Operational Regulations of the Doctoral School of Computer Science of the University of Szeged

This present regulation amends and applies the Government Decree (GD) 387/2012 (XII.19.) on Doctoral Schools, doctoral procedure, and habilitation; the Regulations Governing the Doctoral Training Programmes and the Awarding of the Doctoral Degree of the University of Szeged (henceforth USZRDT); and the Rules of Procedure of the Doctoral Council in Science and Engineering (RPDCS). The regulation pertains to doctoral students starting their studies in the 1st semester of the academic year 2016/2017 or later.

This English version is a translation of the official Hungarian version, and is provided for convenience only. This translation is kept up-to-date with care, but whenever the Hungarian and English versions differ, the Hungarian version takes precedence. All references to the USZRDT point to the Hungarian version of the USZRDT. Note that the USZRDT also has an English translation accessible from the homepage of the Doctoral Institute of the University of Szeged.

1. Address and Contact Data of the Doctoral School of Computer Science

Place of operation: University of Szeged

Faculty of Science and Informatics, Institute of Informatics

2 Árpád tér, Szeged, H-6720, Hungary

Postal address: University of Szeged

Doctoral School of Computer Science PO Box 652, Szeged H-6701 Hungary

Telephone: +36 62 546 715

Email: dscs@inf.u-szeged.hu

Webpage: https://www.inf.u-szeged.hu/phd/

2. The Structure and the Board of Leaders of the Doctoral School of Computer Science

- 2.1. The operation of the Doctoral School of Computer Science (DS) is supervised by the Council of the Doctoral School (CDS). The members of the Council are:
 - the Head of the DS, who is also the president of the CDS

The Head of the Doctoral School is elected by the Doctoral Council from among the core members of the Doctoral School who hold the title of professor and a Doctor of the Academy degree (DSc), on the recommendation of a majority of the core members of the Doctoral School, and appointed by the Rector for a maximum term of five years. The appointment may be renewed several times. (USZRDT II./2.).

The Head of the Doctoral School is a professor holding a Doctor of the Academy degree (DSc) and a core member. The Head of the Doctoral School is appointed by the Rector on the recommendation of the University Doctoral Council (UDC), based on the expert opinion of the MAB (Hungarian

Accreditation Committee) and the approval of the Senate. The appointment shall be terminated by the resignation or termination of full-time employment of the Head of the Doctoral School. (USZRDT III./36.)

• the Deputy Head of the DS (if any), who is also the Vice-resident of the CDS

The Board of the Doctoral School may select a Deputy Head of School from among the core members of the School, who shall be approved by the relevant DCS and shall inform the UDC thereof. The deputy may temporarily replace the Head of School in the event of the latter being prevented from attending to urgent matters (USZRDT III./36.)

- six members (or, if the Head of the DS has a deputy, five members) who are either core members of the DI or supervisors meeting the requirements for core membership, elected by the regular members of the DS,
- The CDS Secretary, appointed by the President of the CDS, after consulting the CDS, and who is a DS lecturer with a PhD, shall be a member with advisory rights,
- a doctoral representative, elected by the active doctoral students of the DS shall be a member with advisory rights,
- two alternates, elected by the DS core members under the same conditions and in the same manner as the members, who may be invited by the CDS President or the CDS Secretary to replace any incapacitated member in any CDS decision-making process.
- 2.2. The members and alternates of the CDS are elected by the core members in elections held every three years. By-elections may be held to fill vacancies. The term of office of the members and alternates of the CDS and the term of office of the Secretary shall also expire at the end of the election cycle. The term of office of the Deputy Head shall expire at the same time as the term of office of the DS Head, unless the DS Head does not complete the five-year cycle. In this case, the term of office of the Deputy will be valid until the appointment of a new head, but not beyond the end of the original five-year term.
- 2.3. The CDS arranges meetings as necessary, but at least once in a semester. Minutes are taken at the meetings.
- 2.4. The resolutions of the CDS apart from voting with points are passed according to the rule of majority decision making. In the event of a tie vote, the chair shall have the casting vote. (During the procedure of obtaining a doctoral degree, the members of the CDS vote with points; for details see the Regulations of Obtaining a Doctoral Degree below). A quorum shall exist at a CDS meeting, if the majority of its members with voting rights (or their substitute members) are present at the voting
- 2.5. CDS decisions made by voting except for personnel issues, applications for a doctoral degree, the approval of the thesis for the defence procedure and the proposal about the awarding or the rejecting of the degree are passed by open voting. If justified, any member,

including the chair, may initiate a secret voting; about this issue the CDS decides with simple majority at an open voting.

