**Rules for the organization of departmental defenses, Information on the state doctoral examination (SDE) and Instructions for registering for the doctoral thesis defense**

## **State doctoral examination**

* SDE is held twice a year – dates will be announced.
* Students must obtain the specific number of credits.
* The Doctorand may register for the State Doctoral Examination after having passed all examinations required by his/her individual curriculum.
* The student must have completed study, including credit evaluation (the completed form must be approved by the vice dean). Pass on to Michaela Plášilová (Study department).

## **Information on the state doctoral examination (SDE)**

* during the state doctoral examination, the doctoral student has to prove mastery of theories and acquisition of the required knowledge in the field of study, including the methodological basis of research paper
* the content of the research paper is based mainly on the topic of the doctoral study program and the individual study plan of the doctoral student
* the doctoral student will prepare a presentation of his/ her doctoral thesis for SDE for a maximum of 15 minutes (in the room where SDE will take place, the projection technique will be prepared)
* part of the SDE is a discussion related to the topic of the doctoral thesis; this discussion is usually based on the treatise submitted by a doctoral student
* part of the SDE is an examination from thematic areas (if they are specifically determined by the Subject Board) or from the area of ​​compulsory subjects of the study field
* The doctoral student may repeat the SDE only once, at the earliest after six months from the date of the failed examination. If the doctoral student does not perform SDE even within the resit, his/ her studies are terminated

**Together with the signed application for SDE, the doctoral student submits:**

* **10 copies of the treatise**
* Before the physical submission of the treatise, s/he will send an electronic pdf document by e-mail to: michaela.plasilova.2@uhk.cz
* a signed **Basic Document for Registering a Doctoral Thesis from STAG**
* a signed **credit evaluation**

**Structure of the treatise for SDE:**

1. Introduction
2. Analysis of the current state on the topic of the intended doctoral thesis
3. Definition of the objectives of the doctoral thesis based on the analysis of the current state
4. Overview of already achieved own results on the research topic
5. Outline of the further direction of the doctoral thesis
6. Conclusion
7. References
8. List of doctoral student’s published studies associated with the research topic

**The treatise will be supplemented at the end by:**

* List of all published studies during the present doctoral study
* Overview of professional research activities performed during student’s studies in the doctoral study program

Recommended length of the treatise: 20 – 50 pages

Binding: ring

Text editing: text is printed on A4 white sheets on one side of the paper only.

For further editing of the text, it is possible to follow the Methodological Instructions for Writing Qualification Papers at FIM UHK and from the Instructions for Defense, in which the form of the doctoral thesis and treatise is given.

**Basic Document for Registering a Doctoral Thesis in STAG**

The form must be completed in STAG, tab **“My study”** → tab on the left side **“Thesis topics”**

**Set search parameters as following:**

Type of thesis: *doctoral thesis (Ph.D.)*

Supervisor: *write name of your supervisor*

Click on search

You will see the list of topics offered by your supervisor. Please choose the topic and click on its name. Make sure it mentions: Topic type: rámcové/ conceptual

Fill in the basic documents for registering a doctoral thesis – click on the title of the thesis

 Principles for writing (complete a brief outline)

 Literature (briefly basic references)

 Approval status: set "Student has completed a supplementary document of thesis topics”

 Save and inform the **supervisor** to approve the document electronically

After approval by the **head of the department**, print the document with the signature of the doctoral student and the signature of the supervisor.

Submit this document together with the application for SDE and with the treatise.

