ANNEX 2A

INSTRUCTIONS FOR WRITING AND GRADING A BACHELOR/MASTER PROJECT

The below instructions supplement the BUT internal standard, BUT Directive no. 72/2017 concerning the layout, submission, and publishing of final projects.

Article 1

Basic Provisions

A bachelor project (BP) is a project written by a student of a bachelor-degree programme (unassisted) to prove the student's capability to address an issue on a given theme using his/her special knowledge and skills acquired by the study in a given study branch. The theoretical background of a BP focuses on particular procedures used for addressing the issue. The work on the project should result in identifying new relationships of the issue analyzed or providing a partial solution.

A master project (MP) is a project written by a student of a master-degree programme (unassisted) to prove the student's specialised knowledge and skills in applying appropriate methods to solving a given problem. The author of the project should prove that he/she is capable to provide a solution on a given theme in a systematic way, identifying the relationships and proposing feasible solution variants.

When working on a BP or MP, a student must observe the Time Schedule for the current academic year including the deadlines for:

- choice of a thematic area for the BP/MP
- binding registration of the BP/MP assignment form in the BUT Information system (BUT IS)
- submission of BP/MP
- carrying out reviews of BP/MP

Article 2 Bachelor/Master Project Layout

1. Project text structure recommended

Problem description and aim

This part defines the aim of the project along with the related partial aims given by the project assignment and the respective field of study.

Next, it gives a description of the methods selected for a master project or procedures to be used for a bachelor project.

Project theoretical background

It sets the theoretical framework for the problems to be dealt with. This part includes a literature search, citations of authors concerned with the given problem area with whose publications the student has been acquainted. Finally, this part lists the theoretical areas used by the student when working on the project and the reasons for choosing particular methods. This part must meet the formal layout requirements and the sources used must be cited pursuant to the current ČSN ISO 690 standards.

Problem and current situation analysis

This part provides a detailed analysis and description of the current state of the art to make it possible to investigate the theme given, and see it in a broader context. The results of the analytical part serve as the starting platform for the proposal part.

Student's own solutions proposed and their contributions

This is the principal part of a BP/MP defining particular solution proposals and reasons for selecting this particular solution procedure, its positive and negative aspects, contributions (economic ones in particular) and, in selected cases, the conditions of solution implementation or the procedures recommended.

2. Text layout

The text layout is regulated by the ČSN 01 6910 standard concerning the layout of documents processed by text processors. The **following recommendations should be respected** to achieve optimal text visualisation:

Margins:

left 3.5 cm (for binding needs), top 2.5 cm, right 2.5 cm, bottom 3.5 cm

Font:

Times New Roman

Font size:

main chapters font size 16 pt, boldface

2nd degree subchapters **font size 14 pt, boldface**

3rd degree subchapters **font size 13 pt boldface**

4th degree+ subchapters* **font size 12 pt boldface**

text in paragraphs font size 12 pt

*Chapters of degree 4 and higher should be used according to the project context. If a paragraph of degree 4 and higher is used, its title should not appear in the table of contents. The 12pt font size is also used for text in the table of contents, lists of figures, tables, etc.,

and for page numbering.

Line spacing:

for visual separation of chapter title and text, the line immediately after a chapter title should be spaced 12 pt, the space between parameters should be 6 pt after or 3 pt before + 3 pt after a paragraph, others (remarks, etc.) should be spaced 3 pt. The paragraph spacing is set in the paragraph attributes and is usually less than an inserted empty line (the size of an "empty line" being up to 8 pt). Thus, it is not recommended to insert an empty line between paragraphs by pressing the ENTER key, but by setting the parameter spacing. The line spacing of the plain text lines is 1.5 pt. The format chosen should be kept throughout the project to give it a unified visual style.

Text highlighting:

Important notions or ideas should be highlighted. Different degrees of importance should be indicated by the font and size or by other graphical means. Recommended are **boldface**, *italics*, or font spacing (font spacing is set in fond settings). Highlighting by <u>underlining</u> should be avoided. The font colour should not be changed with black recommended.

