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## **UNIVERSITY OF DEBRECEN**



### DOCTORAL SCHOOL OF INFORMATICS RULES AND REGULATIONS

### D e b r e c e n – 2018 23 April, 2018

Appendix to the University of Debrecen Doctoral Regulations (Valid as of 21 September, 2017) Attached by the Doctoral School of Information Science and Technology (DSIST)

The organisational framework of doctoral education and the earning of degrees

#### 1. § Doctoral Schools and doctoral programmes

#### (13) (...)

*The members of the council of the DSIST are the core members of the doctoral school and 1 PhD student.* 

The head of the DSIST may nominate additional members of the council who are not core members of the DSIST, but full professors or Emeritus Professors of the University. They can be elected by the members of the DSIST by majority voting. The termination of their membership shall happen at the initiative of the DSIST and by majority voting of the members. The elected PhD student shall have a consultative status in the council of the DSIST. The head of the doctoral school shall summon the council of the doctoral school at least once a semester and report on the important events and decisions that happened after the previous meeting.

#### Further duties of the council of the doctoral school:

- determining the list of the accepted foreign languages
- deciding on the members of the entrance examination committee
- proposing the candidate's defence procedure;
- defining the publication requirements in accordance with the professional requirements of the disciplinary area;
- nominating and appointing the members of the preliminary defence committee;
- *determining the optional mayor and minor subjects for the complex examination.* (14) (...)

The further duties of the secretary shall be defined by the head of the doctoral school.

2. § Doctoral councils of the university and of the disciplinary areas (7)

(...)

- The members of the council of the DSIST may cast their votes in closed envelopes if they are prevented from attending the meeting. The chairperson may order electronic voting if necessary.

#### **CHAPTER IV**

#### **Doctoral education**

#### 5. § Admission to regular doctoral education

(4) (...)

Admission procedure to the Doctoral School of Information Science and Technology

The requirements set for the admission to the doctoral school by the doctoral regulations shall ensure the quality work of the doctoral candidates. The requirements include language proficiency skills in accordance with the doctoral rules of the University, an academic degree with minimum 'good' qualification or a Master Degree in a relevant disciplinary area as well as a well-defined research program. *Regular doctoral education is possible in full-time or correspondence forms.* 

Application deadline is 15 May of the academic year.

Information concerning admission requirements and procedures is available at <u>https://www.inf.unideb.hu/hu/doktori</u> (Admission Information)

The entrance examination committee evaluates the performance of the candidate during the admission interview and gives recommendations about admission, conditional admission or rejection. The committee considers the following criteria by the following point score system:

- professional competence maximum 40 points
- degree maximum 30 points

(honorary: 30, excellent: 25, good: 20)

Degrees presented by candidates of Hungarian nationality living beyond the borders of Hungary are evaluated according to the scoring system used for the ERASMUS programs.

scientific achievement/ National Student Competition maximum 30 points

Degrees obtained more than two years ago are not scored, but maximum scores for professional competence and scientific work are raised with 15-15 points respectively.

Professional competence: the committee evaluates the professional skills of the candidate and the merits of the research plan proposed for the doctoral education either during an interview and/or on the basis of the submitted research plan, written application.

Scientific achievement: to evaluate previous scientific work documented publications (scientific publications, National Student Competition, etc.) are scored by the committee on the basis of the following scale:

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	20–30 points: – first author refereed publication in an academic journal ("in
	extenso")
10	<ul> <li>Awarded National Student Competition paper (I–III places)</li> <li>national design plan competition winners (I–III places or purchased designs)</li> <li>-documented awards in national or international professional competitions</li> <li>presentations at international scientific conferences</li> <li>20 points: – non-first author refereed publications in an academic journal</li> <li>-first author presentation, poster at not local conference, not</li> </ul>
	National Student Competition - National Student Competition presentation (and/or project work) not awarded
0-	-10 points: – not first author, not National Student Competition presentation, poster –presentation at local or student (not National Student Competition) conferences

For admission adequate foreign language proficiency skills are required in at least one of the official languages of the European Union. Hungarian citizens must present a complex (C type,

both oral and written) state accredited foreign language examination certificate (intermediate level, CEF B2) (Doctoral Regulation 4. §, (4)), or a professional translator certificate. In case of foreign citizens the doctoral school of the disciplinary area accepts the language of the country of origin as required language proficiency skills.

Additional language certificates may be rewarded with extra points. A complex intermediate level (B2) certificate, an oral or written advanced level (C1) certificate means extra 3 points, a complex advanced level (C1) certificate means extra 5 points.

The minimum (but not necessarily enough) score for admission is 60 points. Candidates are required to get minimum 10 points in each category.

The conferment of the doctoral degree may be achieved via individual preparation. The applicants have to prove their scientific merits and the prospective supervisors shall declare that on the basis of the previous scientific work the dissertation can be submitted in 2 years.

