

UNIVERSITY OF TWENTE.

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Date: 08-05-2019

Present:

Chairman: F. Krekt

PC-members: ir. E.E.G. Hekman, B.R. van Eijk, dr.ir. M.B. de Rooij, I.T. van der Veen, N. van der Werf,

10 Permanent guests: dr. ir. J.B.W. Kok (left 9.30 hr.), Dr. G.G.M. Stoffels, Drs. L. Gommer, S. Buse

Evaluation committee -

Minute maker: C.D. Molenwijk

Guests: M.H. Riaz and H. Steenstra (trial student members)

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Absent: dr. M. Shahi, dr.ir. E.T.A. van der Weide, Ir. M.E. Toxopeus, K. G. M. Braakhuis, dr.ir. H.J.M. Geijselaers

1. Opening

20 The chairman opens the meeting at 08.47 hr. Two potential new PC student members, M.H. Riaz and H. Steenstra are introduced.

2. Minutes last meeting & Minutes Faculty Council

MINUTES LAST MEETING

25 Page 1: N. van de Werf should be changed to N. van der Werf. B. van Eijk was absent during the meeting. Therefore his name should be moved to absent.

Action points

41: remains; FR should be replaced by FC

30 1: remains; should be translated into English

69: completed; update: there was a complaint that the manual was not professional and contained usernames and passwords. F. Krekt conferred with A. Knijnenburg who responded that the manual is not publically available. When SET was audited, the evaluation committee was asked to provide this manual and afterward they received complaints about the set-up. The manual will not be changed because it is for the Evaluation Committee only: usernames and passwords will still be written down. They are willing to write a more general manual for people outside the committee.

35 78: completed; The ME Programme Director conferred with the Tribology teacher. Exam questions will not be changed. The current teacher will look into finding a replacement teacher for the course and will change his attitude towards student questions. Sample questions are discussed during lectures but teachers can't be forced to put sample questions in a database. The relationship with the bachelor students was addressed and the problem was made clear. Next year there will possibly be a new Tribology teacher.

100: completed

45 102: remains

103: remains

104: in progress; ME Programme Director is collaborating with the head of BOO to organise an event or gathering for ME to connect with the BOO staff;

105: in progress

50 103: completed; should be changed into number 106

The minutes are accepted under the proposed changes.

MINUTES FACULTY COUNCIL

55 2019-03-26 There are no remarks on these minutes.

2019-04-09 There are no remarks on these minutes.

3. Announcements

60 - Student members in Peer Review Institutional Audit

This afternoon (from 15.45 – 16.15 hr.) the university is looking for one person willing to participate in the peer review session in preparation for the institutional audit. If the institutional audit is passed, then the programme audit is supposed to be lighter. There are multiple panels planned, also for the Examination Board and Programme Directors. They are specifically looking for students to join this meeting from the programme committee. B. van Eijk is willing to join.

- J. Kok Enters at 09.04 hr -

70 The panel will probably focus on the cycle in regards to course- and module evaluation and the SEQ. For instance: when and how it is discussed in the PC, how it is reported to the teachers, how it compares to evaluations next year. **AP** F. Krekt will mail R.van Luijk about the attendance of B. van Eijk (in cc) in the peer review panel. Agenda topic 5 is discussed next.

4. Master Renewal

75 - Update progress

All specialisation groups are formed. There are differences how far these specialisations have progressed. ME Program Director has a meeting with all of the specialisation leaders to discuss the progress and alignment. Meetings have been planned for every specialisation. Specialisation names are still up for debate but will not have overlap with existing names.

80 Feedback from around 30 students indicated that the list of specialisations was generally appealing and that students would find it easier to choose from the new list. There were mixed reactions to removing the profiles. This was partly because students thought profile courses might disappear. Students generally agreed having more elective space would be a good idea. The ME Program Director adds that it has already been decided that the profiles will be removed.

85 The planning is as follows: the end of May specialisation names need to be finalized. At the end of June website information needs to be ready. In September there will be workshops and preferably fixed course packages. Course load will be monitored so that courses with (too) high workloads would get less workload and the other way round. There will be open days in November taking into account the transition from old to new programme: students starting in 90 February would follow the current program; the new program starts September 2020. Further aims are to have the final course lists in December and have a draft schedule in Jan/Feb 2020. The progress is currently a bit delayed. There has been a meeting with the master-coordinator.

95 The ME Program Director inquires if the PC is of the opinion that there should be one or two common courses for every student (and specialisation) in the master. This matter will also be discussed during the workshop in September. M.de Rooij is of the opinion that the master is for specialising. ME is very broad. It would be good to know what the common ground is but naming one course that could fit for all specialisations is difficult.

