UNIVERSITY OF SPLIT FACULTY OF MARITIME STUDIES

INSTRUCTIONS FOR WRITING MASTER'S THESIS AND OTHER GRADED PAPERS

SPLIT, 2022

Instructions for writing Master's thesis and other graded papers have been issued by

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Heads of Studies

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1. INTRODUCTION

The Master's thesis is an independent, professional consideration of an agreed topic. The topic can refer to theoretical or practical or theoretical-practical issues from professional and scientific fields of study that the student has taken.

The student chooses the course in which they will write the thesis. The topic chosen must be included in the curriculum of the study enrolled, i.e. it must be one of the courses in which the student enrolled.

In preparing the Master's thesis the student must prove:

- possessing the competencies and achieving learning outcomes when solving problems; from professional and scientific fields that were the contents of their studies;
- ability to apply theoretical and practical knowledge acquired during the studies;
- the ability to apply scientific methods in dealing with the current topic;
- the ability to grasp the relevant values of maritime processes;
- the ability to use the current literature in foreign languages and Croatian, i.e. to use other persons' relevant knowledge, thoughts and scientific facts published in the literature used, when writing about the thesis topic;
- the ability to search various databases on the Internet;
- the ability to properly format illustrations (tables, graphs, photographs, and drawings).

Other graded papers include seminar papers, projects and other papers that are partially or fully taken as parts of the exam in a specific course. The provisions of these instructions that refer to the Master's thesis also apply in an appropriate manner to other graded papers.

The Master's and other graded papers/theses need not be original papers, but they must be independently prepared by the candidate / student.

1.1. PROCEDURE OF APPLICATION FOR AND DEFENCE OF MASTER'S THESIS

At the beginning of the academic year, the topics of Master's theses are posted on the Faculty's website.

Stages in the process from the application for to the defence of the thesis:

- The student chooses a topic from the posted list of thesis topics;
- Agreement between the student and the supervisor (and co-supervisor if designated) on the topic;
- Submitting the topic to the Student Office on the form *Submitting of the thesis topic* (herein: *form, Appendix* 1)
- The Committee for final exams and Master's theses approves the choice of the topic and appoints the members of the Committee for evaluation and defence of master's thesis.
 - Verification of the form
- The Students Office forwards the copies of the form to the student, supervisor and cosupervisor, if designated;
- The student contacts the supervisor, and co-supervisor if designated.
 - Advice and instructions
 - Writing of the thesis.
- Thesis completed
 - The thesis should be completed by the end of the summer semester so that during the summer/autumn exam period, the student will only have to complete the Master's thesis according to the instructions of the members of the Committee for evaluation and defence of Master's thesis.
 - After acceptance of the thesis by the supervisor, and co-supervisor if designated, the authenticity of the Master's thesis is verified through a computer programme used by the Faculty.
 - The supervisor forwards the thesis and authentication report by email to the members of the Committee for the evaluation and defence of the Master's thesis for review.

- The thesis reviewed by the members of the Committee for the evaluation and defence of the Master's thesis.
- Final editing.
- A hard copy of the thesis is handed in to the Students Office of the Faculty.
- The report on the authenticity of the thesis is tore din the Students Office in the student's file.
- Submit an electronic record of the thesis to:
 - Students Office
 - Members of the Committee.
- The supervisor agrees with the Students Office and the members of the Committee for the evaluation and defence of the Master's thesis on the date of the defence of the Master's thesis.
 - Announcement of the thesis defence on the Faculty website (to be announced for a minimum of three days prior to defence)
- Defence of the thesis before the Committee for the evaluation and defence of the Master's thesis.

2. THESIS STRUCTURING

In the process of the thesis' creation, the student is obliged to act according to the instructions and advice of the supervisor. The Master's thesis is assigned and written in the standard Croatian language, and at a special request of the student, it can also be in English.

