Medical Biology Prof. Dr. Ernő Duda, DSc	14	C*	-	3	-	-	-	-	-	-	3	E5
Biomedical Ethics	Department of Behavioral Sciences Dr. Kelemen Oguz, Habil. PhD	14	C*	-	3	-	-	-	-	-	-	3	E5
The total No. of credits in Basic Module 1/a				14	6	-	-	-	-	-	-	20	

*C (Compulsory subject)

The announcement of basic courses may change each semester. Information about the courses announced in the current semester is available in Neptun System, during the course registration period. The courses are announced by the responsible lecturers and/or their departments at the beginning of the semester.

Module I/B.: Special (PhD program-related) PhD courses

-A **minimum of 18 credits** must be obtained within each PhD subprogram (specialization) during the first to fourth semesters.

-Information on courses offered in the current semester is available in the NEPTUN system.

-Each course may be completed only once and its credit value can be counted a single time.

-The Comprehensive Examination must be taken at the end of the fourth semester in the case of full-time doctoral training.

-The total number of **compulsory educational credits** (including core subjects and compulsory elective courses specific to each subprogram/specialization) is $20 + 18 = 38$ credits.

-The courses offered within each subprogram may vary from semester to semester. Information on the currently available courses can be found in the NEPTUN system during the course registration period.

-Courses are announced by the responsible lecturers and/or their respective departments at the beginning of each semester.

1. DERMATOLOGY PhD program

Programme director: Prof. Dr. Lajos Kemény

Clinical Dermatology KODI-DERMA-01 (Coordinator: Prof. Dr. Lajos Kemény. 28 hours, 6 credits, end-semester exam, 2-4 pm Wednesdays)

Differential Diagnosis of Inflammatory Skin Diseases (Coordinator: Prof. Dr. Lajos Kemény. 28 hours, 6 credits, final exam, 8-10 am Fridays)

Differential Diagnostic Procedures in Dermato-Oncology (Coordinator: Prof. Dr. Judit Oláh. 28 hours, 6 credits, final exam, 2-4 pm Tuesdays)

2. IMMUNOLOGY program

Program Director: Prof. Dr. Zsuzsanna Bata-Csörgő

The courses below are COMPULSORY for students doing their PhD in Immunology:

Clinical Immunology and Allergology KODI-IMMUN-01 (Coordinator: Prof. Dr. Zsuzsanna Bata-Csörgő. 28 hours, 6 credits, final exam)

Clinical Dermatology KODI-IMMUN-02 (Coordinator: Prof. Dr. Lajos Kemény. 28 hours, 6 credits, final exam, 14-16 Wednesdays)

Differential Diagnosis of Inflammatory Skin Diseases (Coordinator: Prof. Dr. Lajos Kemény. 28 hours, 6 credits, final exam, 8-10 Fridays)

The courses below are ELECTIVE, but recommended for students doing their PhD in Immunology:

Differential Diagnostic Procedures in Dermato-Oncology (Coordinator: Prof. Dr. Judit Oláh. 28 hours, 6 credits, final exam, 14-16 Tuesdays)

Selected Chapters from Immunology KODI-IMMUN-05 (Coordinator: Dr. Zoltán Veréb. 28 hours, 6 credits, final exam)

Regenerative Medicine and Stem Cell Biology KODI-IMMUN-06 (Coordinator: Dr. Zoltán Veréb. 28 hours, 6 credits, final exam)

3. REPRODUCTIVE HEALTH PhD program

Programme Director: Prof. Dr. György Bártfai

Family planning KODI-REPRO-ELE-1 (Coordinator: Dr. Tamás Bitó, 28 hours, 6 credits, final exam)

Complications in pregnancy KODI-REPRO-ELE-2 (Coordinator: Dr. Tamás Bitó, 28 hours, 6 credits, final exam)

Obstetric and gynecological aspects of metabolic diseases KODI-REPRO-ELE-3 (Coordinator: Dr. Tamás Bitó, 28 hours, 6 credits, final exam)

4. EXPERIMENTAL AND CLINICAL NEUROSCIENCES PhD program

Programme Director: Prof. Dr. László Vécsei

Understanding Pain: Bridging Science and Care AOKDI-ASZV-41 (Coordinator: Dr. Pál Barzó, 10 hours, 2 credits, final exam)

5. EXPERIMENTAL AND CLINICAL INVESTIGATION OF THE CARDIOVASCULAR SYSTEM PhD program

Program Director: Prof. Dr. Tamás Forster

To be announced later.

