# Diploma Project Guidelines
# Civil Engineering study programme

The diploma project aims to demonstrate the skills acquired by the student during the 4 years of bachelor studies by applying them in a final paper. This project must highlight the ability to analyse and synthesize information, as well as the technical and methodological skills required in solving a problem related to the design of a building structure.

This guide provides support for the completion of diploma project that has the following objectives:

- application of theoretical and practical knowledge;
- demonstration of technical skills;
- development of communication skills.

The diploma project represents proof of the graduate's level of professional training and reflects the knowledge and skills acquired during the 4 years of study.

Each student is required to choose a topic for the diploma project and an academic supervisor. While completing the project, the student has to implement the requirements set by the supervisor.

**Contents of the Guide:**

## 1. Topics for the diploma project

**Civil constructions/Buildings for:**

- residential purposes (single-family, collective);
- administrative purposes (headquarters for central and local administrations, town halls, finance-banking, trade unions, offices, etc.);
- trade purposes (shopping centres, shops, supermarkets/hypermarkets, closed markets, public catering, services, etc.);
- health purposes (hospitals, polyclinics, dispensaries, children's homes, nursing homes, maternity homes, homes for the disabled, hospices, etc.);
- culture purposes (exhibitions, museums, libraries, clubs, halls, cultural centres and complexes, cinemas, theatres, multipurpose halls, etc.);
- educational purposes (nurseries, kindergartens, schools, high schools, universities, etc.);
- tourism purposes (motels, hostels, hotels, etc.);
- worship purposes (churches, synagogues, temples, houses of prayer, etc.);
- sports purposes (gyms, stadiums);

**Production/storage buildings** (specific to the industrial environment, housing various technological processes, including their raw materials/finished product warehouses)**;**

**Agro-zootechnical buildings** (stables/shelters for animals (sheep, pigs, horses, poultry, goats, cattle, etc.), fodder warehouses, solariums, nurseries, greenhouses, silos, etc.);

**Parking lots (underground and above ground);**

**Special constructions** (water towers, cooling towers, chimneys, telecommunications towers, reservoirs, etc.).

The student will fill in the project topic (document) in accordance with the topic chosen by the student together with the project supervisor.

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TOPIC

of the diploma project

…….....……

1. Project topic .....
   ……
2. Deadline for submitting the project …….…….…….……...
3. The initial elements for the project
   ……..……
   …….…….
4. The content of the calculation report (name of the problems to be solved)
   …….……
   …….
5. The name of the graphic material (with the precise indication of the mandatory problems)
   ……
   ……
6. Consultations for the project (indicating the parts of the project for which consultation is requested)
   ……
   ……
7. Topic assignment date …….

Supervisor,

The assignment was received for completion,

Date ……

The student's signature,

## 2. Title page

"GHEORGHE ASACHI" TECHNICAL UNIVERSITY OF IAŞI
FACULTY OF CIVIL ENGINEERING AND BUILDING SERVICES
CIVIL ENGINEERING STUDY PROGRAMME

# DIPLOMA PROJECT

# Project title

Supervisor:

Graduate:

Year

## Summary / table of contents:

**Written section:**



**Drawings section:**

## 3. The content of the diploma project

The diploma project will include the work stages specific to the design of a building structure.

**Written section:**

1. Table of contents;
2. General description of the building structure (technical specifications, location, type of building, element of facades, roof, levels, floor layout, finishes, structural system, type of foundation, service class)
3. Design notes will include, depending on the chosen topic:
   - Preliminary design of the structural and non-structural elements;
   - Thermal evaluation of the closing elements (facade, roof);
   - Loads evaluation and combinations;
   - Structural analysis using a computer software;
   - Dimensioning and checking of the main structural elements: at least one vertical element, one horizontal linear element, one horizontal surface element (in accordance with the chosen topic);
   - Dimensioning and checking of the foundation system;
4. Construction technology and management:
   - Description of a work technology (e.g. formwork technology, excavation technology, masonry, wood, metal technology, quality of construction materials);
   - Presentation of the work scheduling elements and the site organization for a construction component (e.g. creating/making a network graph, a calendar scheduling graph, a used resource graph, a critical path method);
   - Making of the economic documentation for a construction component of the building (e.g. establishing the preliminary measurements and cost estimation in accordance with current legislation, using specific software);
5. References – includes a list of resources used in the completion of the project: design and execution regulations, books, courses, journals, papers, economic legislation, norms and references sources cited accordingly in the content of the diploma project.

**Drawings section (minimum 8 drawings depending on the relevant and mandatory plans for the chosen theme, decided together with the project coordinator):**

I. Architectural drawings – depending on the chosen theme (at least 3 drawings):
   - Site plans (sc. 1:200 – 1:2000)
   - Landscape plans (sc. 1:5000 – 1:25000)

- Horizontal plan views and details (sc. 1:50 – 1:100) (horizontal plans through the building at the different levels): ground floor plan, first floor plan or current floor plan, connection details, roof plan
- Elevation (sc. 1:100)
- Vertical sections (sc. 1:50) (a cross-section focused on highlighting vertical elements such as walls or facades, detailing their composition and positioning from the foundation to the roof).