The organisation of the thesis' text is done according to certain principles, and it contains the following parts (Figure 1):

- Cover or outer title page

- A copy of the cover on blank paper onto which the Students Office puts the stamp containing:

- Date of defence:
- Chair:
- Supervisor:
- Co-supervisor:
- Member:
- Member:
- Course:

- Second or inner title page

- Abstract
- Keywords
- Contents
- Introduction
- Topic elaboration
- Conclusion
- List of references and other sources of information used in the creation of the thesis
- Appendices (lists of tables, figures, abbreviations,...).

Hard covers	Copy of cover on a blank page	Second cover	Abstract	Contents		Conclusion	References	•••
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Figure 1. Sequence of the first several pages

2.1. FIRST TITLE PAGE

On the first title page (cover) of the thesis, it must be written (see *Appendix* 2):

- The full name of the faculty (at the top of the page), centred and written in 16-point (pt.) uppercase font, bolded.
- The first name and last name of the student should be written in the middle of the title page, centred, in 16-point, bolded font.
- The title of the thesis must be written in bold letters, three lines below the student's first name and last name, centred, in 20- (22-)-point font.
- MASTER'S THESIS (centred), three lines below the thesis topic, bold, in 14-point font.
- At the very bottom of the title page, it is necessary to write the place and year of the thesis creation, centred, bold 14-point font.

2.2. SECOND TITLE PAGE

On the second title page, it should be written (see *Appendix* 3):

- Full name of the Faculty (at the top of the page, centred and written in uppercase 16point, bold font)
- Name of the study (two lines below, centred, in 14-point, bold font)
- The title of the thesis that must be written in the middle of the page, centred, in 20-(22-)- point, bold font.
- MASTER'S THESIS should be written three lines below the thesis title, centred, in 14-point font.
- First name and last name of the supervisor should be written on the left, a few lines below the name of the thesis type, and the student's first name, last name and ID number on the right, in 14-point font; if a co-supervisor has been appointed, their first name and last name are written above the first name and last name of the supervisor.
- At the bottom of the title page, it is necessary to write the place and year of the thesis creation, centred, in 14-point font.

2.3. ABSTRACT

This part of the thesis contains, in short, the contents in the Croatian and English languages (abstract). The title **ABSTRACT** is written in uppercase 14-pt. font, bold, spacing after: 24-pt., line spacing: 1.5 lines, justified: *centred*.

the abstract should contain a detailed description of the aim (tasks) of the thesis, what has been done, and conclusions (*Appendix* 4).

IMPORTANT: The Abstract should be distinguished from the Introduction. In the Abstract, the conditions and circumstances in which the thesis was created, the purpose of the conducted research and the contribution of the thesis should be stated as a minimum.

2.4. CONTENTS

The Contents part is mandatory. The Contents is a list of the titles of all the parts (chapters) and subsections in the thesis as well as the numbers of the initial pages of each part. The Contents is a numerical and textual summary of the thesis and gives an insight into the pages on which those parts of the thesis are written. The title **CONTENTS** is written in uppercase 14-pt., bold font, *Spacing After* 24 pt., *Line spacing* 1.5 lines. The title is not numbered.

The method of writing and marking the contents and its parts is shown in *Appendix 5* of these instructions. The Contents pages are usually not numbered or are numbered with Roman numerals.

2.5. INTRODUCTION

The Introduction is mandatory. It provides an overview of the papers/theses published, related to the development of the thesis issues (what level of development the issues have reached, whether its further development is possible).

The Introduction should briefly describe the subject (task) of the thesis, the purpose, goals and problems of research, the proposed hypothesis and the scientific methods used. In addition, the structure of the thesis should be described, i.e. how many parts the thesis consists of, and briefly describe the content of each part. The first page of the Introduction is also the first page of the thesis, i.e. the first page numbered (use Arabic numerals for page numbering).

2.6. TOPIC ELABORATION (CHAPTERS)

In this part, the author elaborates on the topic, states their own knowledge and conclusions, compares the hypotheses and conclusions of other authors, performs analyses, re-examines and discusses the already-presented thoughts. The topic is dealt with through chapters and sub-chapters. <u>Chapters</u> are unique, meaningful and connected units. Chapters always start on a new page.

It is necessary to justify **the scheme in the approach** to the thesis writing. If possible, it is useful to apply the following scheme:

- up-to-date development
- the current situation and the existing problems
- assessment for the future.

