Date: April 11th, 2017

## Minutes of the 118th meeting of the PC-IT

Present: Boschma, Van Grinsven, Heerlien (chairman), Heijenk, Heijnen, Huisman, Kortstra, Molenkamp,

Padberg, Peter, Van der Putten (minutes secretary)

5 Absent: Bolding, Havinga

#### 1. Opening and determining agenda

The meeting has been opened at 10:46 hrs.

#### 2. Cyber Security specialization

Peter mentions that the course material of the new courses still needs to be developed.

-Systems Security

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Huisman has several remarks on behalf of the curriculum committee. She mentions that the literature list is very long, which makes it difficult for students to distinguish the material that needs to be studied from the material that only needs to be looked at. Peter responds that they try to be as specific as possible and that only parts of the papers needs to be read. The PC gives a preliminary OK for System Security, since the course material is incomplete.

-Cyber Data Analytics

Huisman has several remarks on the course, she will forward them (and the remarks on the other courses) to Andreas Peter (action). There is an overlap in the prerequisite courses, Heijenk mentions that only the UT courses are on the list in our specialization. On the prerequisite courses given in Delft, there should be a course description available for students in Twente. Peter mentions that there is a contact person at the UT for each Delft course.

25 -Blockchain Engineering

It is remarkable that, in case of too many registrations, the teacher selects students for the course himself instead of "first come, first serve". In general, the limitation of students is difficult, since there are usually some students who drop out of the course, which results in empty places, while there are students who are excluded from the course. There is some confusion about the name, since Delft has a course with the same name which differs from the UT course. Padberg thinks that the name of the course needs to be changed. The PD will discuss the issues on Blockchain Engineering with the teacher (action), we will approve the course for now.

-Advanced Network Security

The student follows the course in addition to the Normal Network Security course, this should be clarified in the description. Huisman mentions that students follow NNS and ANS parallel and asks if it is possible to follow ANS one year after, since it is nice to have some flexibility. It is not clear if that is possible or not. Peter mentions that initially it wasn't the intention to offer the course to UT students and that the teacher may still decide to not offer the course for Twente. Molenkamp suggests telelectures, however there has been decided to stop supporting telelectures. The PD will rediscuss this. Since there needs to be some work done, the PC will not approve the course for now.

#### 3. Announcements PD

-Cooperation China

Soon there will be signed an agreement for the cooperation with the NPU, the dean will go to China in a few weeks to sign the contract. The idea is to have three years of the bachelor in China and one exchange year at the UT. Hopefully, the first exchange students will come to the UT next year. The Chinese students need to improve their English language in order to enter the exchange programme. There are also some ideas to do a double degree master, but this is still under construction.

-Open days

During the open days at the end of March, there has been an increase in visitors for the bachelor as well as for the master compared to last year. The number of preregistrations is about 20 percent more than last year, so there are approximately 150 first years expected next year.

#### **Announcements working groups**

There are no announcements from the working groups.

## 4. Incoming/outgoing correspondence

5 There is no incoming or outgoing correspondence.

## 5. Minutes and action points of the 117th PC-IT meeting d.d. March 14th, 2017

There is no consequent use of first and last names, this will be corrected. The use of "Qx" will be changed in "module x".

Agenda item 2, point 3: "do whatever they want" is not entirely correct and will be reformulated. Furthermore, "join-in minor" needs to be changed into "broadening minor".

Agenda item 4: last sentence (in Dutch) can be removed.

Agenda item 7, second sentence: the PD hasn't said that the module was bad, but that it was badly reviewed. Agenda item 10: the composition of the working groups is incorrect and will be changed.

### In response to

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There are no remarks in response to the minutes.

#### Action points

20 179: remains on the list.

259: the dean has already been requested to appoint Anna Sperotto as a member of the PC-IT. However, due to a lack of time, she will not join the meetings during this academic year. To be removed from the list. 264, 266: remains on the list.

265: due to a lack of time, this will be done during the summer. Remains on the list, deadline will be September. 267, 268, 269 and 270: done, to be removed from the list.

#### 6. Teaching and Examination Regulations

In general: for convenience, page numbers should be added to the TER.

Article 3.9: Padberg mentions that the part on students who want to give a confidential presentation can be interpreted in two different ways. Van Grinsven will discuss/modify this (action).