Text structuring:

The text should be justified. If a student uses offsetting, it should be set to 0.75 - 1 cm at a maximum. Chapters should be numbered starting from 1 (see Annex). No colon, full-stop or source should follow a chapter title. The main chapters should start on a new page. Other chapters should be spaced at 12 - to 16 pt from the end of the preceding one (a student should choose a style and keep it throughout the project to achieve a uniform look).

Page numbering:

Page numbers should be centred at the page bottom. The pages are counted starting with the title page, but are listed beginning with the actual text (starting with an introduction) – so the first number listed may be, say, 8.

Formal requisites:

Requisites such as bibliographic citation, affirmation, and acknowledgement must all be visually united, i.e., placed at the page top, middle, or bottom, with identical format such as title (12 pt, boldface, Times New Roman), the actual text (12 pt, normal, Times New Roman, justified, line spacing 1.5). Each of the above requisites (bibliographic citation, affirmation, and acknowledgement) should appear on a separate page.

The same formatting applies to the abstract and key words (titles 12 pt, boldface, Times New Roman, and the actual text Times New Roman, normal, justified, line spacing 1.5). The key words are written in lowercase letters, being separated by commas with no comma

or full stop appearing after the last word. The abstract and the key words along with the English version are placed on a single page (see Annex 2B).

Formatting of tables, diagrams, and pictures:

Picture, diagram, and table legends are written with a font size of 10 pt. A table legend is placed above the table, while the legends of diagrams, pictures, schemas are placed below (see Annex 2B).

Citations:

Citations are regulated by the ČSN ISO 690 standard concerning bibliographic citations. A verbatim citation must be graphically marked off from the surrounding text - by quotation marks and a possible italic font style. The reference to a cited source whose full citation will be listed among the list of references at the end of the project should appear immediately after the verbatim citation. One of the three possible reference types will be chosen and kept throughout the project. These are: method of footnotes, method of numbered references, and the name-date method (dubbed Harvard system) – for examples see Annex 2B.

Even in the event of the information source having been produced by the author, a reference must be placed after the paraphrased text to a source listed in the final list of references. The actual form depends on the reference method chosen – for examples see Annex 2B.

3. Project scope

- a) The scope of a bachelor project is at least 45 pages counted from the introduction to the conclusion.
- b) The scope of a master project is at least 65 pages counted from the introduction to the conclusion.

Article 3

Assignments of bachelor and master projects

- 1. According to the Time Schedule of the current academic year, a final-year **student** may sign up for the preliminary assignment of a BP/MP by registering in BUT Studis IS. The preliminary assignments are approved by the Degree Programme Board with the directors of institutes being in charge of timely announcements of preliminary BP/MP assignments and their approval in BUT IS.
- 2. The **project supervisor** posts the final definition of a project by the given deadline on BUT IS:
 - a) **Exact title** of the BP / MP in both Czech and English. The title should not include a company name or a full stop at the end.

- b) Characteristics of the task problem area (outline) outline points are not numbered starting with a capital not separated by full stops or free lines the recommended structure of the actual project text (Art. 2, Par. 1) can be specified in more detail. The main outline chapters posted by the supervisor on BUT IS and included in the problem assignment must appear in a BP/MP.
- c) **Aims to be achieved** the project's aims must be formulated (a maximum of 1,500 characters including spaces).
- d) **Basic literature references** at least four and at most six basic sources in the literature. Such literary sources should be of key importance for writing a BP/MP. The sources are not numbered, listed in the form required by the current standards, in alphabetical order, without free lines inserted. The list should also include sources other than electronic ones.
- 3. The directors of institutes are responsible for timely posting of BP/MP assignments on the BUT IS. An authorized employee of the institute will print out the BP/MP assignment and lock it in the BUT IS application.
- 4. The **supervisor** will post the reviewer's name on the BUT IS. Reviewers are appointed by the director of the institute chosen from the faculty (university) academic staff or other university experts in a particular field of research. A reviewer must be at least the graduate of a master degree programme (SER Art. 25, Par. 4). The supervisor will post the project's language on the BUT IS if it is not written in Czech.
- 5. The **supervisor** will provide his/her statement on the student's application for postponement of publication of a BP/MP (pursuant to Directive 72/2017 Art. 11), and post the approved publication postponement and its length including the justification in Czech and English language on the BUT IS.
- 6. A student will put the BP/MP assignment (available in BUT IS) into the electronic form of the final thesis. A printed version of the assignment is filed in the study documentation.