In the tasks where computer programmes are applied, it is necessary to justify the possible obtaining of the results by process simulation, iterative procedure or some special algorithm. When using a software system, software packages and programmes, a brief overview of the existing solutions and an explanation of the student's choice for their application in the thesis should be given. Problem-solving can be based on the theoretical and/or experimental approach. **The theroetical** approach contains the existing or derived mathematical support, results, and solutions. **The experimental** approach implies appropriate measurements on a selected sample of influential parametres (of significance for the solution of the task). The measurement results are then analysed and specific conclusions are proposed.

2.7. CONCLUSION

The graduate part of the thesis is the **conclusion**. It is a <u>brief presentation</u> of only solid and thoroughly explained points of view, evidence and results that have arisen from the title of the thesis topic. In the tasks where a computer programme was used, the conclusion also contains a comment of the output results of the software system, software package or programme, as well as an evaluation of the results of applying some of the methods of process rationalisation or hypotheses testing.

Here, it is important to compare the attitudes at the beginning of the thesis (the goal – described in the Introduction) with the attitudes at the end of the thesis, i.e. to conclude whether the purpose of the work has been achieved. Then, in the Conclusion, one's own

judgement is given on the topic elaborated, with a possible *proposal for further research* in that area.

IMPORTANT: Do not cite other people's quotes or write footnotes in the Conclusion.

2.8. REFERENCES

The literature used in the creation of the thesis must be listed in the References in the alphabetical order according to the instructions for referencing (see the example of referencing in *Appendix 7*).

IMPORTANT: Footnotes must not be used for referencing.

Sources are indicated <u>by Arabic numerals in square brackets</u>. The author's last name is written first, separated from the initials by a comma. It is not necessary to write the author's title. If there are several authors, they are listed in the order indicated on the thesis itself and are separated by semicolons.

- After the name of the author, i fit is a <u>book</u>, <u>dissertation or a Master's thesis</u>, write the *title of the book* (italics), then the name of the publisher, the headquarters of the publishing house or the place of publication, and the year of publication (see in *Appendix 7* references [1], [2], and [3]).
- <u>The papers</u> use din the thesis are listed in a similar way to the books. The last name, initial(s) of the author's name: *the title (italic)*, the title of the journal in which the paper was published, the palce of publication, volume/year of the journal, serial number of the journal, year of publication of the specified number, from-to pages on which the paper was published (see in *Appendix 7* references [4-6]).
- Regulations (laws, ordinances, provisions, etc.) are referenced with their full title, followed by the abbreviation in parentheses and the list of numbers and years of publication of the official gazette in which the regulation and all its amendments were published. As a rule, the regulations cited in the text are not included in the list of references at the end of the thesis, but if they are, they are usually included at the end of the list, slightly separated from the other references.

Example: The provision of information society services in Croatia is regulated by the Law on Electronic Commerce (Official Gazette, No. 173/2003, 67/2008, 36/2009 and 130/2011).

- In case of the use of software systems, software packages or programmes, its full and abbreviated name, version, manufacturer's name and the year of production should be mentioned.
- In addition to <u>website address</u> the last name(s), initials of the name(s) of the author of the cited paper (if known), *full title of the paper* (in italics), date of creation (if different from the date of access to the source), full http/ftp address (together with the full access path to the folder where the document is located) and the date of access to the document (see in *Appendix 7* references [7] and [8]).
 - If the author is unknown, only the address with the date the information was posted on the server can be specified, i.e. if on some server sit is not written, the date when the information was read is written, e.g.:
 - [12] www.skladišna-logistika.hr, (26 January 2020)
 - For other sources, the referencing method used for books is appropriately applied.

The list of the literature used appears on the thesis page after the conclusion (and before the list of tables, list of illustrations, and the appendices if applicable). The title **REFERENCES** is written in uppercase letters, on the top left margin (font size 14 pt., **bold**, justified: left, *Spacing After*: 24 pt., *Line spacing*: 1.5 lines). The title is not numbered, while pages are numbered in Arabic numerals.