Recommended format of the treatise front cover for SDE

**University of Hradec Králové**

**Faculty of Informatics and Management**

Name of the department/workplace of a doctoral student

Title of the treatise for SDE

**Treatise for the State Doctoral Examination**

**Author:** First name, surname, including academic titles

**Study program:**

**Field of study:**

**Supervisor:**

**Department/workplace of the supervisor:**

Hradec Králové October 2020

## **Rules for the organization of departmental defenses**

* The departmental defenses are organized by the head of the department at which the doctoral student, planning to submit a treatise for SDE or doctoral thesis, is a staff member.
* Heads of departments, supervisors and guarantors of the relevant study program must participate in the departmental defenses. Furthermore, the guarantor of another DSP and the Vice-Dean for Science and Research and all members of the department, including doctoral students, are invited.
* The departmental defenses must take place no later than three weeks before the official deadline for the submission of the final versions of a treatise/doctoral thesis. It is good to have one departmental defense within the department per semester. This should be attended by all doctoral students planning to submit a treatise/doctoral thesis.
* The deadlines for the submission of papers and reviews are set by each department. Both the treatise/ doctoral thesis and the review of one opponent (s/he can also be an internal member of FIM) must be available for the departmental defense. The opponent for the treatise/ doctoral thesis for the departmental defense must be approved by the guarantor of the field of study upon agreement.
* The availability of the treatise/doctoral thesis is ensured by the head of the department. The text in the form of a PDF document will be sent to the members of the relevant department at least one week before the departmental defenses.
* Minutes from the departmental defenses are provided by the head of the department and must contain a list of the discussed points and tasks separately for each doctoral student. The minutes must be prepared and sent to supervisors, doctoral students, guarantors and the Vice-Dean for Science and Research within three working days after the defense. The availability of the minutes is a necessary condition for the review of the incorporated comments by the guarantor of the field of study before the submission of the final version of the doctoral thesis or treatise for SDE.
* The modified paper with color-coded changes together with a document containing tasks from the departmental defense and reactions to their fulfilment, together with references to parts of the text in which the changes are made, must be sent to the guarantor of the field of study after the acceptance by the doctoral student supervisor no later than two weeks before the official deadline for the final submission of the paper at the Study Department. Based on these documents, the guarantor will assess the suitability of submitting the final version to the Study Department.
* The review from the departmental defense will be available on request to the opponents of the treatise for SDE or doctoral thesis.

## **Instructions for registering for the doctoral thesis defense, recommended form and structure of a doctoral thesis and theses**

*The defense of the doctoral thesis represents the completion of the research part of the doctoral study and concludes the entire study. Therefore, the doctoral student can apply to defend the doctoral thesis if s/he has met the following conditions:*

* *Successfully passed the state doctoral examination.*
* *The list of publication activities contains at least one all-author publication in a journal with a non-zero impact factor or two all-author publications with a non-zero SJR value (in the case of co-authorship, the doctoral student's shares are added up). In this case, a publication created by the doctoral student with his/ her supervisor is also considered to be an all-author's publication of the doctoral student.*
* *Completion of part of the study at a foreign institution for at least one month or participation in an international creative project with results published or presented abroad or another form of direct student participation in international cooperation (required for doctoral students enrolled in the study from September 1, 2016).*
* *Completion of the departmental defense of the doctoral thesis.*

**The doctoral thesis must contain in particular the following parts:**

1. an overview of the current state of the issues that are the subject of the doctoral thesis,
2. the aim of the doctoral thesis,
3. the results of the doctoral thesis with the presentation of new knowledge reached by the doctoral student, their analysis and their significance for the implementation in practice or for further development of the research field,
4. a list of references,
5. a list of the doctoral student's own research papers and studies related to the topic of the doctoral thesis

The doctoral thesis may also include a documentation of engineering or artistic works prepared by the doctoral student. The dissertation always includes a summary in Czech and English and possibly another language, each usually within the scope of one page.

The doctoral thesis is usually submitted in Czech or English.

**Together with the application for the defense of the doctoral thesis, the doctoral student submits:**

1. **3 identical copies** of the doctoral thesis (with a signed statement)
2. **a digital copy** of the same form and content with a written copy, which the doctoral student submits via the thesis topics web interface (VŠKP); the digital copy must be entered into the thesis topic system before the printed copies can be submitted
3. **theses of the doctoral thesis in electronic form** - before submitting the doctoral thesis, please send them by e-mail to michaela.plasilova.2@uhk.cz
4. **a signed overview of professional activities performed during his/ her studies** in the doctoral study program, including **a list of published papers and papers accepted for publication, together with evidence of their acceptance for publication, or a list of created engineering or artistic works, and citations of such papers and works**

The process of the defense of the doctoral thesis are initiated by the delivery of the application.

* **Doctoral Thesis**
1. **The doctoral thesis should have the following parts:**
* Introduction
* Main text part
* Annexes
* Conclusion

**Introduction**

* **front cover** includes essential features of the title page (the back cover remains empty):
	+ Name of the school: University of Hradec Králové
	+ Name of the faculty: Faculty of Informatics and Management
	+ Type of the qualification paper: Doctoral thesis
	+ Year of publishing: 2016
	+ First name and surname of the author: Jan Novák
	+ Cover color: black or blue, font color: gold or silver
* **title page includes:**
	+ name of the school
	+ name of the faculty
	+ name of the department workplace of the doctoral student
	+ name of the thesis (or subtitle)
	+ designation of the type of the paper
	+ full name of the author (with academic titles)
	+ study program and field of study
	+ name of the supervisor (with academic titles)
	+ place, month and year of publishing
* **signed statement:** I declare that I have written the doctoral thesis on my own and with the use of the listed references. In Hradec Králové on…., first name and surname + signature
* **acknowledgement** to the supervisor, consultant, organization for his/her/ their help in writing this thesis, not longer than a few lines (not obligatory)
* **abstract in Czech and English language** summarizing the aim and significance of the thesis and its results within a scope of one page (English abstract must also contain the title of the doctoral thesis
* **table of contents**
* **list of used symbols and abbreviations, or term**s (ordered alphabetically)