Article 4

Submissions of bachelor and master projects

- 1. By the deadline given by the Time Schedule of the academic year, a student registered for a state final examination must post the BP/MP on the BUT IS.
- 2. The maximum size of the main BP/MP file is 15 MB, the maximum size of its annexes is 15 MB.
- 3. In the event of postponed publication, at the final state examination a student must submit a printed version of the BP/MP in hard cover binding, which is identical with the submitted electronic version, and will be sent to the Ministry of Education, Youth and Sport.
- 4. On the day of the final state examination a student will submit two printed copies of the BP/MP that are identical with the submitted electronic version. Spiral binding is sufficient. After the final state examination, the two printed copies of the BP/MP will be returned back to the student.

Article 5 Assessment of bachelor and master projects

- 1. Written assessments of the BP/MP must be submitted by the supervisor and reviewer. They both must be graduates of at least a master degree. Each of the assessments must contain an unequivocal statement as to whether the BP/MP is recommended or not recommended for defending.
- 2. The supervisor will asses:
 - 1. fulfilment of the aims set;
 - 2. method of solution, the adequacy of the methods used;
 - 3. ability to interpret the results achieved and draw conclusions from them;
 - 4. practical applicability of the results,
 - 5. project layout, formal requisites, terminology and language used;
 - 6. work with information sources, including citations.
- 3. The reviewer will assess:
 - 1. fulfilment of the aims set;
 - 2. method of solution, the adequacy of the methods used,
 - 3. ability to interpret the results achieved and draw conclusions from them,
 - 4. practical applicability of the results;
 - 5. project structure, terminology and language used;
 - 6. work with information sources.
- 4. In their assessments, both the supervisor and the reviewer must include a proposal of the overall grade and a justification in words of the overall grade. They may include questions for the author (questions for the defence).

5. Overall grading of final projects

Grade	Description
A	The final project is written in an above-standard way in terms of both the content and the form. The solution is exceptional, new and feasible.
В	The final project contains everything it is supposed to contain without any deficiencies.
С	The final project is written in a standard way. Minor deficiencies do not diminish the project results.
D	The final project is written in a sufficient way. There are some major deficiencies without influence on the project results.
E	The final project is written in a still satisfactory way. It show signs of understanding the theme, the work is incomplete. A solution has been proposed, but the conditions and implementation contributions are missing.
F	The final project is written in an unsatisfactory way. The solution submitted is superficial, lacking real conclusions, and implementation conditions. The project has serious deficiencies that do not meet the requirements of a final project.

6. The supervisor's and reviewer's BP/MP assessments can be accessed by students at BUT Studis IS.

Article 6

Language of a bachelor and master project

- 1. The supervisor will write a BP/MP assignment on BUT IS as follows:
 - a) in programmes accredited to be taught in Czech:
 - i. project title in Czech and in English,
 - ii. the remaining parts defining the project in Czech,
 - b) in programmes accredited to be taught in English, the entire assignment in English and in Czech.
- 2. The supervisor's and reviewer's assessments are written in Czech or Slovak for programmes accredited to be taught in Czech, in English for programmes accredited to be taught in English.
- 3. If a BP/MP in a programme accredited to be taught in Czech is written in English as approved by the supervisor, it must include about three standard pages of an extended abstract in Czech or Slovak. The extended abstract will contain an introduction, solution description, and a summary and evaluation of the results achieved.
- 4. If a BP/MP in a programme accredited to be taught in Czech is written in Slovak as approved by the supervisor, then the text part written in Slovak will start from the abstract (see the dean's directive no. 72/2017 Art. 15 concerning the requisites and structuring of the text part of a final project).