2.9. LIST OF TABLES AND FIGURES

The list of tables follows the References page. The list contains the ordinal number and title of each table listed according to the sequence (page number) of appearance in the thesis. The title **LIST OF TABLES**, written in uppercase (14-pt, **bold** font, justified: left, *Spacing After*: 24 pt., *Line spacing*: 1.5 lines), is not numbered and is found on the top left margin of the page (see *Appendix 8*). The page is numbered with an Arabic numeral.

The list of illustrations follows the page with the list of tables. Illustrations include graphs, drawings, and pictures. If more than one type of illustration appear in the thesis, it is advisable to make separate lists of graphs, drawings, and figures. Creating the page with the list of illustrations is identical to the technique of creating the page with the list of tables.

3. THESIS TEXT FORMATTING

In addition to the required appearance, the thesis must show correct grammar, orthography, and style. The thesis is written in the neutral style (e.g. "X will be examined", instead of "I/We will examine X"), using the scientific style, without intimacy, individuality, or emotionality.

IMPORTANT: The thesis should be written in neutral form, using scientific style, without intimacy, individuality, or emotionality. If possible, passive voice should be used when writing in English.

Example	Grade	Explanation
We have concluded that the measurements are bad.	Bad	Written in the 1 st person plural
from the measurements made, it can be concluded	Good	Neutral
I have considered	Bad	Written in the 1 st person singular
X has been considered	Good	Passive voice

Table 1.Examples of good and bad writing

A recommended extent is from 40 to 50 pages for a thesis (without Abstract, Contents, References and Appendices).

3.1. THESIS PAGE SETTINGS

The text of a Master's thesis is created and formatted in MS Word or another text editor, according to the following principles:

- The whole **text** of the thesis should be written in one (the same) font (Times New Roman or Arial), font size 12 pt.
- Spacing between the lines must be 1.5 line, and spacing before/after is 0.
- For the footnotes / endnotes, font size 10 pt. should be selected.

- The thesis should be divided into chapters and subchapters. Each chapter that is divided must have at least two subchapters. A chapter <u>must start</u> on a new page. Therefore, page break should be inserted before such a title.
- *Chapter titles* must be written in 14 pt. bold uppercase font, *Line spacing*: 1.5 lines, *Space Before*: 0 pt, *Space After*: 24 pt. **Do not use any spacing below the title.**

The chapter is broken down into subchapters, and subchapters into sections.

- A subchapter is written in uppercase, <u>bold</u>, font size 12 pt., *Line spacing*: 1.5 lines, *Space Before*: 18 pt., *Space After*: 12 pt. A subchapter <u>does not have to</u> start on a new page and no spacing is necessary below the title.
- Sections are marked by third-level headings written with <u>12 pt., bold, lowercase font,</u> *Line spacing*: 1.5 lines, *Space Before*: 12 pt., *Space After*: 6 pt.

Do not exaggerate with the levels of headings. The number of levels depends on the total amount of the text in the thesis. A Master's thesis can be structured with up to three headline levels. Exceptionally, Heading 4 (font 12 pt., lowercase, bold, italics) can be used.

Example 1. Example of titles and subtitles

1. SIMULATOR APPLICATION

1.1. SIMULATORS IN CROATIAN HIGHER EDUCATION

1.1.1. Polaris simulator

- The text of the thesis should be written in **paragraphs** initial line of the paragraph indented (between paragraphs 1-line spacing).
- The text should be written justified.
- The text pages (starting from the Introduction) <u>are numbered</u> with Arabic numerals (1, 2, 3, 4, ...). The page number is added vertical right (font and its size must be the same as in the body of the thesis).
- The title pages are not numbered.
- The pages with the Contents and Abstract are numbered with Roman numerals or may not be numbered at all.