- 2.6. In justified cases, the CDS may take a decision on a specific case presented by the CDS President without personal presence by electronic vote using the appropriate voting tool. In such cases, an appropriate opportunity for discussion shall be provided (e.g. email, electronic forum). Votes of members not responding by the deadline shall be considered invalid.
- 2.7. The issues on the agenda of the CDS meeting and necessary documents about the issues to be decided about must be made accessible for the members at least two days before the meeting this may be done electronically.
- 2.7. The CDS makes decisions about the following issues concerning the DS (in accordance with the USZRDT):
 - accepting new research topics recommended by supervisors,
 - specifying subjects of the doctoral programme for the given semester,
 - organizing preliminary defences,
 - approving study trips, and
 - financial management of the incomes of the DS, in consent with the Board of Leaders of the Institute of Informatics.
- 2.8. The CDS makes proposals about the following issues concerning the DS:
 - selecting new supervisors,
 - the Operational Regulations of the DS,
 - the Training Programme of the DS,
 - the Quality Assurance Plan of the DS,
 - admittance of DS candidates
 - initiating degree awarding procedures
 - continuing degree awarding procedures
 - compiling the subjects of the doctoral comprehensive exam
 - appointing the members of the Comprehensive Examination Board and the Committee of Assessors of public defences,
 - allowing the intermission of studies,
 - awarding a doctoral degree,
 - appointing the members of the Admission Committee,
 - electing new core members,
 - defining the internal structure of the DS, and
 - filling up the admission quotas assigned to the School by the Faculty.
- 2.10. The secretary of the CDS is responsible for the administration of the DS. The secretary controls the following tasks:
 - collecting research topics,
 - collecting the courses planned for the given semester, inviting the lecturers,
 - preparing the documents necessary for CDS decisions
 - collection and preliminary evaluation of the semester reports of students,
 - keeping record of student data,
 - preparing statements and statistics
 - managing the Hungarian Doctoral Database,
 - maintenance of the webpage of the DS.
- 2.11. Only a faculty member with a PhD degree who has scientific achievements beyond those required for the award of a PhD degree in the announced research area and who has

achieved part of these in the five years preceding their appointment as a research area announcer is eligible to be an announcer. The right may be withdrawn in duly justified cases, e.g. if the lecturer has no scientific publications relating to the topic for which the appointment was made in the five years preceding the appointment.

3. The Studies of Doctoral Students

- 3.1. All applicants must take an entrance exam before an admission committee (Chapter IV of the USZRDT), proposed by the CDS and approved by the DCS, consisting of at least three members; the chair must be a habilitated associate professor (or hold a higher academic title) and all members must be at least PhD graduates. The oral entrance exam may be conducted online. The calculation of admission points is carried out in accordance with the RPDCS. (The Training Programme sets out further practical details on the admission process.)
- 3.2. The structured doctoral programme of the University of Szeged can be accomplished as a full-time training or as a correspondence course. This latter provides a possibility for those already working to obtain a doctoral degree.
- 3.3. Doctoral students preparing individually can apply for the comprehensive exam if they have conducted research that fits into the profile of the DS, and have accomplished at least two-thirds of the publication requirements. The DS might appoint a consultant for the individually preparing student and the DS might require a fee to be paid.

On admission, the higher education institution shall recognise the minimum credits required for taking the comprehensive examination. Based on previously acquired skills and competencies, additional credits may also be recognised upon request. (USZRDT VI./52.)

