

Guidelines for Writing a BSc Thesis and Information on the Final Examination

This guide has been prepared to assist students in the preparation of their theses.

I. THESIS REGISTRATION FORM

At the Faculty of Informatics students of all majors are required to compose a separate, independent bachelor thesis for each of their programmes. (See section 76 (3), Academic Regulations for Students, henceforth ARS.)

From 2019/2020 the Thesis Registration Form needs to be submitted through Neptun: Administration / Requests / Available request forms / IK - Thesis Registration Form

Students are required to fill in the following data:

- Student's data
- Major
- Supervisor's data
- Title of the thesis
- a max 1 page long description of the topic so that the difficulty and complexity of the task undertaken by the students can be clearly seen and measured.

Before submitting the Thesis Registration Form, please contact the supervisor to discuss the topic and to check his data.

Supervisors can be lecturers and also researchers who are not employed by the University, but they are required to obtain an MSc degree in the relevant field. If the student has an external supervisor, the Faculty will appoint an internal supervisor for him/her.

The topic and the supervisor of the student's thesis will be approved by the head of the department responsible for the programme.

Choosing thesis topic is required to be indicated in at least six month before the Final Exam period. (ARS section 77 (4a)).

Deadline for submitting the Thesis Registration Form is:

- 1 December in case of Final Exam in June
- 1 June in case of Final Exam in January

Extended deadline for submitting the Thesis Registration Form together with an administrative fee:

- 2-15 December in case of Final Exam in June
- 2-15 June in case of Final Exam in January

The student can change the topic of the thesis, **until utmost in four months before the Final Exam** but between changing the topic and the beginning of the final exam period at least 4 months must pass. (ARS section 77 (8a)). Deadlines:

- 1 February in case of Final Exam in June
- 31 August in case of Final Exam in January

In case of inappropriate Thesis Registration Form, the supervisor will send the request back for modification.

Students can choose a thesis topic by themselves, by contacting their previous lecturers to take care of their supervision.

II. CONSULTATION

Please note that students who started their studies in or after September 2015 are required to complete Thesis Consultation, course to prove that they have regularly consulted with their supervisor and got to the point where their work is completed in at least 60-70%.

From Spring semester of the 2021/22 academic year students of Computer Science BSc are required to register for Thesis Consultation course during the registration period in Neptun in case they intend to finish their studies (get the absolutorium) in the current semester. Thesis consultation courses are ordered to the inner supervisors.

You are required to follow the steps as listed:

- Check whether the Thesis consultation course concerning your training is available with the course code (check your sample curriculum) - indicated by your supervisor in Neptun.
- Register for the course in case you intend to complete your studies (get the absolutorium) in the current semester.
- In case the Thesis consultation course is not available with the code ordered to your supervisor, please contact your supervisor, ask him/her to publish the course code as soon as possible.

The accomplishment of the Thesis Consultation course is recorded in Canvas system. Thesis consultation results are recorded in Neptun by the supervisor in case of accomplishment.

Consultation is required to be fulfilled in order to obtain the required amount of credits of the Thesis Consultation subject and the Thesis itself.

Deadline for last Thesis Consultation (deadline of the registration of the accomplishment in Neptun):

- 15 December in Autumn semester,
- 15 May in Spring semester

III. CONTENT OF THE THESIS

The thesis consists of an ICT solution (i.e. a program) to a practical problem. The complexity of the task(s) set in the thesis must not exceed the capabilities and skills of an average student; i.e. the task(s) can be completed in max. 600 man-hours, worth 20 credits. If the volume of the task accounts for more workload, several students can join to write one thesis together. In this case, it must be clearly marked which part of the thesis is the student's work.

The thesis must contain the following sections as independent chapters:

1. Introduction
2. User Documentation

3. Developer Documentation

The source code of the program must be enclosed.

The Introduction consists of a justification for choosing the given topic and a brief and plain description of the problem to be solved.

The User Documentation contains

- a short statement of the problem solved,
- a brief description of the methods used,
- and all the information required for using the program.

The **Developer Documentation** contains

- a detailed specification of the problem
- a detailed description of the methods used, a definition of the terms used,
- a description of the logical and physical structure of the program (data structures, databases, module resolution),
- a testing plan and test results.