3.2. QUOTATIONS AND CITATIONS

In the creation of a thesis, it is allowed to use literature, and consequently to quote what other persons have written. Quoting is a word-for-word written or verbal citation of a person's words or parts of a text that can be written in the original (in a foreign language). It is important to be able to clearly distinguish in the text what belongs to the author themselves, and what has been taken from other authors / sources. A common way of dividing one's own thoughts, views, claims, etc. from those of others is *writing in italics*. At the end of a quote (citation) the original text from which the quotation is taken must be indicated. To indicate the source, at the end of the quotation or a paraphrased excerpt, the number of the quoted reference is added, and in the list of references, the full reference is given; e.g. **[the reference number from the References].**

If a larger part of a text is quoted, and a part of it is to be omitted, the omitted part is marked with [...].

Example 3: Citing

Fractals represent the boundaries of a new type of sets of points in the complex plane [7].

IMPORTANT: Word-for-word quotation of other persons' views, opinions, claims, ideas, etc.in the text of a thesis is usually marked by putting that part of the text within quotation marks or writing it in italics. The adopted way of marking references must be consistently applied throughout the thesis.

It is important to emphasise that the sources must also be indicated for all the non-own graphs, schemes, pictures, tables, formulas, etc.

3.3. TABLES, FIGURES, GRAPHS, AND DIAGRAMS

Tables and figures (graphs, diagrams, etc.) are numbered with ordinal numbers from 1 to n (Table 1. is the first table in the whole thesis, Figure 1. is the first figure in the thesis). The titles of tables and figures (graphs, diagrams, etc.) are written with bold, size 12 pt. font, followed 1-line spacing.

The title of a table is written above the table, and the title of a figure below the figure (see *Appendix* 6). The title of a table runs as follows: Table followed by the number,

corresponding **title** (an explanation representing the data) and **source** (if taken from the literature).

Figures, diagrams, graphs, schemes, etc., i.e. everything except the tables, are referenced below the image itself (graphs, diagrams) as follows: **Figure** followed by a **number**, then **the title**, and finally **the source**. The figure and the corresponding reference are centred.

If the author(s) themselves created the table, figure, graph or diagram, the source is not indicated. All the tables, figures, graphs, and diagrams used must be referenced. It is necessary that all the materials from other sources are of satisfactory quality regarding their legibility and clarity.

It is allowed for the thesis author to make their own processing of figures, graphs, or tables in such a way as to keep the same meaning of the content, but change the appearance. In such cases, the title must nevertheless include the reference to the original paper, e.g.: (According to: Klačmer Čalopa and Cingula, 2012).

3.4. MATHEMATICAL EXPRESSIONS

To enter a mathematical expression (a formula), Equation Editor or a similar tool for entering mathematical expressions should be used. To write formulas, use Times New Roman font, size 12 pt. Exponents and indices are written with font size 10 pt.

The symbols for physics quantities, the value measured and the unit of measurement are written with SI system units. This refers to all quantities, and not only to those in the formulas. It is preferable to always include short descriptions of the symbols used in the formulas.

Mathematical expressions are marked with a number in parentheses which is aligned right, e.g. Equation 17:

$$R = 20 \frac{\sin\beta + 3 \cdot \gamma}{28 \sum_{1}^{n} 33\alpha + t}$$
(17)

where:

- *R* quantity XYZ
- β angle of reflection.

IMPORTANT: According to *the Standardization Act of the Republic of Croatia*, all variables are written in *italics*. Constants and numbers are not italicised. Indices and powers must not be italicised. Unit must be written next to the calculation result if the value has a unit of measurement, and is written without italicising (normal).

3.5. ABBREVIATIONS

If abbreviations of concepts from the text are used, with the first use of the concept it is necessary to write it in full, and the abbreviation should be put in parentheses. After that, the abbreviation can be used in the text. <u>Full terms must be used in the titles.</u>

3.6. FOREIGN TERMINOLOGY

• A foreign term is written in parentheses next to the English term.

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	ber:		:		
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Study.					
	APPLIC	ATION FOR MASTER'S TH	ESIS TOP	νiC	
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Appendix 2. Example of the first title page of the thesis

UNIVERSITY OF SPLIT FACULTY OF MARITIME STUDIES

FIRST NAME AND LAST NAME

TITLE OF THESIS TOPIC

MASTER'S THESIS

SPLIT, 2022

Appendix 3. Example of the second title page of the thesis

UNIVERSITY OF SPLIT FACULTY OF MARITIME STUDIES

STUDY: NAUTICAL STUDIES

TITLE OF THESIS TOPIC

MASTER'S THESIS

CO-SUPERVISOR: Ivo Vrh, Full Prof.