Degrees older than 2 years or foreign degrees are not scored, in these cases the points given for the professional competence and the scientific work are raised with 15-15 points respectively. The same procedure is followed if the degree does not have a qualification.

In the cases of foreign degrees the level of the applicant's academic degree is determined by the entrance examination committee. Admission fees are listed in Appendix 12.

Admission procedures for the Doctoral School of Information Science and Technology:

#### Admission to regular doctoral education

Application conditions for the entrance examination are listed in the Application Information. Necessary documents for the application:

- application form,
- short Curriculum Vitae,
- publication list,
- university degree (copy), if the degree is not issued by the University of Debrecen, a certified copy is needed,
- graduating students need a certificate about the qualification of the diploma (if candidates cannot present the certificate before the decision about admission or foreign students before registration, the admission is denied)
- language proficiency certificates (certified copy)
- proof of admission fee payment,
- 2 normal size envelopes addressed,
- certificate of clean criminal record (except for UD graduates or employees).

Application for individual preparation

In addition to the above mentioned documents applicants for the individual education are to submit a written statement from the prospective supervisor that on the basis of the documented previous scientific work the dissertation can be submitted in 2 years.

Entrance examination procedures in the Doctoral School of Information Science and Technology:

- The council of the Doctoral School of Information Science and Technology is responsible for the administration of the entrance examinations (admission procedure, organisation of the entrance examinations, aggregation of the results, notification of the applicants)
- The secretary of the council shall inform the DSIST about the number and the data of the applicants.
- Members of the entrance examination committee are nominated by the DSIST and approved by the Doctoral Council of Natural Sciences and Informatics by 30 April every year. The members' assignment lasts for one year.
- *The DSIST shall inform the Doctoral Council of Natural Sciences and Informatics about the time and place of the entrance examination. It is organised and conducted by the DSIST.*

The secretary of the Doctoral Council of Natural Sciences and Informatics shall check the necessary documents and the recommendation of the supervisor and shall remedy the deficiencies. Afterwards the secretary shall inform the applicants about the time and place of the examination and forward the applicants' documents to the committee.

The Doctoral Council of Natural Sciences and Informatics shall be informed about the results of the entrance examination and about the recommendations concerning admission made by the DSIST.

- The DSIST shall rank the applicants on the basis of their scores and offer the state scholarships (available for the DSIST in different quota every year) to the applicants with the highest scores. Applicants who qualify, but cannot receive state scholarships may conduct doctoral studies financed by different other resources.

- The applicants shall be informed about the admission decision by the Doctoral Council of Natural Sciences and Informatics.

6. § Full time form of regular doctoral education

(4) (...)

- Doctoral students admitted to the regular program shall register at the Doctoral Council of Natural Sciences and Informatics before the first semester as announced.

(...)

After the deadline for registration a special procedure fee shall be applied.

(6) (...)

- During the first 4 semesters of the doctoral education students shall complete minimum 16 credits by completing 2 credit courses (ending with examinations) offered or accepted by the DSIST. Minimum 12 of the 16 credits shall be obtained by taking courses within the DSIST. Maximum 4 credits may be obtained by completing courses offered by other doctoral schools of the university with the preliminary consent of the supervisor. The head of the doctoral program shall decide about the accepted credits. Maximum 4 credits may be obtained at other universities or by foreign studies with the preliminary consent of the supervisor.

(7) (...)

- During the 8 semesters of full time doctoral education maximum 40 teaching credits may be earned by participating in teaching at Debrecen University. ( 1 credit: 13-15 hours/semester or 30 hours of any other teaching activity)

- For correspondent students teaching credits are not required.
- (8) (...)
- During the 8 semesters of full time doctoral education minimum 184 research credits, during the correspondent studies minimum 224 research credits must be earned. The supervisor shall accept research work in 6, 10, 20 or 30 credit units.
- Each semester the DSIST shall administer and monitor the academic, research and teaching activities of the PhD students through the electronic academic record keeping system.
- The students shall record the title and the teacher of the courses they take together with the number of the course credits they can earn in the electronic academic record keeping system.
- The teachers shall record the achievement of the students in the electronic academic record keeping system.
- The supervisors shall evaluate the scientific research work of the students by grading every semester.
- Students may attempt to upgrade their "fail" grades twice a semester. A given course may be taken three times, but the maximum number of the attempts for the examinations is 6 during the doctoral education.
- The DSIST determines the number of credits to be earned per semester. A semester may be considered completed even if the student does not earn academic credits. However, in this case the supervisor shall certify the completion of the research work.

Academic courses are offered by the DSIST on a semester basis. -Language courses do not qualify as academic credit courses. -

## **9.** § Regular doctoral education with funding non-state-funded external scholarships (5) (...)

- Contracts involving the DSIST shall define the expenses of the research activities and the way these expenses are covered or taken over. The financial aspects of the research activities are

determined by the supervisor in charge.