Van Grinsven mentions that she and Jan Willem Polderman have already processed the remarks of the PC into the new version of the TER, except items 18 and 20. The period of two years to inspect assessments is the same as in the bachelor-TER. Furthermore, there is a difference between "Cum Laude" and "judicium Cum Laude", so this is not confusing. The chairman will write a positive advice on the TER, including the discussion points, since the Faculty Council likes to see that the decision has been thought through (action).

#### 7. Master rationalization

Heijenk mentions that there will be constructed a new structure with three specializations in Computer Science and Internet Science & Technology. All specializations have a clear common structure, but also have their own explicit profile. The goal is to reduce the number of courses and let each program connect with our current research. Each program has a core of obligatory courses and a set of advanced (eligible) courses. Each student has a 30 EC profiling program, for which the student needs to make a proposal for the content.

-Software Technology
This has a clear structure, looks fine.

45 -Data Science & Technology

The new course on "Fundamentals of Data Science" still needs to be developed, a course description will be provided soon. The setup of the new course on probabilistic programming is still under construction. -Cyber Security

There are some clusters of courses due to the prerequisites of the courses. There are no course descriptions available, the PD makes sure that these will be available next meeting (action). The integration week will not be obligatory any more. Peter asks if this framework is final or if it is a draft framework. Heijenk mentions that there is still room for changes, but that this is the base structure. Peter says he is not very happy with the framework, since it doesn't reflect the content well. Heijenk mentions that there has been chosen for a clear general structure, since it has to be presented to the aggregation committee in a few years. Peter suggests to choose three courses instead of four, since it will significantly be better for building a study plan.

-Internet Science & Technology

This has the same structure as the previous specializations, looks fine.

Huisman asks if there will be cancelled some courses. In that case, there will be made a plan for students who already started their master to offer the old courses while the master rationalization is being introduced. Heijenk

will make a plan for these students (action). The course table needs to be looked at well before the meeting in May, since the master TER needs to be finished at the meeting on 6 June.

#### 8. Master courses

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-Programming Principle, Patterns and Processes

The workgroup curriculum remarks that the descriptions are quite general and would like to have more specific descriptions. Furthermore, there are four books being used in this course. We would rather have one book for the course.

-Replace Information Retrieval

10 The working groups advise positively on the replacement of Information Retrieval.

-Modeling and Analysis of Concurrent Systems

The workgroup mentions that the course is not really relevant for students who do not graduate in software technology. Furthermore, "study literature" is not a learning objective. Heijenk mentions that the UT has a rule that minor modules cannot be prerequisites for a course. The PC approves the proposal with previous remarks.

15 -Capita Selecta Software Technology

The PC advises positively on the proposal.

-Automated Reasoning

The workgroup wonders if this course is really necessary and attractive. It should better come to terms as a part of Capita Selecta. There is a lot of doubt about the course, so the feedback will be discussed with the teacher.

20 -Testing Techniques

The plan is not finished yet, so next meeting a more specific plan will be discussed.

-Managing Big Data

The PC advises positively on the course "Managing Big Data".

-Additional document: Programming Paradigms change in weighing Functional & Logic Programming Projects.

It was 50/50 and it change in 75 for FP and 25 for LP.

The PC advises positively.

#### 9. A.O.B.

No other business is being discussed.

#### 10. Questions and conclusion

The meeting closes at 12:29 hrs.

# Actions

#	Meeting	Action	Person	Deadline
179	March 2015	Biannual overview of study and evaluation results	Heijnen	September / March
264	December 2016	Find a solution for the premaster/bridge minor problem	Programme director	January 2017
265	March 2017	Check whether there is a correlation between the grades for Q2 and the algorithmic pearl in Q1	Huisman & Heijnen	September 2017
266	March 2017	Attend the FR+ meeting or get someone else to do it	Chairman	April 2017
271	April 2017	Forward the remarks on the Cyber Security specialization to Andreas Peter	Huisman	May 2017
272	April 2017	Discuss the new course Blockchain Engineering with the teacher	Programme director	May 2017
273	April 2017	Discuss/modify article 3.9 in the TER on confidential presentations	Van Grinsven	May 2017
274	April 2017	Write a positive advice on the TER	Chairman	May 2017
275	April 2017	Make sure that all course descriptions in the master rationalization are available next meeting	Programme director	May 2017
276	April 2017	Make a plan for already started master students due to the master rationalization	Programme director	May 2017