- 3.4. The students pursue their studies according to the credit system devised and regularly revised by the CDS (see Training Programme).
- 3.5. Students have to make a report about their work at the end of each semester, which has to be submitted to the secretary of the DS until a given deadline. The student's report form is available at the homepage of the DS.
- 3.6. Students may pursue their studies partly abroad during their training. The disbursement of grants of state-funded students are not interrupted during their studies abroad. The CDS makes a decision about accepting the subjects completed abroad.
- 3.7. During the first 4 semesters of their studies, upon request, students are bound to take part in the educational work of the Institute, by holding practical lessons/labs and by supervising state exam preparations and for drawing up the minutes of the state exam. Students are bound to hold a maximum of 4 lessons a week per semester; they can get hourly rates for their work. Students are bound to supervise state exam preparations and draw up state exam minutes at a maximum of two occasions per semester.

4. Regulations of Obtaining a Doctoral Degree

- 4.1. The candidate's publication activities have to meet the requirements described in Appendix 1.
- 4.2. To obtain the PhD degree, the candidate has to submit the doctoral dissertation within three years after the comprehensive exam. Besides the requirements stated in USZRDT and RPDCS, the DS prescribes the following:

- the length of the dissertation with the abstracts (and without the bibliography) has to be 80-120 pages,
- the majority of the results presented in the dissertation has to be published or accepted for publication at the time of submission;
- the dissertation must contain original, independent results in the field of computer science, which may be new theoretical results or new applications; in the field of interdisciplinary and applied computer science, it is allowed to publish these on publication forums of other disciplines, but at least one full-length conference or journal publication specifically in computer science, used in the dissertation and meeting the publication requirements, is required,
- the candidate has to define whether he/she wants the fulfilment of the publication criteria to be qualified according to area a) or b), which publications are to be considered, and which criterion each publication satisfies.
- 4.3. The candidate and the supervisor (if there is one) prepare a declaration about the publications used in the dissertation that details the contributions of the candidate. The secretary of the Doctoral School then sends this declaration, using a list of email addresses provided by the candidate, to all of the coauthors of all the papers that form part of the thesis and asks whether they agree with this declaration, with a deadline of 1 week. Till any of the coauthors raises any objections within the 1 week period, this procedure is repeated. After this, the Doctoral School certifies that the coathors accepted the declaration. The necessary forms are included in Appendix 2.
- 4.4. Before the official submission of the dissertation, upon the recommendation of the supervisor, a preliminary, closed defence may be organized. To start such a procedure, the publication requirements of Appendix 1 must be fulfilled, but the dissertation and the abstracts are not necessarily regarded as final, so these must be marked as "draft version". The documentation of the preliminary defence must be submitted to the secretary of the Doctoral School. The preliminary defence is organised by the supervisor, along the guidelines of the public defence procedure. Based on the comments made on the preliminary defence, and considering the remarks and the recommendations of the opponents, the candidate can revise the dissertation and the abstracts, and then officially submit the thesis. The Council of the Doctoral School aims at inviting the future opponents of the official defence to take part at the preliminary defence.
- 4.5. When the candidate also submits their thesis, the CDS President will ask a referee to check that the conditions for awarding the degree are met. The referee may be the President himself. The referee verifies if the candidate meets the necessary language and publication requirements, and if the dissertation meets the formal requirements, whether the majority of the research results in the dissertation are published and whether the dissertation contains the necessary co-authors' declaration; after this he makes a proposal to the CDS to initiate the doctoral procedure. The CDS makes a decision about the proposal by secret vote (on a scale of 0 to 5 points). The proposal is supported by the Council, if it gets at least 60% of all possible points. Upon the proposal of the coordinator, the CDS makes a decision by open voting about the members of the Committee of Assessors.
- 4.6. After the open disputation, considering its results, the CDS makes a decision about the awarding of the degree by secrete vote.