**Text part includes:**

* introduction
* aims of the thesis, choice of methodology
* description of the current state of the research topic (possibly a literature review)
* description of solutions and research results
* evaluation with emphasis on stating the doctoral student's own contributions
* conclusions
* list of bibliographic citations (list of used references)

**Annexes:**

* text extracts of larger source texts of computer programs are placed in annexes, computer sets and tables, detailed descriptions of equipment, visual documentation, user manuals and instructions for use, etc.

**Recommendations for editing the text part and annexes of the doctoral thesis**

* 1. The standard text formatting is into a block.
	2. In addition to the abstract in Czech and English, it is necessary to insert keywords (again bilingually) and a list of abbreviations. Furthermore, a list of figures and tables.
	3. Table of contents:
		+ 1. the maximum number of levels is 3, i.e., e.g. 1.1.1.
			2. on one side of the Table of contents, it is reasonable to have approx. 60 pages of text, i.e. for 120 pages of the text, the content will have 2 pages
	4. *The introduction* will start on page 1
		+ 1. the introductory chapter ends with a paragraph, which verbally describes what is in each chapter (plus a reference to the chapter)
	5. each first level chapter starts on a new page
	6. the chapter *Objectives of the thesis* should be listed in points (as bullets or numbered); this will facilitate the comprehensiveness of the text and subsequently, in the final chapters, a summary of the achieved results/ objectives; this chapter should not be longer than one page
	7. *tables* or *pictures* must clearly state if they are the work of the author of the thesis (i.e. an explanation, such as author's own processing) is enough, or taken over and then the source must be given (citations in references)
	8. the chapter *Conclusions* has a reasonable content within a scope of one page - otherwise it is not possible to read it in time in the defense of the thesis and unnecessary questions may occur
	9. if there are many results and the author needs to break them down, it is not appropriate to put it in the conclusions, but in a new chapter, preceding the conclusions (e.g. Discussion of the results), where it is possible to summarize the overall research and comment in detail on meeting the objectives of the thesis (suitable as a subchapter). This chapter should start again with a list of objectives from the chapter (Objectives of the thesis) and gradually comment on them with references to previous passages of the text (as a possibility of quick navigation in the text…). The text as a whole is appropriate to link with references.
	10. *References/ literature* represent a numbered chapter - this is due to reference to the author's own papers, participation in projects, awards, etc. The recommended citation norm is APA.
		+ 1. basic literary sources can be divided into
1. classic (these are peer-reviewed sources such as books, journal and conference articles, etc.)
2. Internet resources (usually not subject to review)
	* + 1. the list of author's publications will be a subchapter of References/ Literature
3. again divided into e.g.:

textbooks

journals with an impact factor

other journals

international conferences

* + - 1. another subchapter may include cooperation on projects and grants - this is important especially for the justification of some passages of the text, where the author brings his/ her own new idea, based on experience/ findings, etc. within the project c. it can also be a subchapter of
	1. *Annexes of the thesis* can be numbered as other chapters, or another format can be chosen, e.g. A1, A2 …
1. The text is printed on white A4 sheets on one side of the paper.
2. The author is obliged to ensure that the text of the thesis is in terms of style and spelling at the appropriate level.

**The conclusion part** includes:

- back cover;

- appendices (diskettes, CD ROM, samples, etc.).

The recommended length of the doctoral thesis is **up to 120 pages** (without annexes).

Number of copies of the doctoral thesis: 3

The doctoral student submits a digital copy, identical forms and content with a written copy via the thesis topics web interface; the digital copy must be entered into the thesis topics system before the printed copies can be submitted.

* **Theses of the doctoral thesis**

The theses contain in a brief form the basic ideas, methods, results and conclusions of the doctoral thesis in the same structure as the doctoral thesis. They include an overview of the doctoral student's publication activities related to the topic of his/her doctoral thesis and an overview of his/ her presentations at conferences on the topic of his/her doctoral thesis.

The theses, which the doctoral student submits together with the application for the doctoral thesis defense, will be received by all members of the doctoral thesis defense committee and opponents.

Warning - the theses are not the same as the treatise that was submitted to the state doctoral examination (as students often mistakenly believe and then submit the same treatise together with the doctoral thesis; the theses is a newly created "brief summary" of the completed doctoral these, so-called summary.