SUPERVISOR:

Ivo Vrh, Full Prof.

STUDENT: Antun Rak (MB: 319357)

SPLIT, 2022

ABSTRACT

The high level of automation of ocean-going ships, both in the navigational and propulsion terms, has significantly increased the level of safety, reliability and economy of the ship. Seafarers, i.e. all the members of ship crews, and especially the management staff, are required to be professional in carrying out their responsibilities that represent a challenge to modern maritime transport technology. In this paper, it is shown that besides investing in highly sophisticated equipment and technology, funds must also be invested in education and training of human resources, whose competence in every moment and in every sense will be able to contribute to increasing efficiency and safety of the overall transport operation. The objective of this article is to provide a view on how information technological developments have been applied to improve the education of marine engineers. Interactive simulators, in comparison with educational facilities equipped with realistic onboard hardware, are obviously becoming a powerful tool to achieve this goal.

Key words: ship crew, education, training, information technology, simulator

SAŽETAK

Visok stupanj automatizacije na brodovima, kako u navigacijskom, tako i u pogonskom smislu, bitno je utjecao na unaprjeđenje sigurnosti, pouzdanosti i ekonomičnosti broda. Od pomoraca, odnosno od svih članova brodske posade, a posebno rukovodećih, traži se profesionalnost u izvršavanju radnih zadataka koji su izazov suvremenim modernim tehnologijama pomorskog transporta. U ovom radu je istaknuto to da je pored investicija u sofisticiranu tehniku i tehnologiju nužno ulagati u obrazovanje i obuku ljudskih resursa, čija će kompetentnost u svakom trenutku i u svakom smislu pridonijeti boljoj učinkovitosti i sigurnosti u pomorskom transportu i prijevozu putnika. Cilj ovog rada je pružiti viziju kako je informacijski tehnološki razvoj utjecao na poboljšanje obrazovanja pomorskih inženjera. U usporedbi s obrazovnim sadržajima koji su opremljeni samo stvarnom opremom na brodu, interaktivni simulatori postaju moćan alat za postizanje tog cilja.

Ključne riječi: brodska posada, obrazovanje, obuka, informacijske tehnologije, simulator

Appendix 5. Example of Contents

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Appendix 6. Examples of figures, graphs, diagrams and tables

In Figure 2., a high-voltage distribution scheme of a platform is shown, with eight diesel generators of 5,200 kW power each, connected to a high-voltage system of 11,000 V/60 Hz, which is divided into four parts. Each high-voltage system can operate independently in case of a fault.

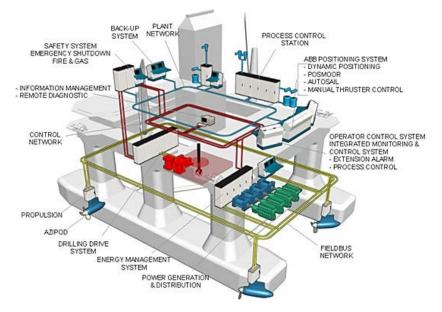


Figure 2. Platform - principle scheme of power system [8]

The first three LNG tankers with electric propulsion were built in France in 2005. They are powered by medium-speed diesel generators that can run on gas or heavy fuel oil (i.e. dual drive). The surplus gas that evaporates should be cooled again and returned to the tanks, which results in considerable savings. The engines drive a 2×14 MW medium-speed electric drive shown in Figure 3.



Figure 3. Distribution of propulsion on LNG tanker [5]

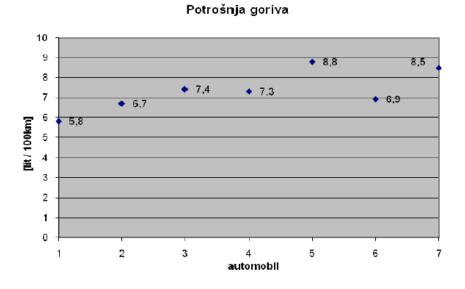


Figure 4. Graphic representation of fuel consumption by cars [4]

Table 4. describes the importance of the operating mode.