(10) (...)

- Applicants who are not accepted for the doctoral education programme for lack of available regular student quota may earn a full time self-financing student status and take part in the doctoral education if they cover the expenses of the education and research program. The doctoral school shall give a written statement that they have the capacity for training these doctoral students.

#### 11. § Correspondence form of regular doctoral education

(5) (...)

- The doctoral school shall determine the tuition fee and shall inform the Doctoral Council of Natural Sciences and Informatics. Students participating in this programme shall pay the tuition fee at the time of their registration.

#### 12. § Individual preparation

(1)(...)

- Applicants for the individual preparation programme shall submit the documents listed in 5. § (4) and undergo the admission procedure described in 5. § (4), just like the other participants of the doctoral education.

(6) (...)

- Individually preparing doctoral students shall pay the same tuition fee as the correspondent students for maximum 4 semesters, until their application for the degree conferment procedure. Regulations stated in 11. §. (5) shall apply here.

#### 13. § The complex examination

(2) (...)

- The condition of admission to the complex examination set by the DSIST is that students are required to earn minimum 120 credits during the first 4 semesters of the doctoral education, which shall include minimum 16 academic course credits, maximum 20 teaching credits and minimum 86 research credits.

(6) (...)

*The list of elective subjects for the complex examination is included in Appendix 14.*  $(9) (...)^{1}$ 

Candidates shall present their published or to be published research work that shall be included in their dissertation.

Candidates shall present at least one paper submitted to a conference publication or scientific journal. The presentation shall convincingly show how the results are published in the field of science and demonstrate the innovative/scientific elements, test results which prognosticate their publication.

<sup>&</sup>lt;sup>1</sup> Jóváhagyta az ITDT 2018.04.23-án.

The scientific forums (conferences, journals) considered as first options shall be defined. Preferably all the research approaches and plans to be used in the dissertation shall be presented

#### CHAPTERV V

#### The degree conferment procedure

#### 14. § The general conditions of the degree conferment procedure

(5) (...)

During the degree conferment procedure candidates shall start the defence procedure by submitting the following documents:

- written records of the preliminary defence
- the dissertation and the thesis (including the authenticated publication list)
- proof of the satisfaction of the language requirements ("b" language certificate)
- ranked list of publications with the relevant scientometric data (impact factor, ISBN/ISSN number, referring journal, place of citation etc.)
- at the same time the members of the defence committee shall be nominated by the doctoral school and approved by the Doctoral Council of Natural Sciences and Informatics,
- proof of payment for the procedure fee (if applicable)

-written statement from the candidates that they agree to the processing of their personal data during the conferment procedure

#### Documents to be submitted for the beginning of the defence procedure:

- 7 copies of the doctoral dissertation B5 format (in accordance with the formal requirements)
   signed by both the candidate and the supervisor,
- 15 copies of the thesis booklet A5 format both in Hungarian and English (in accordance with the formal requirements), the last pages shall include the authenticated publication list,
- together with each dissertation 1 CD with the most important scientific publications or the printed version of the two most important publications,
- 2 copies of the second foreign language proficiency certificate in accordance with the University of Debrecen Rules and Regulations for the Doctoral Schools
- 2 copies of the records of the preliminary defence and its attendance sheet
- nomination for the members of the Defence Committee made by the Doctoral School (1 signed copy)
- candidates must register on the website: mtmt.hu, (upload their list of publications) and the
  obtained registration number must be submitted to the Secretary of the Doctoral School
  together with the recommendation of the Defense Committee,
- the dissertation and the thesis shall be uploaded to the University of Debrecen Electronic Database.
- the thesis and the detailed, ranked publication list shall be submitted electronically by e-mail to: phd-ttk@science.unideb.hu

The necessary forms and cheques can be obtained by the candidates from the administrator of the Doctoral Council of Natural Sciences and Informatics.

#### (7) (...)

# - After the appointment the Members of the Defence Committee shall give a written statement about any possible conflict of interest.

#### 16. § Knowledge of foreign languages

#### (2) (...)

Admission to the doctoral programme of the Doctoral School of Computer Science is open to those who have the necessary language skills for the field of study, primarily in English or, where appropriate, in a language recognised by the profession (as determined by the admissions committee).

For the Doctoral School of Computer Science, the candidate must have the necessary language skills in the field of the discipline, primarily in English or, where appropriate, in a language recognised by the profession (e.g. German, French, Russian, Chinese or Japanese) (as determined by the Council of the Doctoral School or the Head of the School). If the candidate does not demonstrate language skills in English, the appropriate level of English will be verified by the Council of the Doctoral School or a committee appointed by the Council.

