**Requirements for diploma theses/dissertations**

**written at the Faculty of Management, Wrocław University of Science and Technology**

**Content-related requirements**

**Diploma thesis after six-semester first-level studies (licencjat)**

The diploma thesis after six-semester first-level studies (licencjat) refers to narrower issues than master theses. The objective of the diploma thesis should be practical. The diploma thesis can be a case study, comparative analysis, in-depth diagnosis, or a project. It requires the use of typical methods to diagnose, identify and solution of a selected managerial problem. It should present an appropriate selection of methods for the problem and confirm the student’s mastery of the skills of collecting and organising material, correct application of selected methods, formulating conclusions and editing the text. The diploma thesis should generally discuss the methods, techniques, tools, management concepts appropriate to the problem and the scope of work and describe in more detail those that were selected to achieve the purpose of the work.

The diploma thesis should include citations and references to specialist literature concerning the field of study - several items (more than ten), with a predominance of books and articles published in journals.

**Diploma thesis after seven-semester first-level studies (inżynier)**

The diploma thesis after seven-semester first-level studies (inżynier) should have the character of a project work. It should present the solution of a given specific managerial problem with the use of engineering methods / techniques / tools (quantitative / mathematical, IT).

A student should demonstrate knowledge of methods possible to solve the problem indicated in the literature on the subject and the ability to choose the appropriate ones and apply them correctly. The diploma thesis must generally discuss the methods, techniques, tools appropriate to the formulated problem and the scope of the work and describe in more detail those that have been selected to achieve the objective of the work. The diploma thesis should present the student’s skills in the scope of analysing obtained data and drawing conclusions on their basis and include a project of solving a managerial problem.

The diploma thesis should include: characteristics of an organisation, identification / diagnosis of the problem and analysis of its causes and a draft solution to the problem together with an analysis of the possibility of its implementation and expected benefits.

The diploma thesis should confirm the student’s knowledge and skills in the field of analytical and design workshop. The diploma thesis should make use of specialist literature concerning the field knowledge - several items, with a predominance of books and articles published in journals.

**master’s thesis (magister or magister inżynier)**

The master’s thesis must have the features of a scientific work, the aim of the work is to be of a research character. It is important to set a topic of the diploma thesis in the broader context of research within the discipline of Management and Quality. The diploma thesis should not concern a single organisation, unless it is to serve as an object for verification of a theoretical model or an accepted thesis, or to present an analysis of a problem (“case study”) against the background of results obtained by other organisations in a given industry / in Poland / in the world, etc.

In the master’s thesis the student should be able to apply appropriate research methods (including literature review), demonstrate independent thinking and the ability to interpret research results, and not be limited to a descriptive presentation of the topic.

Master’s theses should be based on an extensive source base and take into account an adequate scientific apparatus. The essential part of the master’s thesis is the review of reliable and diverse bibliographic sources, also in foreign languages.

**Formulating of the diploma thesis title**

The title of the diploma thesis should have the features of relevance and topicality and correspond to the content of the diploma thesis. It is acceptable to use acronyms and English-language terms in the title only when it is difficult to find their full equivalents in the Polish language or they have already been fixed in the language of the discipline.

The title of the diploma thesis should be in particular:

• as concise and clear as possible,

• linguistically correct,

• specifying the subject and scope of the diploma thesis.

In the case of the diploma thesis after six-semester first-level studies (licencjat), the diploma thesis title should include the phrase:

„in enterprise (name)”, “in enterprises from sector (name)”. It is permissible to use the phrase “in (name) sector” if the entire title indicates work of a practical/professional nature.

In the case of the diploma thesis after seven-semester first-level studies (inżynier), the title should include the phrase “design”, “prototype”, “improvement”, “refinement”, “development”. The topic should clearly indicate the engineering method / tool / technique.

The title of the master’s thesis should be more general than the first-level diploma thesis. However, it must clearly indicate what the diploma thesis is about. In the case of the implementation of the diploma thesis topic, in which an organisation is a research subject illustrating the adopted theses / conclusions / models resulting from theoretical research, the topic may include the phrase “on the example of (name of the organisation / industry)”.

