

## I. PERSONAL AND STUDY DETAILS

Student's name: **Suthar Poonam Pravinkumar** Personal ID number: **473069**  
 Faculty: **Faculty of Biomedical Engineering**  
 Study program: **Biomedical and Clinical Technology**  
 Branch of study: **Biomedical Engineering**

## II. EVALUATION OF THE MASTER THESIS

Masters's thesis title in English:

**Methods of measurement and evaluation of postural stability using a transportable system**

	<b>Evaluation criteria</b>	<b>N. of points</b>
1.	Fulfillment of the aim of the thesis and suitability of the structure of the thesis with respect to the topic (compliance with the assignment). (0 - 30)* Each assignment, or rather any part or sentence from the assignment has to be dealt with, 20 points can only be given for a fully fulfilled assignment. Reduce the number of points with respect to the part of the assignment that is not adequately dealt with. Stating the aim in the introduction is compulsory and if the student fails to state the aim, he/she loses 10 points. The total of 30 points can be granted only to a flawless and precisely prepared thesis.	17
2.	Theoretical level and application of accessible sources. (0 - 30)* The role of the reader is very important here. It is as follows: if most of the text is adopted, then the student gets only 5 points. If everything is written by the student, in his/her own words, he/she may get maximum 15 points. Additional maximum 15 points can be added for appropriate and complete processing of accessible sources, i.e. state of the art is described in an independent chapter (5 points), important and relevant sources are commented on including the description of the selection process (selection strategy 5 points). All sources are adequately cited. The composition of the cited sources is also judged, i.e. whether they reflect the state of the art and are related to the topic, general sources such as mathematical formulas etc. are not included in full-bodied citations. The ratio of these sources can be calculated i.e. useful / not useful sources and the ration has to have impact on the evaluation (5 points).	15
3.	Scope of experimental work (SW, HW) and applied knowledge, quality of the methodology and conclusions of the thesis. (0 - 30)* If the thesis is a combination of theoretical deductions (4 points - can be replaced by a paper in English), modelling and simulation (4 points), SW implementation (4 points) and technical realization (4 points - can be replaced by a patent or utility model) and 4 points for functionality of both SW and HW - then the student can get up to 20 points. If the thesis has the correct structure including the discussion (5 points - at least 2 A4 pages) and conclusions (5 points - at least one A4 page) then another 10 points can be added. It means 30 points for a complex and flawless thesis which includes some outcomes in projects, papers, patents or utility models.	16
4.	Formal requisites and layout of the thesis (writing mastery, structuring, graphs, tables, citations in the text, list of references etc.). (0 - 10)* Currently, students have materials explaining how to prepare a professional text on PC, they have all knowledge and skills; therefore it is not necessary to make allowances for the quality of PC processing. The list of contents of the thesis should have decimal system. Consider references between the individual parts including numbering of equations, pictures, tables and graphs (1 point), quality of pictures (1 point), number of spelling mistakes (1 point for just a few), whether it contains important features with respect to the type of the thesis (2 points). Only standard terminology should be used especially in the English language (ability to express oneself with the use of professional language - 2 points), if graphs are according to the rules (see tolerance and influence of statistical processing - 1 point), if there are relevant captions for graphs and tables and everything is readable (1 point), observance of citation rules ISO690 and ISO690-2 (1 point).	4
5.	<b>Total points</b>	52

\* Verbal evaluation should be part of the Comments

### III. PROPOSED QUESTIONS FOR THE DEFENSE (OPTIONAL)

1. Can you explain the functional significance of the anatomical landmarks chosen by you for evaluation of the posture as a whole?
2. The only difference was found between infantry and other two groups. It seems that they tend to have more flexed posture. What part of their training could explain this finding?
3. Please correlate the COP position with the vertebral spine angles. Is there correlation with more flexed posture and COP position?

### IV. THE OVERALL ASSESSMENT OF THE LEVEL OF THE MASTER THESIS

Grade**:	A (excellent)	B (very good)	C (good)	D (satisfactory)	E (sufficient)	F (failed)
Number of points:	100 - 90	89 - 80	79 - 70	69 - 60	59 - 50	< 50
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	X	<input type="checkbox"/>

\*\* in case of F (failed) please explain in detail

I give the above grade to the master thesis and I recommend/~~do not recommend~~ it for the defence.

### V. COMMENTS

The first and maybe main problem of this thesis is rather poor English. There are so many examples of errors throughout the text, that it is not possible to cite them. Sometimes it is nearly incomprehensible.

Eg.: int phrase  
"...and may confirm however well your body adapts " author confuses "however" and "how" - the meaning is quite different! And such example could be found on every page. In many instances the ending "-s" is not used in verbs in the third person - wrong verb conjugation - eg. he write instead of he writes.

Improper use of capitals - in many instances probably due to the automatic correction (capital after "." in Word) is also frequent, particularly in references.

There is a good overview of methods and technique used for measurement of posture and body position with relevant references.

But the description of angles used for body measurement is very short and incomplete - see Figure 14. Angle is defined by three points and not just two. Also, the point denominated SXs is not defined in the paper - probably it is the tip of sternal bone according the figures.

Discussion is not very elaborated and particularly some explanation of the results is missing nearly completely.

The work needs proof reading and correction of English professional.

In relation to the above objections one has to argue that the quality is low, on the lower limit of requirements prescribed for defending it.

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