**Structure of the theses:**

The structure of the theses is based on the structure of the doctoral thesis and it should contain the following parts:

1. Introduction, abstract of the doctoral thesis in Czech and English

2. Brief analysis of the current state on the topic of the doctoral thesis

3. Definition of the aims of the doctoral thesis

4. Presentation of the used methods

5. The main achieved results of the doctoral thesis with emphasis on the author's own benefits

6. Conclusion

7. List of references used in the theses

8. List of student’s published papers

9. List of projects

10. List of citations

11. List of awards, etc.

The recommended length of the theses is a **maximum of 32 pages** (the maximum range of pages must be followed!).

Send the electronic version of the theses by e-mail to: michaela.plasilova.2@uhk.cz (brochures in A5 format will be printed) before submitting the doctoral theses.

* **REVIEWS OF THE SUPERVISOR AND OPPONENTS**

Before the doctoral student registers for the defense, the supervisor reports 3 opponents, who prepare an opponent's reviews on the doctoral thesis (it is advisable to consult with the opponents in advance). The proposal is approved by the DSP guarantor, Vice-Dean for Science and Research, Dean).

3 opponents of the doctoral thesis are appointed (the proposal of the opponents is submitted by the supervisor), of which at least one must be a professor or associate professor in the field of study or related field and at most one may be from the faculty or institution where the thesis originated (but usually from other faculty than doctoral student’s home faculty). The supervisor or consultant of the doctoral student's thesis cannot be appointed as an opponent. The opponent will prepare a written review on the doctoral thesis.

The supervisor will also prepare the review on the doctoral thesis of his/her doctoral student.

Opponents' reviews (as well as the supervisor's review) are available 15 days before the defense. They are sent to the doctoral student by school e-mail.

In the event that one of the opponents does not recommend the doctoral thesis for defense, the doctoral student may request a suspension of the doctoral thesis defense procedure in order to complement or revise his/ her thesis. The Dean makes the final decision on this application.

* **COMMITTEE FOR THE DOCTORAL THESIS DEFENSE**

The Committee for the Doctoral Thesis Defense has at least five members. At least two members of the Committee are not members of the doctoral student's home faculty. The supervisor of the doctoral student participates in the meeting of the Committee in an advisory capacity. The meeting of the Committee for Doctoral Thesis Defense is run by its chairman. A majority of the votes of all the members of the Committee is required for the acceptance of the proposal.

* **DEFENSE**

The defense of the doctoral thesis is a scientific discussion between the doctoral student and the opponents, members of the Committee for Doctoral Thesis Defense and other participants in the defense.

The defense of the doctoral thesis is public.

The defense of the doctoral thesis is classified as grade "A" (passed) or "F" (failed).

If the doctoral thesis has not been defended, a new defense can be held in one year at the earliest. If the doctoral thesis is not defended a second time, the doctoral student's studies will be terminated.

The doctoral thesis must be defended no later than seven years from the date of enrollment in the study. The period during which the study was interrupted is not included in this period. If the doctoral student does not defend it within this period, his/ her studies will be terminated.

The defense of the doctoral thesis is held with the personal participation of the opponents. If, exceptionally, one of them is unable to take part in the defense, the defense may take place provided that the absent opponent has provided a positive review. In this case, the review of the absent opponent is read. The defense is run by the chairman of the Committee for Doctoral Thesis Defense, exceptionally on his/her behalf by another member of the Committee.

**When defending a doctoral thesis, the procedure is usually as follows:**

a) the chairperson starts the process of the defense, introduces the doctoral student, informs about the topic of the doctoral thesis and acquaints the Committee for Doctoral Thesis Defense with an overview of his/ her published research papers or engineering or artistic works created by him/ her

b) the doctoral student will explain the essential content and the main results of his/ her doctoral thesis, the doctoral student will prepare a presentation of his/ her doctoral thesis in the length of 20 minutes (the projection technique will be prepared in the room)

c) the supervisor acquaints the Committee for Doctoral Thesis Defense with his/ her opinion on the doctoral student’s work during the doctoral studies and his/ her review of the doctoral thesis

d) opponents present the essential content of their reviews

e) the doctoral student responds to the reviews of the opponents, especially on the objections, comments and questions

(f) The chair opens a discussion, which may be attended by all present members and which may cover the whole field of study

The defense of the dissertation does not last longer than three hours.

At a closed session, the Committee for Doctoral Thesis Defense with the participation of opponents and the supervisor will evaluate the doctoral thesis defense and decide on its result in a secret ballot. A majority of positive votes of all members of the Committee are required for a successful defense of the doctoral thesis. Following the decision, the Committee shall act by a majority of the justification for that decision. The doctoral student is acquainted with the decision and its justification.