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Information regarding „external“ Master Theses

From time to time we are faced with requests regarding Master Theses, which have not been proposed by our faculty but by industry. This often leads to wrong expectations.

Formal Background:

The most important statement regarding Master Theses can be found in §22 of the examination regulations of the course computer science (Prüfungsordnung Informatik). The regulations regarding the software engineering and INFOTECH study course are very similar.

§ 22 Masterarbeit

- (1) Die Masterarbeit soll zeigen, dass die zu prüfende Person in der Lage ist, innerhalb einer vorgegebenen Frist eine Aufgabenstellung aus dem Bereich Informatik selbständig nach wissenschaftlichen Methoden zu bearbeiten und die Ergebnisse sachgerecht darzustellen. Mit der Masterarbeit werden 30 Leistungspunkte erworben.
- (2) Die Masterarbeit kann nur von Professoren und Hochschul- oder Privatdozenten des Masterstudiengangs Informatik ausgegeben und bewertet werden, die dem Fachbereich Informatik angehören. In begründeten Ausnahmefällen kann der Prüfungsausschuss gestatten, dass das Thema der Masterarbeit auch von einem nicht dem Masterstudiengang Informatik zugehörigen Professor oder Hochschul- oder Privatdozenten der gleichen Fakultät, einer anderen Fakultät oder einer anderen Hochschule ausgegeben wird.

(The complete examination regulations can be found online.)

General Remarks

1. A Master Thesis is an academic record. It can only be issued by examiners of the faculty for the area of computer science/ software engineering/ INFOTECH.

This especially means: An institution that is not part of the university cannot issue a topic. If topics are offered on notices, in advertisements or on job fairs, this is incorrect and awakes wrong expectations. (Our student's council can't offer the cafeteria on the real estate market!)

Often industry argues that they issued many topics. This concerns universities of applied sciences (FH) and universities of cooperative education (BA) for which other regularities are in place. Regarding our faculty those regularities are not discussable.

2. Needless to say that every person, especially a student, can propose a topic. But there is no guarantee that this proposal is accepted.

3. As the Master Thesis is an academic record it is not allowed to pay for it. The examiners are obliged to make sure that these rules are preserved.

Awards, which are paid by companies after the completion of a Master Thesis without any legal obligation, lie within a grey area.

„External Master Theses“ in the Institute of Computer Architecture and Computer Engineering

The previous statements are valid for the whole computer science department. In the Institute of Computer Architecture and Computer Engineering, they are concretized and précised as follows.

4. All students have the right to get one topic; but they don't have the right to get a specific topic from a specific professor. This institute only issues Master Theses to students that qualified in the field of computer architecture and computer engineering, normally by an exam like "Advanced Processor Architecture". But depending on the topic, other criteria may apply.

5. Every thesis issued here is supervised in our institute, even if there is supervision by industry as well. As every staff member has an area of research, Master Theses on topics not covered by the institute have only slight chances of success.

6. As examiner I have to ensure, that a thesis can be completed even if industry loses interest, does not supply the needed data or otherwise stops to support the work. As a matter of fact, we have no legal claim on the cooperation with the industry, unless the work is part of a cooperation agreement. (But even then we can't delegate the responsibility!)

7. The chances for the approval of an "external" Master Thesis are very low if a student with a concrete topic "searches for an examiner".

On the other hand, a student who wants to do a Master Thesis in cooperation with industry should ask if an institute offers such a thesis.

In the same way, a company can ask a professor, if cooperation is possible. Student assignments can be conducted in such cooperation. The search for a student who eventually works on the topic lies within the responsibility of the institute.

8. Experience shows that industry and university have different standards and criteria for success. This especially applies if the work includes the development of software. For the final grading of the thesis the criteria of the university is decisive. As students try to please „their“ company, they may lose sight of the relevant criteria and in the end are disappointed by potentially bad grades.

For this reason we pay attention that the interests of the company are clearly separated from the goals of the Master Thesis: The institute delivers the results to the company upon which they agreed in the cooperation, not the student who should focus on the examination regulations and the rules of the department.

9. Despite our precautions an “external” work involves a high risk. This risk is accepted by the graduand if he takes such a work.

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2015-08-12

(Based on a text written by Prof. Dr. Jochen Ludewig)