6. CLINICAL AND EXPERIMENTAL RESEARCH FOR RECONSTRUCTIVE AND ORGAN-SPARING SURGERY PhD programme

Program Director: Prof. Dr. György Lázár

Craniofacial Malformations - Clinical Team Meeting (Coordinator: Prof. Dr. József Piffkó, 2 hours/ week, 30 hours/semester, 6 credits. 2-4 pm Tuesdays, Department of Oral and Maxillofacial Surgery, Albert Szent-Györgyi Medical Center, University of Szeged, 57 Kálvária sugárút, Szeged, Hungary)

Clinical Maxillofacial Consultations (Coordinator: Prof. Dr. József Piffkó, 2 hours/ week, 6 credits. 12-14 Tuesdays, Department of Oral and Maxillofacial Surgery, Albert Szent-Györgyi Medical Center, University of Szeged, 57 Kálvária sugárút, Szeged, Hungary)

7. STUDY ON THE PATHOMECHANISMS AND THERAPEUTIC POSSIBILITIES OF DIFFERENT PEDIATRIC DISEASES PhD program

Programme Director: Prof. Dr. Márta Katona

To be announced later.

8. DENTAL MEDICINE (*Research in Dental Medicine*) PhD program

Programme Director: Prof. Dr. Melinda Madlén

Methodological Problems and Protocols in the Scientific Examination of Intraoral Diseases (Coordinator: Dr. Márk Antal, 28 hours, 6 credits, final exam)

Modern Methods and Materials in Prosthetic Dentistry (Coordinator: Dr. Márta Radnai, 28 hours, 6 credits, final exam)

9. TRANSLATIONAL MEDICINE PhD program

Programme Director: Prof. Dr. Péter Hegyi

HCEMM PhD course (Translational medicine: from bench to bedside and back again) (Coordinator: Prof. Dr. Lajos Kemény. 28 hours, 6 credits, end-semester exam)

Advanced biostatistics (Coordinator: Prof. Dr. Zoltán Rakonczay, II. semester; 2 credits 10 hours, practice) From 2025-26/II. semester).

Basic and advanced clinical pharmacology (Coordinator: Prof. Dr. Zoltán Rakonczay, II. semester; 2 credits 10 hours, practice) From 2025-26/II. semester).

Basic and intermediate biostatistics (Coordinator: Prof. Dr. Zoltán Rakonczay, I. semester; 2 credits 10 hours, practice) From 2025-26/I. semester).

Clinical trials (Coordinator: Prof. Dr. Zoltán Rakonczay, I. semester; 2 credits 10 hours, practice) From 2025-26/I. semester).

Group meetings and workshops I. (Coordinator: Prof. Dr. Zoltán Rakonczay, I. semester; 2 credits 10 hours, practice) From 2025-26/I. semester).

Group meetings and workshops II. (Coordinator: Prof. Dr. Zoltán Rakonczay, II. semester; 2 credits 10 hours, practice) From 2025-26/II. semester).

Patient registries in medical science and clinical practice (Coordinator: Prof. Dr. Zoltán Rakonczay, I. semester; 2 credits 10 hours, practice) From 2025-26/I. semester).

Presentation technique workshop I. (Coordinator: Prof. Dr. Zoltán Rakonczay, I. semester; 2 credits 10 hours, practice) From 2025-26/I. semester).

Presentation technique workshop II. (Coordinator: Prof. Dr. Zoltán Rakonczay, II. semester; 2 credits 10 hours, practice) From 2025-26/II. semester).

Scientific writing in translational medicine (Coordinator: Prof. Dr. Zoltán Rakonczay, II. semester; 2 credits 10 hours, practice) From 2025-26/II. semester).

Soft skills I. (Coordinator: Prof. Dr. Zoltán Rakonczay, I. semester; 2 credits 10 hours, practice) From 2025-26/I. semester).

Soft skills II. (Coordinator: Prof. Dr. Zoltán Rakonczay, II. semester; 2 credits 10 hours, practice) From 2025-26/II. semester).

Systematic review and meta-analysis I. (Coordinator: Prof. Dr. Zoltán Rakonczay, I. semester; 2 credits 10 hours, practice) From 2025-26/I. semester).

Systematic review and meta-analysis II. (Coordinator: Prof. Dr. Zoltán Rakonczay, II. semester; 2 credits 10 hours, practice) From 2025-26/II. semester).

10. INFLAMMATORY BOWEL DISEASE PhD program

Programme Director: Prof. Dr. Tamás Molnár

To be announced later.

Module I.c : Elective courses of the Doctoral School

KODI doctoral students are entitled to register for courses offered by other subprograms within the Doctoral School as elective subjects.