**Features differentiating diploma theses**

The main differences between the requirements for diploma theses carried out at the Faculty of Management are presented in Table 1.

Table 1. Main differences between diploma thesis carried out at the Faculty of Management

|  |  |  |  |
| --- | --- | --- | --- |
| Criterion  | Diploma thesis (licencjat) | Diploma thesis (inżynier) | Master’s thesis |
| Nature of work | Case study / comparative analysis / in-depth diagnosis / project | Project  | Has features of scientific work |
| Purpose of the work | Practical purpose | Practical objective requiring an engineering approach or the use of technical means | Objective of a research character |
| Scope of work | Requires the use of typical methods to diagnose, identify and solve a management problem | Requires the use of IT or quantitative methods / techniques / tools to solve a management problem | Requires the use of appropriate research methods (including literature review) to solve the problem posed |
| Depth of description, domain knowledge | Discussion of methods / techniques / tools / management concepts adequate to the problem and scope of the work and broader description of methods / techniques / tools / management concepts selected to realize the aim of the work | Discussion of methods / techniques / tools adequate to the problem and scope of the work and broader description of methods / techniques / tools selected to realize the aim of the work | Critical analysis of literature sources, author’s description of the research problem, its solution and method of verification |
| Selection of sources | Specialized literature concerning the field knowledge - several items, mainly books and journals | Specialized literature concerning the field knowledge - several items, mainly books and journals | Extensive literature, also in foreign languages. Reliable and varied sources, including scientific ones |

**Formal requirements**

**General information about the structure and volume of the diploma thesis**

The diploma thesis at the Faculty of Management consists of the following parts:

* Title page,
* Abstract of the diploma thesis in Polish and English,
* Table of contents,
* Introduction (including the aim and scope of the diploma thesis),
* Content of the diploma thesis divided into chapters and subchapters,
* Conclusion,
* Bibliography (numbered list of sources in alphabetical order by authors’ names),
* List of figures and tables,
* Appendices (optional).

The minimum volume of the main text of the diploma thesis written in accordance with the editorial requirements should be for the diploma thesis:

* diploma thesis (licencjat): 30 pages,
* diploma thesis (inżynier): 30 pages,
* master’s thesis: 50 pages.

**Title page**

The title page should be prepared in accordance with the applicable model (Appendices 1-6).

Particular attention should be paid to keywords - these should be the most frequent words in the text, usually closely related to the topic of the diploma thesis, and to a brief summary (description), which should briefly inform about the content, present the basic information contained in the text.

**Abstract**

The abstract in Polish and English should not exceed one page of text. The abstract should, inter alia, state the aim of the diploma thesis and the main conclusions of the diploma thesis, and show the author’s own contribution.

**Introduction**

The introduction should provide information on the rationale for the topic of the diploma thesis and a brief discussion of the problem that will be the subject of the diploma thesis. It should contain a precisely formulated purpose and the scope of work, presentation of the individual parts’ content, research methods used in the diploma thesis (e.g. literature review, documentation review, survey, interview, participant observation).

**Content of the diploma thesis**

The diploma thesis should have a structured layout. The main part of the diploma thesis should be divided into chapters, subchapters, or paragraphs. In order to ensure the clarity of the layout, the work should be divided into no more than three levels (chapters/subchapters/paragraphs). Although there is no set standard for the number of chapters, you should ensure that your thesis contains between 3 and 5 substantive chapters.

Subsequent chapters should contain structured content that is closely related to the aim of the diploma thesis as stated in the introduction. Each chapter / subchapter should deal with separate aspects of the presented problem and should be logically connected with the preceding and following parts of the work.

Care should be taken to ensure that the volume of chapters in the diploma thesis is relatively symmetrical (similar number of pages).

Each table, figure, equation should be referred to in the body of the diploma thesis before being included (i.e. no objects can be inserted without being referred to in the text).

**Conclusion**

The conclusion of the diploma thesis should present synthetic conclusions drawn from the whole work referring to the aim and scope of the diploma thesis. The extent to which the objective of the work has been achieved should be stated. In the case of partial achievement of the objective, the reasons for failure should be given. You can indicate directions for further action. Do not bring up new topics, present new issues that have not been previously discussed in the diploma thesis.