5. Language requirements

- 5.1 Proof of English language proficiency is necessary and sufficient to meet the language requirements for the degree. The possible means of proof of language proficiency is defined in teh USZRDT.
- 5.2 Clause 5.1 shall also apply to the doctoral procedure of any student admitted before the entry into force of this regulation, if it is more favourable to them.

16 February 2023

Appendix 1. Publication requirements

Publication requirements can be completed at the general computer science or the electrical and computer engineering area. The candidate determines which area's requirements are to be applied when evaluating his application for a doctoral degree. Verifying that papers are accepted for publication is sufficient at both areas. In both areas, the duplication rule described at the end of this Annex applies.

a) Requirements of the area of general computer science

The total score of the full length publications containing new scientific results of the doctoral candidate must be minimum 2.5. Scoring of publications:

Single-author paper: 1.00 point
Two-author paper: 0.75 point
Three-author paper: 0.60 point
Four-author paper: 0.48 point
Five-author paper: 0.40 point
Six-author paper: 0.32 point
Seven-author paper: 0.25 point
Eight-author paper: 0.20 point
Nine-author paper: 0.15 point

• Ten or more-author paper: 0.10 point

The following full length papers containing new scientific results count automatically as publications:

- *Peer-reviewed journal article:* when appearing in a journal indexed in Web of Science or Scopus.
- Paper appearing in a conference (symposium, workshop) publication: when indexed in DBLP or Scopus.

There may also be others, e.g. if the journal or conference is new and therefore not yet indexed, but beyond doubt prestigious and peer-reviewed; or a prestigious, peer-reviewed book or book chapter (not a conference article) containing original results, etc. In these cases, the CDS will decide on a case-by-case basis. The main criteria for the decision are thorough, selective, high-quality peer review and originality of the results.

b) Requirements of the area of electrical and computer engineering

The doctoral candidate must have at least 4 full length publications containing new scientific results, that meet the below requirements:

- their total score is at least 12 points,
- at least 2 of them are peer reviewed, foreign language journal articles, one of which appeared (or will appear) in a journal indexed in Web of Science or Scopus and
- at least 2 of them are foreign language, which are worth at least 50% of the points below.

Publication scores:

- Book
 - o Foreign language

	0	Hungarian	5
•	Part o	of a book, book chapter	
	o	Foreign language	6
	o	Hungarian	3
•	Journal article		
	o	Peer-reviewed	
		 Foreign language, published abroad 	6
		 Foreign language, published in Hungary 	4
		 Hungarian language 	2
	O	Not peer-reviewed	
		 Foreign language, published abroad 	3
		 Foreign language, published in Hungary 	2
		 Hungarian language 	1
•	Conference proceedings article, at least 4 pages		
	o	Foreign language article at an international conference	3
	O	Foreign language article at a Hungarian conference	2
	O	Hungarian language	1
•	Patent		2
•	Electro	onic publication ¹	1

The above publications are to be divided with the number of authors, excluding the supervisor and the co-supervisor.

Duplication rule

For scoring under both (a) and (b), the journal article score should be doubled if is published in a Scimago Q1 journal in an IT category in the year of publication, and the conference article score should be doubled if the conference has a CORE² rating of A or A* valid in the year of publication. Independently organized workshops associated with conferences do not inherit the CORE rating of the host conference, so the rating of the workshop itself must be taken into account.

¹ On the webpage of a journal or company, appears in the result list of *google scholar* (being published at a personal homepage does not earn any points).

² https://core.edu.au/conference-portal

Appendix 2. Co-author's declaration

The signature of the supervisor is required only if there is a supervisor.

Declaration

In the PhD dissertation of <name of candidate> entitled <title of thesis>, <name of candidate>'s contribution was decisive in the following results:

dist of results with reference to the thesis points/sections that they are part of and to papers in
which they appeared>

These results cannot be used to obtain an academic research degree, other than the submitted PhD thesis of <name of candidate>.

date, signature of candidate, signature of supervisor

The head of the Doctoral School of Computer Science declares that the declaration above was sent to all of the coauthors and none of them raised any objections against it.

date, signature of head of Doctoral School