IV. FORMAL REQUIREMENTS OF THE THESIS

Physical requirements of the thesis:

- Paper: white, size A4
- Font size: 12 points
- Rows: line-adjusted, 1,5 line spacing
- Margin: inside: 3,5 cm, outside: 2,5 cm, bottom: 2,5 cm, top: 2,5 cm
- Page number: continuously from the contents to the bibliography. Marked with Arabic numbers.
- Main chapters of the thesis (Heading 1) are required to start on a new page.

Structural requirements of the thesis:

- The header of the title page of the thesis must bear the ELTE logo, the name of the university, the faculty and the supervisor's department, respectively. The main body of the same page is required to contain the title of the thesis, the candidate's name and his/her training programme, the supervisor's name, the external consultant's name, the place of submission and the year of the thesis defence.
- Table of contents
- The thesis must contain all the three chapters prescribed as obligatory in Section II (Introduction, User Documentation and Developer Documentation).
- The thesis must be completed -- if the topic requires -- with a bibliography. (If a student uses other people's results for his/her work, he/she must name the source(s) of such results.)

Further details on the formal requirements for the thesis are specified in „Thesis sample”.

V. ENCRYPTION OF THE THESIS

The thesis defence is public. Restrictions are only possible in the case of confidential theses as specified in Section 80. (ARS, section 79 (6))

The thesis may only contain information warranting its confidentiality in justified cases. If the thesis can be interpreted without the information warranting its confidentiality, (e.g. personal data can be anonymised), then there is no reason to include such information. (ARS, section 80 (2))

The thesis is to be classified as secret if it

- a) contains business secrets,
- b) contains classified information,
- c) contains a patent or an invention,
- d) contains the personal data of a third party,
- e) concerns the University's business interests. (ARS, section 80 (4))

Documents required to be submitted to **request** the encryption:

- **Encryption request form** in Neptun with the attachment of
- **Statement of consent** request form filled, signed and stamped by the head of the involved company or involved person. This document is required to be attached to the Neptun request in pdf format and available on the website of <http://csbsc.elte.hu/requests/>

The task of the supervisor is to assist the student in the elaboration of the thesis according to paragraph (2) and in the establishment of the justification of its classification as secret. The task of the student is to obtain the necessary permits and consents for the confidential thesis before submitting them. (ARS, section 80 (3))

The confidentiality of the thesis is to be announced by the Student or ordered by the supervisor or the chair of the final examination committee. (ARS, section 80 (5))

The confidential thesis shall be submitted with the protection provided by an electronic password, which may only be revealed to those entitled to the classified information in question. (ARS, section 80 (6))

Only the evaluation committee, the supervisor and the student, and in the case of a teacher training programme, the professional methodology instructor may be present at the defense of a confidential thesis. (ARS, section 80 (7))

Deadline of submission of the encryption documents:

- 15 November in case of Final Exam in January
- 1 May in case of Final Exam in June

After the approval of the Neptun request form by the vice-dean, the student will receive an encryption certificate. This is required to be uploaded together with the thesis into Neptun. After uploading, checkbox „Confidential” is required to be ticked.

VI. SUBMISSION OF THE THESIS

Only one file can be submitted in pdf or zip. Files required to be included beside the thesis and the programme:

- **Thesis Registration Form:**
- **Statement of Originality**
- If needed: documents regarding **Encryption**

In case you can't print and sign the documents **listed above**, fill them electronically and write after your name: sgd.

For uploading data files bigger than 200 MB please follow these steps:

1. Upload in zip file: the Thesis Topic Declaration, the Thesis, the source-code of your programme (concerning your own work), the Statement of Originality and in case you have one, the Encryption request.
2. Upload the whole thesis programme onto Onedrive, available with your inf mailing system.

At the end of the Statement of Originality, please indicate that the whole thesis programme is on Onedrive and give access to the head of the Final Exam Committee. He/she will forward the documents towards the other members of the Committee.

Submitting Thesis in Neptun

After logging in Neptun please search for Studies / Degree Thesis/Thesis application.

Here you can upload your thesis by clicking on „Upload degree thesis”.

Please fill in the final title of the thesis, some keywords (3-5 words what will make searching easier) and the short summary of the thesis (max. half page).

After this you can upload and save the thesis itself in pdf or zip.

Please save the file in the following name and format: NAME_NEPTUNID_THESIS.PDF OR .ZIP

By choosing the correct file, please wait until it is uploaded properly. (You will not receive a system message to wait.) In case of successful uploading, the name of the uploaded file will be listed.

Finally click on “Save file”.