**Bibliography**

The bibliography is a numbered list of sources in alphabetical order by author name. The list should include only items directly referred to by the author in the text.

The bibliography, prepared in alphabetical order, should be prepared according to the following model given in *Table 2.* Works of one author should be listed in order of date of publication, from the oldest to the newest.

Table 2: Models and examples of items in a bibliographic list.

|  |  |  |
| --- | --- | --- |
| Source | Model | Examples |
| Books and monographs: one, two or three authors | Author’s surname, first letter of the name/names, (year of publication). *Title.* Place of publishing: name of publishing house. | Dobrowolska A. J., (2017). *Podejście procesowe w organizacjach zarządzanych przez jakość*. Warszawa: Wydawnictwo Poltext. |
| Books and monographs: more than three authors | Author’s surname, first letter of the name/names, abbreviation “et al.” (year of publication). *Title of a book: subtitle.* Place of publishing: name of publishing house. | Malara Z., Kroik J., Malara M., Sobol-Wojciechowska J., (2013). *Ryzyko: perspektywa jakościowa*. Wrocław: Oficyna Wydawnicza Politechniki Wrocławskiej.*or*Malara Z. et al. (2013). *Ryzyko: perspektywa jakościowa*. Wrocław: Oficyna Wydawnicza Politechniki Wrocławskiej. |
| Book - collective work edited by | Author’s surname, first letter of the name/names, abbreviation ed./eds. (year of publication). *Title of a book: subtitle.* Place of publishing: name of publishing house. | Ludwikowska K., Bieńkowska A., Tworek K. (red.), (2020). *Capacity building in higher education institutions*. Warszawa: Difin. |
| Chapter in a collective work | Author’s surname, first letter of the name, (year of publishing). Title of the article/chapter: subtitle. In: the initial of the editor’s name, the editor’s surname, abbreviation “ed.”. *Title of a book: subtitle.* Place of publishing: name of the publishing house, p. (pages from to). | Mazurek E., (2008). Internet jako narzędzie wspomagające ocenę efektywności szkoleń. In: M. Jabłońska, ed., *Estetyka, sztuka, media: przestrzenie i konteksty pedagogiczne*. Wrocław: Oficyna Wydawnicza Atut, p. 201-208.Mrzygłocka-Chojnacka J., Ryńca R., (2018).Innowacje procesowe i organizacyjne w działalności wrocławskich szkół wyższych. In: Z. Malara, J Skonieczny, ed*., Innowacje w gospodarce, przedsiębiorstwie i społeczeństwie*. Wrocław: Oficyna Wydawnicza Politechniki Wrocławskiej, p. 207-216. |
| Article in a scientific journal | Surname/surnames, first letter of the name/names, (year). Title of the article. *Title of a journal*, No. of the periodical, p. (pages from to). | Mielczarek B., (2016). Review of modelling approaches for healthcare simulation. *Operations Research and Decisions*, vol. 26, no. 1, p. 55-72.Tworek K., Zgrzywa-Ziemak A., Hopej M, Kandora M., (2020). Stability of employment of the non-profit organization manager and its results. *Zeszyty Naukowe Politechniki Poznańskiej. Organizacja i Zarządzanie*, no. 81, p. 249-261.Walecka-Jankowska K., Zimmer J., (2019). Open innovation in the context of organisational strategy. *Engineering Management in Production and Services*, vol. 11, no. 3, p. 86-95. |
| E-book | Author’s surname, first letter of the name/names or the institution name, year of publication. *Title of a book: subtitle* [type of medium e.g. online, CD ROM]. Place of publication: name of publishing house. Available at: URL. [Accessed: date] | Jach K., (2019). Metodyka wspomagania aktywności zawodowej osób z ograniczeniami funkcjonalnymi, Wrocław University of Science and Technology Publishing House. Available at: https://www.dbc.wroc.pl/dlibra/publication/142581/edition/73955 [Accessed: 19.12.2021] |
| Article available in electronic journal | Author’s surname, first letter of the name/names, (year of publication). Title of an article: subtitle. *Journal title* [online], number, pages (if given). Available at: URL. [Accessed: date] | Sikora M. Z., (2020), Między teorią a praktyką. *Forum Akademickie*. [online] 2020, no. 7/8, p. 40-43.Available at: https://miesiecznik.forumakademickie.pl/czasopisma/fa-7-8-2020/miedzy-teoria-a-praktyka/ [Accessed: 18.12.2021] |
| Thesis in conference materials | Author’s surname, first letter of the name/names, (year of publication). Title of thesis. In: the initial of the editor’s name, the editor’s surname (abbreviation “ed.”), *Title of conference materials*. Place of issue, p. (pages from to). | Ropuszyńska-Surma E., Węglarz M., (2019). The identification of the pro-ecological factors influencing a decision to become a prosumer. In: Z. Wilimowska, L. Borzemski, J. Świątek (red.), *Information Systems Architecture and Technology: Proceedings of 39th International Conference on Information Systems Architecture and Technology, ISAT 2018*. (Advances in Intelligent Systems and Computing, ISSN 2194-5357; vol. 854). Cham: Springer, p. 405-416.  |
| Standards | Symbol of standard, *title of a standard.*   | PN-ISO 690:2002, Documentation - Bibliographic footnotes - Content, form and structure.PN-EN ISO 9001:2015, *Quality management system. Requirements.*  |
| Legal acts |  | Directive 2010/13/EU of the European Parliament and of the Council of 10 March 2010. (Consolidated version) on the coordination of certain provisions laid down by law, regulation or administrative action in Member States concerning the provision of audio-visual media services (Audio-visual Media Services Directive), Directive 2010/13/EU, Article 1. |
| Online documents  | Author’s surname, first letter of the name/names or the institution name, (year of publication). *Title of a document* [type of medium, e.g. online]. Place of publication (where available): publishing house (where available). Available from: URL. [Accessed: date] | Narodowy Bank Polski, (2021). *Biuletyn Informacyjny* [online], no. 6/2021.Warszawa: Narodowy Bank Polski. Available at: https://www.nbp.pl/publikacje/biuletyn\_informacyjny/2021/2021\_06\_pl.pdf [Access: 18.11.2021]Holmes A. F. (2015). *A History of Philosophy. Plato’s Epistemology* [online]. Wheaton College 07.04.2015. Available at: https://www.youtube.com/watch?v=5xVakHLDxAc&list=PLw4-Fp0S2dJbBtytnCcVUXCaVZOvsPs00&index=4 [Access: 18.11.2021] |