In addition, KODI students may also register for courses announced by other doctoral schools of the Faculty of Medicine, University of Szeged (SZTE SZAOK), provided that the respective doctoral school officially authorizes participation and makes the course available for KODI students.

In the case of studies completed at other faculties or universities, the recognition of previously earned credits may be granted through a credit transfer procedure. Detailed information is provided in *Annex 3: "Credit Transfer Application."*

Recommended elective courses held by other doctoral schools of the Faculty of Medicine, University of Szeged:

Clinical Genetics – 1 (Coordinator: Prof. Dr. Márta Széll, Department of Medical Genetics)

Courses held by the Faculty of Medicine and recommended for the first 3 semesters:

The theory and practice of animal experiments in medicine – Level A. Lecture: 20 hours, Practice: 20 hours, sum. 40 hours, **9 credits**. Head of the course: Prof. Mihály Boros MD, PhD, DSc. Institute of Surgical Research, Faculty of Medicine, University of Szeged, H-6724 Szeged, Pulcz u. 1, Hungary, Tel: +36-62-545-103, E-mail: boros.mihaly@med.u-szeged.hu

Module II.: Research Activities

Kötelező és megszerezhető kreditek:

- A recommended **minimum of 130 credits** must be earned in this module over eight semesters (30 hours = 1 credit).
- Max. 20 credits can be allocated for 30 hours of research activities in every semester (~30 hours/week). The total number of credits may not exceed 160.
- The maximum number of credits obtainable during the eight semesters is **172 credits**:
 - experimental research, maximum 20 credits / semester (8*20 credits)
 - research report, maximum 3 credits, maximum 4 reports / eight semesters.
- Research reports are recommended to be submitted at the end of semesters 2, 4, 6, 8.
- Further elective credits can be allocated for other research activities:
 - participation at scientific conferences and professional courses, workshops: max. 2 credits each
 - oral or poster presentation at international conferences, 5 credits each.

Module III.: Teaching activities (optional)

Important: Credits may only be awarded for participation in Hungarian-language teaching activities (such as giving lectures, supervising seminars, grading assignments, or invigilating exams). No credits may be granted for teaching in English or German, as PhD students participating in such courses receive hourly remuneration for their work.

Module IV.: Publication activities (obligatory, continuous)

a) Impact factor based requirements (until 12/31/2023)

- A continuous training criterion: **min. 2 publications, min. 65 credits, max. 90 credits**.
- Total number of credit points for publication activity (publications, posters and oral presentations): min. 65 – max. 90 credits.
- Number of publications required for completing the PhD training:
 - min. 1 publication where the PhD student is the first author

min. 2 original research articles, min. 1 of which is published in a journal with an impact factor and the combined impact factor of the 2 articles has to fulfill the requirements of the PhD program

-Number of credit points may be collected for publication activity:

Article type	Credit points
English article with no IF	20 credits
English article with IF	45 credits
Poster presentation at an international event	5 credits
Oral presentation at an international event*	5 credits
Participation in scientific conferences, courses, workshops	2 credits

*(also if held in Hungary)

-The number of impact factors to be achieved in the different programs:

	IFs
Immunology	4.0
Dermatology	2.0
Reproductive Health	2.0
Clinical and Experimental Neurosciences	4.0
Experimental and Clinical Investigation of the Cardiovascular System	3.0
Clinical and Experimental Research for Reconstructive and Organ-Sparing Surgery	2.0
Study on the Pathomechanisms and Therapeutic Possibilities of Different Diseases in Children	2.5
Dental Medicine	2.0
Translational Medicine	5,0
Inflammatory bowel disease	4,0

-Regarding the publications, where the PhD student is not the first author, all the other co-authors need to sign an authorization form, in which they authorize the student to include the given paper and its contents in hir/her PhD thesis.

-The first author has to issue a statement authorising the PhD student to include the paper in their thesis.

b) D/Q based requirements (mandatory from 01/01/2024 onwards)

-From 01/01/2024, doctoral candidates' publication activity in degree-awarding procedures will be assessed solely according to the MTMT-listed rating (D) or Scimago Journal Rank (SJR) quartile ranking (Q) of the relevant specialist journals.