Mode	Generators (minimum)	Thrusters
Harbour operating	1	0
Harbour operating	1	

 Table 4. Ship operating modes [2]

			5
Harbour operating mode:	1	0	
Navigation operating mode:	2	2	
DP class 1 mode:	1	2	
DP class 2 mode:	2	3	Closed bus-tie
DP class 3 mode:	3	4	Closed bus-tie

Switchboard configuration

REFERENCES

- [1] Bošnjak, I.: *Telekomunikacijski promet* I, Fakultet prometnih znanosti, Zagreb, 2001.
- [2] Brooks, C.; Warren, R. P.: Understanding poetry, 3rd ed, Holt, Rinehart and Winston, New York, 1960.
- [3] Bruckman, A.: Approaches to managing deviant behavior in virtual communities. Apr. 1994. <u>ftp://ftp.media.mit.edu/pub/asb/paper/deviance-chi94.txt</u>, (accessed 4 December 1994).
- [4] Jensen, K.: Coloured Petri Nets. Basic Concepts, Analysis Methods and PracticalUse, Monographsin Theoretical Computer Science, 1 (3), Springer-Verlag, Berlin, 1997.
- [5] Kniesner, D. L.: *But is it an online shelflist?*, Classification access in eight OPACs, Cataloging and classification quarterly, 20, 4, 1990, pp. 5-21.
- [6] Lauren P.: A hypertext history of multi-user dimensions, The MUDdex, 1993.
 URL: <u>http://www.apocalypse.org/pub/u/lpb/muddex/essay/</u>, (accessed 5 Dcember 1994).
- [7] Lucky, R. W.: Automatic equalization for digital communication, Bell Syst. Tech. J., 44, 4, 1965, pp. 547-588.
- [8] Muftić, O.; Sivončik, K.: *Ekspertni sistemi i njihova primjena u strojarstvu*, Strojarstvo 31, 1989, 1, pp. 37-43.
- [9] Radošević, D.: Osnove teorije sustava. Nakladni zavod Matice Hrvatske, Zagreb, 2001.
- [10] Tabain, T.: Njihanja broda na nepravilnim valovima, Brodarski institut, Zagreb, 1972.
- [11] Williams, J: Narrow-band analyzer, Ph.D. thesis, Dept. Elect. Eng., Harvard Univ., Cambridge, MA, 1993.
- [12] <u>http://ic.ims.hr/faq/office2007/word2007/sadrzaj-word2007.html</u>, (accessed 22 May 2015).

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LIST OF ABBREVIATIONS AND ACRONYMS

A/D (Engl. Analog to Digital Conversion)
ADSL (Engl. Asymmetric Digital Subscriber
Line)
AMPS (Engl. American Mobile Phone System)
AN (Engl. Access Node)

Appendix 11. The most common errors to be avoided

* (1999-2005) – No spacing is required from the parentheses to the number.

* (1999 - 2005) - No spacing is required between the hyphen and the numbers.

* pp.15-20 – Spacing is missing after pp.

* pp. 15.-20. – No point necessary after the page number, unless at the end of a sentence.

* pp. 15 - 20 – No spacing is required between page numbers.

*Ante ANTIĆ – Between the footnote number and the name, spacing is necessary.

* Each footnote at the bottom of the page is a sentence, so it must end with a full-stop.

* Punctuation is related to the previous word, and it is followed by spacing.

* ... medieval Hum land ... – In both cases, the three dots are connected with the words.

* Zagreb-Split – Between the hyphen and the words, spacing is required.

* When the whole sentence is in the quotation, the quotation marks follow the full-stop; when only a part of the sentence is in the quotation, the quotation marks precede the full-stop

* Between words, double spacing should be avoided.

* Each new paragraph starts with a TAB, and between the paragraphs, no spacing is necessary.

* A paragraph rounds up one full thought. Therefore, each thought should not start a new paragraph.