**Thesis editing**

**General principles of editing the diploma thesis**

A student is responsible for linguistic correctness of the text.

The diploma thesis should be written in impersonal form, in a concise manner. No blank spaces should be left between paragraphs.

**Editorial requirements**

The diploma thesis should be drafted in a template published on the Faculty website, which includes a title page and appropriate styles for the content of the diploma thesis. In particular:

1. **Page format:** A4, left margin: 3.0cm (2.5cm +0.5cm for binding), right margin: 2.5cm, top and bottom: 2.5cm.
2. **Font:** Times New Roman
3. **Page numbering:** in the middle, at the bottom of every page except the title page. 4) Basic text: justified.
4. **Basic text:** justified, 12 points, single line spacing, indentation of the first line of a new paragraph 0.7 cm.

• New chapters should start from a new page.

• There should be no content between the diploma titles (e.g. introduction). If a chapter / subsection needs an introduction, create a subsection / paragraph with such a title and include the content there.

1. **Titles:**

• **chapters:** left-aligned; font: 14 points, bold; spacing before: 12 points, spacing after: 6 points.

• **subchapters:** left-aligned; font: 13 points, bold; spacing before and after: 6 points.

• **paragraphs**: left-aligned; 12 points, bold; spacing before: 6 points, spacing after: 6 points.

1. **Footnotes** (i.e., additional comments) at the bottom of the page: 10 points, single spacing.
2. **Text in tables and figures:** aligned to the left, font 10 points, single spacing.
3. **Description of tables and figures:**

• All tables and figures must be described and numbered consecutively, and their lists placed at the end of the diploma thesis. The numbering can be continuous or two-tiered, e.g. Table 2.1. Table 2.2, Fig. 2.1, Fig. 2.2, where the first digit indicates the chapter number and the second digit the consecutive table / figure number in that chapter.

