📘 Student Handbook – Engineering and Master's Diploma Theses

Warsaw University of Technology – Institute of Production Systems Organization
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Introduction

This handbook was prepared to guide students of the Institute of Production Systems Organization (IOSP) through the process of preparing and defending an engineering (BSc) or master's (MSc) diploma thesis. It combines official regulations, faculty guidelines, and good practices in one clear document. The diploma thesis is the final and most important element of your studies – it verifies your ability to conduct an independent project or research work, solve complex problems, and present results clearly.

This handbook covers: choosing a topic, registration procedures, structure and formatting, submission, defense, and evaluation criteria. Links to official forms and resources are also provided.

Part I – Starting the Diploma Thesis

1. Choosing and Formulating the Topic

The topic and title must be relevant, concise, and consistent with the field of study. Engineering theses are usually project-oriented, while master's theses may be project-oriented or research-oriented.

Examples:
● **Engineering (BSc): "Project of Implementing Lean Tools in the Assembly Line of Company X"**
● **Master's (MSc): "AI-Driven Demand Forecasting and Inventory Optimization in the Automotive Industry"**

2. Registration and Document Flow

The diploma process begins with the submission of the diploma thesis registration card (FOR-PD form). It must be signed by:

1. the student
2. the supervisor,
3. the Head of Department.

Once approved, the topic is registered in the USOS and APD systems. Any later change of topic or supervisor requires a new approval process.

Part II – Writing the Diploma Thesis

3. Structure of the Thesis

The recommended structure of the diploma thesis is as follows:

Table 1: Structure of the Thesis

Pages	Content
1–2	Title page (without page numbering)
3–4	Registration card (without page numbering)
5	Abstract in Polish, keywords
6	Abstract in English, keywords
7 and following	Table of contents
Next odd page	Introduction
Following pages	Chapters, summary, bibliography, appendices

Source: own elaboration

Recommended length: Engineering (approx. 60 pages), Master's (approx. 80 pages).

4. Formatting Rules

Formatting requirements (based on Rector's Order No. 4/2022):
• Font: Arial or Verdana, 11 pt., spacing 1.15, justified,
• Margins: left 30 mm, right 20 mm, top/bottom 25 mm,
• Page numbers: bottom outer corner, mirrored on odd/even pages,
• Headings: three levels, bold, sizes 14/13/12 pt..
• Figures/tables: numbered, titled, with sources and references,

• Formulas: centered, numbered on the right.

Graph 23. Location of the investment area
Source: http://mapa.pf.pl/

Table 15 Monitored measures of operational control

Specyfikacja planowanych i monitorowanych mierników	Harmonogram działań / wielkości/wartości mierników					
	Wielkości/ wartości docelowe na koniec okresu t=1 rok	Planowane wielkości/wartości kwartalne				
		t_0	t_1	t_2	t_3	$t_4=t'_0$
1. Płaszczyzna finansowa						
1.1. Stopa zwrotu zainwestowanego kapitału	+	+	+	+	+	+
1.2. Stopa wzrostu sprzedaży	+	+	+	+	+	+
1.3. Udział sprzedaży eksportowej w ogólnych przychodach ze sprzedaży	+	+	+	+	+	+
1.4. Zmniejszenie jednostkowego kosztu wytworzenia	+	+	+	+	+	+
1.5. Wskaźnik rentowności brutto	+	+	+	+	+	+

Where: + - numbers
Source: own elaboration

The thesis must be written in an impersonal style, avoiding colloquial expressions.

4. Differences Between Engineering and Master's These

Aspect	Engineering Thesis (BSc)	Master's Thesis (MSc)
Objective	Project-oriented, practical problem	Project or research-oriented, broader scope

	solving	
Scope	Within BSc program, practical focus	Broader, often interdisciplinary
Methodology	Application of known methods/tools	Advanced methods, possible development of new approaches
Data sources	Enterprise, literature	Enterprise, literature, research, models, experiments
Conclusions	Recommendations for implementation	Critical analysis, verification of hypotheses, future research directions

Part III – Submission and Defense

6. Workflow in the APD System
The APD (Archive of Diploma Theses) system is used for the electronic processing of theses. The workflow includes:
1. The student uploads the thesis in PDF format.
2. Supervisor approves and uploads the review.
3. Reviewer uploads their review.
4. Anti-plagiarism report is attached.
5. Thesis is approved by the Head of Department and the Faculty authorities.

7. Submission of Documents
Before the defense, the following must be submitted:
• Thesis uploaded to APD system,
• Signed registration card (FOR-PD),
• Anti-plagiarism report,
• Supervisor and reviewer's reviews,
• Other documents required by the Dean's Office.

8. Defense Process
The defense takes place before an Examination Committee. The process includes:
• Student presentation (10 minutes for engineering, 15 minutes for master's),
• Questions from the committee,
• Discussion of supervisor's and reviewer's evaluations,
• Committee deliberation and final grade decision.

The final diploma grade is calculated based on:

- Average of all course grades,
- Supervisor's grade for the thesis,
- Reviewer's grade for the thesis,
- Defense grade.

Part IV – Evaluation

9. Criteria for Assessing Diploma Theses

The evaluation of theses is based on the following main criteria:

Criterion	Description
Consistency of title and content	Thesis matches approved title and scope
Methodological correctness	Proper identification of the problem, objectives, methods, and data
Substantive value	Quality and usefulness of the proposed solution or research
Literature analysis	Adequate use of current, relevant sources
Conclusions	Clear, logical, supported by results
Structure and editing	Clarity, formatting, and language correctness
Independence	Student's own contribution and creativity

Additional elements assessed include: level of knowledge, skills in applying methods, critical thinking, and social competencies such as responsibility, ethical behavior, and openness to feedback.

Annexes – Quick Reference

📅 Timeline:

- Registration of topic (beginning of semester)
- Project work with consultations
- Upload thesis to APD (before defense)
- Defense (end of semester)

✅ Checklist before submission:

- Thesis formatted correctly,
- Registration form signed,
- Thesis uploaded to APD,
- Reviews completed,
- All documents submitted to Dean's Office.

🔗 **Key links:**
- APD system – https://apd.usos.pw.edu.pl
- IOSP forms – https://www.mt.pw.edu.pl/iosp/Studia/Formularze
- Regulations – https://www.pw.edu.pl/Studenci/Regulaminy