

ENGINEERING THESIS STANDARDS

for theses prepared at the Wrocław University of Economics and Business.

1. General requirements

- 1.1. An engineering thesis should be the development of a specific scientific subject that presents the general knowledge and skills of the student related to a given program of study, the level of second-degree studies and the profile of education, and the leading discipline to which the studies were assigned.
- 1.2. The subject of an engineering thesis should be connected to the learning outcomes adopted for the program of study. The thesis is conducted under the supervision of a supervisor who will ensure that it is achieved.

2. Substantive requirements

- 2.1. The thesis should include:
 - formulation of a research problem, purpose of the thesis and scope of research,
 - application of a specific test method,
 - application of appropriate analytical tools, measurement techniques, measuring equipment used in the thesis,
 - formulation of conclusions on the basis of the analysis carried out.
- 2.2. A structure of the thesis should lead to the achievement of its objective.
- 2.3. Preparation of an engineering thesis should shape the following skills of a student:
 - broadening knowledge by independent study of literature on the subject,
 - selecting and relating literature of the subject to the research problem,
 - diagnosing and assessing the problem in the researched economic entity or institution,
 - designing new solutions or modifications to the existing ones,
 - using a research workshop, and in particular using methods of scientific study,
 - identifying and analyzing the surrounding phenomena, particularly those which the graduate will face in practice,
 - seeing the regularity of these phenomena,
 - assessing and drawing conclusions,
 - active use of knowledge acquired during the course of study and its use in practice or theoretical application,
 - application of logical reasoning and the use of clear and precise language.
- 2.4. The thesis should have a separate theoretical part (analysis of the literature of the subject) and a research part (own research results aimed at solving the problem analyzed in practice).
- 2.5. The theory should briefly present advanced knowledge (Level 6 of the PRK) from the selected topic resulting from the review of national and foreign literature.

3. Requirements concerning the nature of the thesis

The engineering thesis should take a form of:

- a) **research** – the author identifies a relation between economic phenomena and detects dependencies, within the framework of the examined excerpt of economic reality. The thesis may also take an experimental form – it contains an experimental solution of a particular research hypothesis and includes a concept and an appropriate selection of test methods, planning and organization of the experiment, presentation of the results obtained, their discussion and conclusions,
- b) **project (application)** – provides a comprehensive system design (e.g., technological process, product manufacturing, management, including computer, logistics,

organizational management) that performs specific performance functions resulting from environmental analysis or user needs, without or with implementation.

4. Regulatory requirements

Engineering thesis:

- is a student's own work prepared under the supervision of a supervisor,
- is subject to a review,
- is defended during the course of the diploma examination,
- allows the graduate to become a professional engineer.

5. Formal requirements

- The structure of an engineering thesis, apart from chapters includes:
 - a) cover page,
 - b) title and summary in English,
 - c) table of contents,
 - d) introduction and conclusion,
 - e) lists,
 - f) statements (specimens of the statements are attached). Student's statements should be placed at the end of the thesis.
- Structure of a thesis on *English-language programs of study* – the thesis should include, apart from chapters:
 - a) cover page in English – ENG model
 - b) thesis title and summary in English,
 - c) table of contents in English
 - d) introduction and conclusion,
 - e) lists,
 - f) statements (specimens of the statements are attached). Student's statements should be placed at the end of the thesis.
- The thesis should include lists in the following order:
 - a) a list of the literature quoted in an alphabetical order, in accordance with the requirements of the bibliographical description,
 - b) a list of legal acts and other regulations used,
 - c) a list of materials from Internet sources (with the last date of access) and other source materials with a full bibliographic footnote,
 - d) a list of boards/tables,
 - e) a list of figures (diagrams, maps, etc.),
 - f) a list of annexes.
- **The introduction** should outline the background to the researched issue, point out the rationale for the choice of the subject of the thesis, formulate a research problem, define the purpose and scope of the thesis, identify test methods and measurement techniques, measuring equipment used in the work, and present general information on the content of the various chapters of the thesis.
- **The conclusion** should indicate conclusions drawn from the thesis.
- Before the list of contents we should place, for theses in Polish: title and summary in English, for theses in English: title and summary in Polish (text of summary of maximum 2,500 characters including spaces).
- Literature footnotes should be uniform according to one of the following styles:
 - a) Harvard style
 - b) [APA style](#)
 - c) Bibliographical style of footnotes (examples in Annex 4).
- The thesis should have no less than 30 pages.

- Literature should include at least 12 references in the form of non-serial publications and articles. In addition, it may be supplemented by legal acts and a list of websites, if required by the subject of thesis.
- Foreign language references should be present in the literature.
- The list of references may contain only the ones to which reference is made in the thesis.

Moreover, the thesis should include:

- a list of the literature quoted in an alphabetical order, in accordance with the requirements of the bibliographical description,
- a list of the legal acts and other regulations used,
- a list of materials from Internet sources (with the last date of access) and other source materials with a full bibliographic footnote,
- a list of boards/tables,
- a list of drawings (diagrams, maps, etc.),
- a list of annexes.
- Standard cover page layout as attached.

6. Editorial requirements

- paper size format: A4 (one-sided print),
- basic font: Time New Roman 12 pt or Calibri 11 pt,
- font in tables and figures maximum 11 pt,
- space between the lines: 1.5 of a line,
- margins: top 2.5 cm; bottom 2.5 cm; left 3.0 cm; right 2.0 cm,
- align text to both margins,
- indent paragraphs: 0.5 cm,
- continuous numbering of all pages of the thesis,
- footnotes: 10 pt font size.

Program

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Author's First Name and Surname

Student No.

ENGINEERING THESIS / CLASSIFIED ENGINEER'S THESIS

Title of the Thesis

Engineering thesis written under the supervision of

.....

at the Department

.....

I approve the thesis and I request its further processing

.....

Supervisor's signature

WROCLAW 20.....

**DECLARATION OF THE AUTHOR
CONCERNING INDEPENDENT AND SOLE AUTHORSHIP OF THE THESIS**

I hereby declare that I am the sole author of this thesis and that it includes no content obtained in contravention of the applicable regulations. All data, concepts, crucial ideas and formulations derived from literature (quoted verbatim or paraphrased in the thesis) are appropriately referenced. The thesis, in its entirety or any part containing significant fragments presented as original (results of empirical research, calculations, observations, assessments, conclusions, proposals, etc.), has not been submitted by anyone to any prior assessment or published elsewhere.

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