-Based on this, a candidate may be admitted to the defense if one of the following conditions is met:

- The candidate has one first-authored, original, D1-classified scientific publication in English, which is used exclusively by the candidate to prepare the dissertation.
- The candidate has one first-authored, original, D1-classified publication in English, part of which is also used by another student for their dissertation. In this case, the candidate must additionally have one complete scientific publication of any classification in English.
- The candidate has one first-authored, original, Q1-classified publication in English, and one complete scientific publication of any classification in English. In the latter, the candidate may appear as a co-author, or an article published in a domestic publication in English may also be accepted.
- The candidate has one first-authored, original, Q2-classified publication in English, and at least two other complete scientific publications of any classification in English. In the latter, the candidate may appear as a co-author, or an article published in a domestic publication in English may also be accepted.
- The candidate has one first-authored, original, Q3-classified publication in English, and three other complete scientific publications of any classification in English. In the latter, the candidate may appear as a co-author, or an article published in a domestic publication in English may also be accepted.

-The same research result may not appear as an independent result in multiple procedures or dissertations. However, in exceptional cases, several students may share the results included in a given first-author main publication if the quantity and significance of the results allow this. This is possible only after individual assessment. For this, an application must be submitted to the KODI Council, detailing precisely how the results will be shared among the students. The sharing must be disclosed to the KODI Council before the first relevant procedure, which may approve the proposal and specify additional publications expected from the candidates. The application and the Council's decision are attached to the candidates' materials by the Doctoral Institute staff and sent to the appointed opponents, who will consider them in their evaluation.

-Starting December 2021, the Doctoral School of Clinical Medicine has defined the types of publications that are not accepted as first-author publications in the degree-awarding procedure:

- Publications with multiple or group authors. Exceptions may be granted by the KODI Council on a case-by-case basis, evaluating the candidate's exact contribution.
- Letters to the editor. The DSCM Council may allow them based on individual assessment and submitted application.
- Short communications. The DSCM Council may allow them based on individual assessment and submitted application.

- Case reports or case studies cannot be counted as main (first-author) publications; they may only be considered as additional publications.
- Meta-analyses may be included as first-author main publications, but are not sufficient alone to fulfill publication requirements. The candidate must also have at least one other original co-authored publication on a related topic.

-In its degree-awarding procedures, the University of Szeged takes into account exclusively the SJR quartile ranking, supplemented by the D1 rating from MTMT. The quartile ranking and rating of individual publications are recorded in the MTMT database.

-For doctoral schools affiliated with the Doctoral Council of Medical and Pharmaceutical Sciences, if a journal receives multiple ratings in multiple categories in a given year, the best ranking value of the journal may be considered.

Signed by Prof. Lajos Kemény

7. Recommended Sample Curriculum

UNIVERSITY OF SZEGED, ALBERT SZENT-GYÖRGYI MEDICAL SCHOOL DOCTORAL SCHOOL OF CLINICAL MEDICINE **Recommended Curriculum**

for full-time students in the 4-year (2+2) program (min. 20, max. 45 credits)

Semester I.		Semester II.	
Basic module	6+3 credits	Basic module	6+3+2 credits
Compulsory subjects	6 credits	Compulsory subjects	6 credits
Research activities	20 credits	Research activities	20 credits
		Research report	3 credits
Teaching (optional)	(4 credits)	Teaching (optional)	(4 credits)
Total number of credits:	35+4 credits	Total number of credits	40+4 credits

Total number of credits for Semesters 1 and II: 75+8 credits

Semester III.		Semester IV.	
Compulsory subjects	6 credits		
Research activities	20 credits	Research activities	20 credits
		Research report	3 credits
Teaching (optional)	(4 credits)	Teaching (optional)	(4 credits)
Total number of credits:	26+4 credits	Total number of credits:	23+4 credits

Total number of credits for Semesters III. and IV.: 49+8 credits

Minimum 90 credits should be earned in Semesters I–IV to be eligible for taking a **complex examination**.

Semester V.		Semester VI.	
Research activities	20 credits	Research activities	20 credits
		Research report	3 credits
Teaching (optional)	(4 credits)	Teaching (optional)	(4 credits)
Total number of credits:	20+4 credits	Total number of credits:	23+4 credits

Total number of credits for Semesters V. and VI: 43+8 credits

Semester VII.		Semester VIII.	
Research activities	20 credits	Research activities	20 credits
		Research report	3 credits
Teaching (optional)	(4 credits)	Teaching (optional)	(4 credits)
Total number of credits:	20+4 credits	Total number of credits:	23+4 credits

Total number of credits for Semesters VII. and VIII: 43+8 kredit

SUMMARY			
Semester I-IV. (required min.: 90 credits)		V-VIII. félév (required min.: 90 credits)	
with teaching	140	with teaching	214
without teaching	124	without teaching	242

In addition to the above course credits, credits for publications are awarded regardless of the semester. The number of these publication credits ranges from a minimum of **65** to a maximum of **90**.

