



Study program „Biomedical and Clinical Technology“
Study branch „ Biomedical Engineering“

SUPERVISOR REVIEW OF DIPLOMA THESIS (MASTER PROJECT THESIS)

student: Ana Carolina DAngeles Mendes de Brito with title: Design of construction of intelligent orthosis
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Evaluation of the diploma thesis reaches the following level:

	Evaluation criteria of thesis	Points
1.	Access of the student to the solving task (preparedness, initiative, work approach and student autonomy). (0 – 30)* <i>Full points can be awarded to a student who approached the diploma thesis long-term, systematic, independent and with a clear vision of the solution. Supervisor of diploma thesis can decrease of the related points from the case of low student activities or piecemeal work, which was reflected in non-conceptual search and easiest solution.</i>	25
2.	The method and level of processing task. (0 – 30)* <i>Supervisor assesses a creative approach and ability to seek professional literary sources. Full points can be awarded if the thesis has a high level of the theoretical background, which is in accordance with the needs of the practical part. In case of insufficient development of the theoretical background the relevant points are reduced up to 15 points. The reason for the reduction in the overall evaluation is also insufficient development of the application part.</i>	25
3.	Range of experimental work (SW, HW), applied knowledge, publications and other activities, including awards in connection with the theme of the work. (0 – 30)* <i>The maximum number of points can be given a thesis that is suitable for publication. This aspect is particularly in terms of importance to enhance the theoretical knowledge and practical importance. Especially positively evaluated is a model, software product as well as technical implementation. For minor methodological flaws, the assessment can be reduced by up to 5 points. Inconsistency of treatment with theoretical and unclear or not fully professional approach has led to a reduction of at least 15 points. Further downgrades may be granted for the lack of discussion and relevant conclusions. A total of 30 points for a very complex and error-free work, including other activities such as participation in scientific-research project or grant, active participation in the creation of publications, patents and industrial designs can be applied.</i>	25
4.	Formalities and finish thesis (level writing, markings structure of the text, graphs, tables, citations in the text, bibliography, etc.). (0 – 10)* <i>Supervisor evaluates formal requirements in terms of compliance with the rules of writing, theses attributes, i.e. text formatting, structure of the work, a list of references, availability thesis charts and tables, the method of citation. The total points can be reduced for non-compliance of rules by the maximum score of 2 points for each attribute disrespect. Also, for the occurrence of grammatical errors, typos and improper terminology and stylistics is reduced by 2-4 rating points as well. Within the thesis should appear only standard terminology, especially in the English language (must evaluate the ability to express the technical language - 2 points), graphs are formed according to the principles (see tolerance and the influence of statistical processing - 2 points) for graphs and tables are appropriate legends and everything is legible (2 points) and there are followed by the citation rules ISO690 and ISO690-2 (2 point).</i>	5
5.	Total points	80

* In case of further comments carry on the overleaf

Proposal issues for defence (optional)

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4.



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The overall assessment of the level elaboration of the diploma thesis:

A (excellent)	B (very good)	C (good)	D (satisfactory)	E (sufficient)	F (failed)
100-90 points	89-80 points	79-70 points	69-60 points	59-50 points	< 50 points
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** - check the appropriate classification level, in the case of evaluation of F (fail), please provide detailed comments

Diploma thesis was evaluated at classification level **B** mentioned above.


Comments (optional with exception of classification level „F“)

Student chose the topic focused on the design of intelligent orthosis for rehabilitation because it is a requirement for clinical practice and research, including upcoming research projects, of Department of Child and Adult Orthopedics and Traumatology of the 2nd Faculty of Medicine and Faculty Hospital Motol. The aim was to design construction and select sensors of subsystems of "intelligent" orthosis for measurement of kinematic, kinetic and other physical data of patients in Faculty Hospital Motol. Student began work on thesis in January 2016 because of personal and organizational reasons. During this short period student repeatedly consulted new suggestions and repeatedly performed design modifications to accomplish all the goals of the thesis. I also emphasized that the student completed study program focused primarily on clinical practice rather than in the area of engineering design, for this reason, student educated himself in a number of new areas, including the use of CAD systems for engineering design. For this reason, my recommendation for overall mark is B.

Name and Surname incl. degrees: doc.Ing.Patrik Kutilek, Ph.D.

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Signature: 

Date: 30.8.2017