II. Structural drawings (at least 5 drawings)
- Excavation plan
- Foundation plan and details
- Plans and details for vertical structural elements
- Plans and details for horizontal linear structural elements
- Plans and details for horizontal surface structural elements

## 4. Typesetting rules for diploma project

1. The framework structure of the project must be respected;
2. The recommended length is between 50-80 pages (including the references). Appendices related to the chosen topic are additional to the page count.

**3. Editing and typing rules:**

- the document will be written in the MS Office editor, with Times New Roman font, font size: 12;
- standard page format - A4;
- the margins will be set so that the binding margin is 3 cm (to allow for the binding of the pages), and all the others are 2 cm;
- spacing between lines will be 1-1.5;
- the alignment of the paragraphs will be justified; the left and right edges of the paragraphs will be straight, running parallel with the sides of the page;
- quotation marks will be used to cite bibliographical resources (“....”);
- the sections will be: chapter/subchapter/paragraph;
- each new chapter will start on an odd page;
- equations, figures and tables will be centred;
- each equation, figure and table will be numbered;
- each figure and table will have a title specific to the content (a very short description);

## 5. Thesis supervisor's report



# REPORT

on the diploma project of the student

……....,

class of ……., bachelor's degree in Civil Engineering,

Faculty of Civil Engineering and Building Services.

I, the undersigned, ....., as supervisor of the diploma project elaborated by the student ……., with the topic: ……..

……..,

after reviewing the diploma project, noted the following:

1. The project comprises the following chapters:

.....

.....

2. Considerations on the project:

.....

.....

.....

3. Grade ……..……

Date .....

Diploma project supervisor,

## 6. Plagiarism check

Any form of intellectual fraud - plagiarism - is strictly prohibited, regardless of whether it is done in part or in whole, intentionally or by mistake, through an improper use of the citation system.

The inclusion of ideas, expressions and definitions that belong to another author than that of the work, must be done as a citation by using quotation marks. It is mandatory to observe all the rules regarding the use of information from various types of bibliographic resources.

Within the work (the written part), references must be cited in the text, according to academic rules and citation methods. The student will submit the thesis in both printed and electronic format (PDF format file, saved from the DOCx file), accompanied by a declaration of originality and conformity between the two versions (the one uploaded for plagiarism checking and the other printed and presented in the final exam).

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FACULTY OF CIVIL ENGINEERING AND BUILDING SERVICES

# DECLARATION OF ORIGINALITY AND CONFORMITY

I, the undersigned, ……, graduate of the Faculty of Civil Engineering and Building Services, Civil Engineering study programme, class of……, declare on my own responsibility that the diploma project with the title …… ……, completed under the supervision of ……....., represents my own contribution, and the version submitted in electronic format is the same with the paper printed and presented to the committee.

In completing the project, I used exclusively the sources presented in the References chapter of the thesis, in accordance with national legislation and international conventions on copyright.

This project is the result of my own intellectual activity and has not been previously presented at any higher education institution, in Romania or abroad.

Date: Signature,

…… ……

Plagiarism check will be carried out using a recognized and approved software at the national level. The supervisor of the diploma projects, together with the committee secretary will check the conformity of the bachelor's thesis.

If the percentage of similarities is below the accepted level (according to PO.DID.08), the candidate will be allowed to defend the thesis in the current session.

If the percentage of similarities is higher than the accepted level, the graduate's supervisor will analyse the thesis. If the supervisor accepts the presented version of the thesis, the candidate will be allowed to defend the project in the current session.

If the supervisor does NOT accept the presented version of the thesis, the candidate must revise and resubmit the thesis for a further analysis.

If the percentage of similarities is below the accepted level upon the second check, the candidate will be able to defend the thesis in the next available session, according to the academic calendar.

## 7. The diploma project defence

Registration of candidates for the graduation exam has to be made with at least 5 days **before the start of the exam**, at the Dean's Office, by submitting an application:

“GHEORGHE ASACHI” TECHNICAL UNIVERSITY OF IAŞI

Approved,
Dean
Prof. Andrei Burlacu, Ph.D.

To the DEAN of the Faculty of Civil Engineering and Building Services

I, the undersigned, ……, graduate of the Faculty of Civil Engineering and Building Services, Civil Engineering study programme, class of……, hereby kindly request your approval to register for the diploma project exam in the …… session, in accordance with the legal provisions.

I previously took the diploma / bachelor’s degree exam in the year .....

I completed the bachelor’s degree project with the title ……
……
under the supervision of …….

Date:
……

Signature,
……

Visa of the thesis supervisor ……

Average school grade (ECTS): ……

Faculty secretariat visa,

The application will be accompanied by:

- the diploma project;
- the similarity report (first page signed by the supervisor);
- the report of the scientific supervisor, including assessments of the content and originality of the project and the proposal for grading it;
- two ¾ color photos for the diploma;
- copy of the identity card.
- a certificate of linguistic competence in an international language issued by the Foreign Language Staff within the Department of Teacher Training of "Gheorghe Asachi" Technical University in Iași or by another specialized institution, only if the documents certifying this competence are recognized by the department mentioned above.

When evaluating the project, the following will be taken into account:

- the chosen topic, the content and organization of the project, the topicality and/or novelty of the topic, compliance with the imposed structure;
- graduate's documentation and contributions;
- level of presentation and answers to questions, communication skills, mastery of specialized language.

This guide for the preparation of the diploma project was approved at the meeting of the Faculty Council on November 26th, 2024.

Dean,

Professor Andrei Burlacu, PhD