The way of demonstrating the language proficiency necessary for the pursuit of the discipline may be:

- a state-recognised language examination of at least intermediate level (corresponding to level B2 of the Council of Europe's Common European Framework of Reference for Languages), complex (including oral and written proficiency, previously 'C' level) or equivalent;

- a diploma as a linguist or translator in the language concerned;
- a diploma or a bachelor's or master's degree in the language concerned.

It may also be accepted as proof of knowledge of the languages required for admission:

- a certificate from the University of Debrecen ÁOK Centre for Foreign Languages / BTK Centre for Foreign Languages / GTK Institute of Business Communication;

The language skills required for the field of study must be demonstrated by the submission of the doctoral thesis at the latest.

#### 17. § The dissertation

#### (1)(...)

- The doctoral dissertation is open to the public, to research and references. The provision of public access may be limited in case of dissertations that contain classified data from a national security point of view or postponed in case of dissertations that have connections with intellectual property rights or patents.

- When submitting the dissertation candidates shall declare in writing that their dissertations have not been submitted to any other educational institutions and they agree to the processing of their personal data during the conferment procedure.

(4) (...)

- The electronic copy of the dissertations and theses are stored in the University of Debrecen Electronic Database and are forwarded to the Scientific Directorate of the University of Debrecen.

#### Appendix II

UNIFIED REQUIREMENTS FOR DISSERTATIONS DEFINED BY THE DOCTORAL COUNCIL OF NATURAL SCIENCES AND INFORMATICS

#### 3. SCIENTIFIC REQUIREMENTS

3.1 Candidates have to present their own results in 2-4 scientific papers published or accepted for publication in internationally referred scientific journals or have to demonstrate equivalent scientific achievement. The unified criteria for the latest shall be defined and enforced by the Council of the Doctoral School as recorded in the regulations.

3.2 In exceptional cases, when the candidate presents extremely high scientific achievements and with the previous consent of the Council of Natural Sciences and Informatics a dissertation can be submitted in a shorter, summarised version (minimum 30 pages). In this case the publications used for the dissertation have to be attached to the dissertation and the formal and editing requirements also have to be observed.

3.4 The scientific merits of oral presentations and posters presented at international or national conferences may differ, therefore this kind of publication activity can be considered as circumstantial.

#### Minimum requirements for the Ph.D. degree

1. 1. The candidate must carry out scientific, research and development activities and publish on IT topics.

IT topics are those described in the ACM (Association for Computing Machinery) classification system, the current version of which can be found at https://dl.acm.org/ccs/ccs.cfm. The assessment of the activity may be guided by the scoring system set out in the Annex, which requires a minimum of 15 points. Consideration will also be given to duly documented other subject-specific products: development of new processes, methods, innovations; development of technology, software; creation of work related to the development of an information system, which significantly exceeds the standard of the average IT activity; scientifically based IT activity related to another subject.

- 2. At the time of submission of the thesis, the candidate must have at least two papers published (accepted for publication) in peer-reviewed scientific journals or volumes, one of which must be a decisive contribution by the candidate. A copy of each publication (original or copy) must be submitted with the thesis and uploaded to the publication database of the DE University and National Library. Based on the publications uploaded in the database, the Library will prepare and validate the candidate's publication list.
- 3. Checking the scientific level of publications is the joint responsibility of the student's supervisor and programme leader, and students should consult them before submitting their publications. The Scimago Journal & Country Rank page can be used as a guide to assess the level of scientific level.
- 4. The impact of the research and development work (citations, participation in conferences, poster presentations, professional awards, etc.) should also be taken into account.
- 5. The applicant should draw up a self-assessment based on the above criteria.

#### Publication activity scoring

Publication in a referred international journal or referred proceedings of internationalconference7ptsPublication in a referred Hungarian journal or referred proceedings of Hungarianconference1pt

For co-authored works, authors must declare the percentage of their contribution.

If two doctoral candidates are authors, the topic leader must declare to what extent (in what percentage) the results used in the thesis reflect the contribution of the respective candidate.

#### Supplementary remarks

- 1. Only articles published in refereed publications of international conferences are worth 7 points (depending on the number of pages); articles published in Hungarian-language conference publications can be counted as Hungarian-language articles.
- 2. Specific products may be considered up to a maximum of 10 points (based on the documents submitted, as proposed by the referees).
- 3. Knowledge of English, French, German and Russian (at the level specified by the EDHT) is accepted as a prerequisite for the PhD degree. For the recognition of language levels, we accept the opinion of the University Lectureship for Foreign Languages when assessing the equivalence of the various language proficiency examinations.

One of the language tests must be English.

Language examinations will only be accepted in languages in which prestigious IT journals are published (e.g. English, French, Japanese, Chinese, German, Italian, Russian, Spanish).

Otherwise, the Head of the Doctoral School will decide whether to accept the language examination.