8. Other Requirements

Accepted Master's Programs: (general medicine, (undivided program), dentistry (undivided program), medical biotechnology, psychology, biology, info-bionics engineering, molecular biology, pharmacy, clinical laboratory research).

1. Preparation of Annual Work Report

Doctoral students are required to prepare an annual work report at the end of each academic year, with a maximum length of one page, summarizing their work for that year. The formal requirements for the annual work report are detailed in Annex 1.

The report must include the following:

- Accurate information about the student and the training subprogram (name, year of study, training form, Neptun code, e-mail address, subprogram name, supervisor's name, research location).
- Courses taken and completed, including the achieved results and corresponding credit points.
- Teaching activities, indicating the number of hours and credit points (including the name and code of the taught course).
- The most important results of the student's research work.
- Presentations delivered (event, location, date, title of presentation, certification, e.g., congress program booklet).
- Published, accepted, or submitted publications.
- The contents of the report, signed by the student, must be verified and signed by the supervisor, who also assigns a five-grade evaluation. The annual report is approved by the Head of the Doctoral School.

2. Foreign Language Proficiency

1. Doctoral students are required to present a state-recognized intermediate-level ("C" type, complex) language examination certificate in English, or a certificate deemed equivalent. The equivalence of language examinations is regulated by government decree. In cases not covered by the decree, the professional opinion of the University's Centre for Foreign Languages must be accepted.

In programs taught in German for medical and dental students, instructors involved in teaching may choose German instead of English to satisfy the intermediate-level language requirement.

2. For non-native Hungarian foreign citizens, their mother tongue may be accepted as fulfilling one of the foreign language requirements, provided that it meets the language proficiency standards of the respective doctoral school. For these students, Hungarian is also considered a foreign language. Non-native Hungarian foreign citizens must present at least an intermediate-level ("C" type, complex) state language examination certificate in English, or an equivalent

certificate. The equivalence of language examinations is regulated by government decree. In cases not covered by the decree, the professional opinion of the University's Centre for Foreign Languages must be accepted.

3. Requirements for the comprehensive examination (in full-time 2+2 year programs)

(Annex 2: Comprehensive Examination Minutes; Annex 4: Dissertation Report)

Composition of the Comprehensive Examination Committee: The committee shall consist of a minimum of three members, of which at least one-third must be external members (external: not employed by the University of Szeged). No committee member may belong to the same research group or have co-authored publications with the examinee.

1. Chair: a university professor, professor emeritus, or habilitated associate professor at the University of Szeged.
2. Internal member: a faculty member of the University of Szeged holding a doctoral degree (PhD minimum).
3. External member: a faculty member not affiliated with the University of Szeged holding a doctoral degree (PhD minimum).

The Doctoral School, or if applicable, the subprogram or institute, announces 1–2 examination dates, preferably in May–June each year.

Structure and repeatability of the Comprehensive Examination:

- a) Theoretical part: a subject-specific examination that replaces the former doctoral qualifying exam. From the mandatory courses of the subprogram, the student selects two subjects/topics for the examination. If unsuccessful, the exam may be repeated once within the same examination period.
- b) Dissertation part: a dissertation report covering research conducted in the first two years and planned research for the subsequent two years.

Doctoral students take the comprehensive examination at the end of the fourth semester.

Organizational guidelines and recommendations:

The supervisor must submit a one-page evaluation/recommendation prior to the examination, which may be sent to the examiners in advance for review.

The dissertation report must be submitted in writing, electronically, before the examination and may be provided to examiners in advance for evaluation. Formally, this can be a PowerPoint presentation or a three-page MS Word report. The latter must also be attached to the minutes.

The supervisor may be present during the dissertation part of the comprehensive examination but may not serve as a committee member (cannot ask questions).

The examination may also be conducted online.

Requirements for the Comprehensive Examination Minutes:

In accordance with Government Decree 87/2015 (IV. 9.) implementing certain provisions of Act CCIV of 2011 on National Higher Education >>

The doctoral qualifying examination minutes and comprehensive examination minutes must contain the following mandatory elements:

- a) Name and institutional identification number of the higher education institution,
- b) Name of the doctoral candidate, student identification number, previous degree level, and professional qualification,
- c) Name and instructor identification number of the supervisor,
- d) Scientific field and discipline of the degree to be obtained,
- e) Questions asked and evaluation of answers during the qualifying/comprehensive examination,
- f) Overall evaluation of the qualifying/comprehensive examination,
- g) Names, instructor identification numbers, and signatures of the chair and members of the examination committee.