After saving please check that the system **has** really saved all the uploaded documents.

The Thesis file can be changed till the deadline of the uploading. In case of a change: first you will need to delete the first file, than upload the modified one.

In case of an encrypted thesis, don't forget to choose „Confidential”.

VII. ASPECTS OF THE REVIEW

The student's thesis is reviewed by the supervisor and an external consultant (if there is one).

Theses are evaluated according to a set of criteria based on the following:

1. The difficulty of the programming task solved. Since the method and the algorithm are predetermined, their difficulty and complexity are not included in the evaluation.
2. Quality attributes of the program including: transparency, changeability, extensibility, adaptability to the user, reliability etc.
3. Usability of the User Documentation: How easily and quickly the user can get familiarized with the program?
4. In what extent does the Developer Documentation help orientation in the program, as well as in the further development and maintenance of the program?

The aspects considered:

- the structure, language and appearance/layout of the documentation;
- the transparency of the program text;

- the relationship and harmony between the parts of the documentation (algorithms, modules and program structures);
 - quality assessment of testing.
5. Opinion on the student's work.

VIII. PREREQUISITES FOR THE FINAL EXAMINATION

1. Registration for the Final Exam in Neptun.
2. Before the final examination students are required to acquire a final, pre-degree certificate ('abszolutórium' in Hungarian)
 - a. Complete all the subjects of the ideal curriculum
 - b. Complete the Thesis consultation course (recorded in Neptun)
 - c. Complete internship (recorded in Neptun)
3. Submit their thesis proposed by the supervisor for defence.
4. No debt/Neptun liabilities towards the university/library

IX. FINAL EXAMINATION

1. The final exam consists of two parts: the defence of the thesis by the student and a professional examination provided the thesis defence was successful.
2. During the defence of the thesis, the candidate has 15 minutes to present the completed program and then he/she has to respond to the committee's questions regarding the program shown. A brief presentation of the task and the methods used are welcome. It is the student's responsibility to prepare the appropriate environment and test cases to demonstrate the operation of the program.
3. During the final examination, the student is required to give an account of his/her professional knowledge and skills required for the chosen profession by discussing a topic from the pre-set final examination questions' list.
4. The final exam committee evaluates the thesis itself, its defence and the professional exam with a grade from 1 (fail) to 5 (excellent). If the thesis is graded as insufficient/failed (1), the student must prepare a new one. If either part of the final examination i.e. the defence of the thesis or the professional examination is graded as failed, the student may not retake it within the same exam period.
5. A thesis that wins top or first prize at the National Conference of Scientific Students' Associations ("OTDK") may be rewarded by the Dean with an excellent grade without any further evaluation if it complies with all the requirements for thesis (§7 Section 79, ARS).
6. In accordance with Section 383/A of the ARS, the final grade of the Final Examination is the mathematical average of the grades received for the thesis, the defence of the thesis and the oral examination. The final grade of the degree certificate equals to the grade of the final exam.

X. DEADLINES REGARDING FINAL EXAMINATIONS AT THE FACULTY OF INFORMATICS ARE AS FOLLOWS:

Final Examination in June (organised in the last 2 weeks of the Exam period)

Deadline for submitting the Thesis Registration Form: 1 December
Extended deadline for submitting the Thesis Registration Form together with an administrative fee: 15 December
Deadline for registering for the final examination: 15 March
Registration period: from 1 to 15 March
Deadline for completing the Thesis consultation course: 15 May
Deadline for submitting the thesis: 15 May
Extended deadline for submitting the thesis together with an administrative fee: 29 May – needs to be requested till 15 May
Deadline for the pre-degree certificate ('abszolutórium'): 18 June
Regarding the exact date of the Final Exam a message will be sent by the student coordinator.

Final Examination in January (organised in the last 2 weeks of the Exam period)

Deadline for submitting the Thesis Registration Form: 1 June
Extended deadline for submitting the Thesis Registration Form together with an administrative fee: 15 June
Deadline for registering for the final examination: 15 October
Registration period: from 1 to 15 October
Deadline for completing the Thesis consultation course : 15 December
Deadline for submitting the thesis: 15 December
Extended deadline for submitting the thesis together with an administrative fee: 29 December – needs to be requested till 15 December
Deadline for the pre-degree certificate ('abszolutórium'): 15 January
Regarding the exact date of the Final Exam a message will be sent by the student coordinator.

Date: 17 February 2022

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