• Tables and figures taken from other works and subject to copyright protection should be provided with bibliographic information in the form of a reference to the source placed in the description of the table / figure, e.g..: “Source: own compilation”, “Source: compiled based on (Name, year, page)”, “Source: (Name, year, page).

• The title of the table should be placed centrally above the table, 10-point spacing from the main text above the title. The source of the table should be given below the table. There should be a 10-point spacing between the source of the table and the main text.

- In the diploma thesis, all figures, charts, diagrams, screenshots and photographs must be signed as figures. Descriptions should be placed centrally under the figures, 10-point spacing between the signature and the figure and the signature and the text under the figure. The source of the title should be indicated after the title (the same as for tables).

1. **Mathematical formulae**: place centrally and number them. The Numbering should be given in parentheses (chapter number, formula number), e.g. (4.1), (4.2) aligned to the right margin. Not all formulas need to be numbered - number only those to which there is a reference in the text.
2. **Appendices** should be placed at the end of the diploma thesis; the numbering should be consecutive, one-tiered, e.g.: Appendix 1. The title of the appendix should be placed centrally above the appendix, 10-point spacing from the body text above the title. The source of the title should be given below the appendix; 10-point spacing should be left between the source and the body text.
3. The diploma thesis should be printed double-sided **for archiving purposes**.

**References to sources**

The author of the diploma thesis is obliged to reliably indicate the sources of information presented in the diploma thesis, by:

• using inverted commas when quoting passages taken from other works, while literal quotations should be limited to a minimum and used exceptionally;

•recording the bibliographic source according to the Harvard standard (in round brackets, giving the name of the author(s), the year of publication, page number(s) - see Table 3, immediately after the citation or in any other place where the source must be indicated).

In the case of sources from the Internet, website addresses should be given together with information on the date of access (see Table 3).

Quotations of excerpts from foreign works must be justified by the argument and must not constitute extensive sections of the written work. Literal quotations should be kept to a minimum. Excessive use of a single source of work by a single author is unacceptable.

Table 3 Models and examples of in-text references to bibliographic sources in the diploma thesis.

|  |  |  |
| --- | --- | --- |
| Source | Model | Example |
| Book / monograph / journal article | One author | (Surname, year of publication) | (Dobrowolska, 2017) |
| Two authors | (Surname and Surname, year of publication) (ampersand in parentheses, “and” in the text) | (Zabawa & Mielczarek, 2020) (Ropuszynska-Surma, Węglarz 2019) |
| More than two authors | (Surname et al, year of publication) | (Tworek et al., 2020) (Malara et al., 2013) |
| After the author’s surname was given | (year of publication) | According to A. Dobrowolska (2017)… |
| Publications by the same author published in different years | (Surname, year of publication, year of publication, year of publication) | (Weron, 2009, 2011) |
| Publications by the same author(s) published in the same year | (Surname, year of publication a, year of publication b) | (Malara & Kroik, 2018a, 2018b) |
| Bibliographic data of several cited items | (Surname, year of publication; Surname, year of publication) | (Dobrowolska, 2017; Zabawa & Mielczarek, 2020) |
| Quotation from the cited source | (Surname, year of publication, page numbers) | (Dobrowolska, 2017, p. 20-21)(GUS, 2020, p. 206) |
| Documents prepared by institutions | (Name of institution, year of publication) | (GUS, 2021) |
| Online sources | Journal article available online | (Surname, access date) | (Sikora, accessed: 19.12.2021) |
| Legal acts |  | (Directive 2010/13/EU, Article 1) |

**3.4 Appendices**

Appendix 1 - Model of the title page of diploma thesis after six-semester first-level studies (licencjat);

Appendix 2 - Model of the title page of diploma thesis after seven-semester first-level studies (inżynier)

Appendix 3 - Model of the title page of diploma thesis after first-level studies (licencjat and inżynier) in English;

Appendix 4 - Model of the title page of the master’s thesis;

Appendix 5 - Model of the title page of the master’s thesis in English.