100 An initiative is being set up in collaboration with Civil Engineering. Students that did their previous bachelor level education elsewhere miss certain skills. L. Gommer is looking into possibilities for an obligatory course (elective) for student that did not do the UT-ME bachelor. A broad range of skills can be chosen from to be implemented into this course, like Matlab, and study skills. B. van Eijk proposes to have a general exam for all students to test if they have the necessary skills. Both are viable options.

105 - Splitting Numerical Methods for Mechanical Engineering (NMME)

There was a problem with the high workload for NMME due to which many students failed. It was proposed to split the course in two 5EC courses (in adding workload to both): Fundamentals of Numerical Methods (FNM) and Advanced Topics in Finite Element Methods (ATFEM). One is 110 more fundamental and one application based. The courses will be given in two consecutive quartiles. FNM will become part of the Research & Development profile and ATFEM a part of Design & Construction. The specialization coordinators can advise students on what would fit best in their programme. According to both teacher and students there was not a lot of coherence between the two parts of the original course. Students can therefore do both courses or follow 115 either one separately. There will be an arrangement for those having to redo the course so they can still finish the course. Exams for the old situations will be set-up.

Advice PC: The PC gives a positive advice for splitting NMME.

AP F. Krekt will communicate this to R. Loendersloot and E. van der Weide.

- *Splitting Dynamics & Control*

- 120 Most students are interested in only one part (either Dynamics or Control) of the course but not both. Therefore it was proposed to split Dynamics & Control into two courses. Dynamics will be merged with Dynamics of Machines into Flexible Multibody Dynamics (FMBD). The control part will become a new course: Control for (Bio) Mechanical Engineering. W. Hakvoort and A. Keemink will recap control topics from the BSc. The course is made especially for the Robotics and Mechatronics track. Students can also do both courses with the option of a combined assignment. B. van Eijk inquires if it this mini project is for extra EC. Doing so would be difficult because courses are 5EC and you could not really do anything with 1EC. Both courses take place in the quartile 1A. The workload for each course will become 5EC through adding deeper knowledge and information to the current course. Dynamics & Control will not be a profile course.
- 125
- 130 The courses are independent.

Through splitting courses and adding workload to each, you risk getting more and more courses. The ME Program Director replies that this is being looked into. In the case of FMBD, Dynamics of Machines will disappear, resulting in one extra course. A. Heutink is looking into the occupancy of courses (i.e. courses that attract high or low amounts of students) to determine which courses could be scratched. Preferably this will result in a smaller amount of courses. This is work in progress.

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- L. Gommer addresses a concern regarding the scheduling of these courses. The proposed courses are all for 1A and 1B. There should also be courses for the second semester, especially if you have the February intake. This will have to be arranged later. There should be an even workload. Teachers seem to have a preference for the first two quartiles, most likely because the largest group of students starts in September and some courses have prerequisite knowledge requirements.
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Advice PC: The PC gives a positive advice for splitting Dynamics & Control.

145 - *Advanced Motion Control*

W. Hakvoort has made a proposal for a course Advanced Motion Control that would replace J. van Dijk's course Motion and Vibration Control. This connects to the master track RAM. There will be a slight change of content so it will still connect to the teacher's research fields. It is unclear if the basic knowledge will remain the same for the proposed follow-up course.

- 150 *Advice PC:* The PC gives a positive advice under the condition that basic skills for Motion and Vibration Control will still be a part of the course.

5. Delays in master due to internships

- J. Kok was unable to prepare anything yet. He did write a proposal for adding another SET team member to assist in the second year. In the first year the curriculum is fixed and students do not have any significant delay. In the second year some are confronted with the degree of freedom when they have to make choices and arrangements themselves. There is a delay in choosing an internship, choosing specialisation courses and choosing a master thesis topic. It is made clear to second year students that they have to organise this themselves. Some pick it up and others postpone until the last moment. The proposal was sent to N. Vander Vaet for comments. By next year there will possibly be a new team member. Internship definitions might be changed. **AP** Add topic to agenda again when the annex is finished. Back to agenda topic 4.
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6. Change evaluation process modules

- 165 J. Kemna wrote a proposal to improve response for the bachelor course evaluations by diminishing the amount of time students require for the evaluation. Students have four points of evaluation: central and course questionnaire, and two separate panel evaluations. The proposition is to cut the course evaluations. This would result in more available time for the master evaluations, attention for SEQ within module teams and monitoring response.

- 170 You would miss information because the course evaluations contain more specific questions about courses. Then other input would be needed because at the moment the PC does not handle SEQ and panel evaluations. The SEQ and the panel evaluations provide different information. Another possible reason for low response to evaluations: students do not feel like anything is being done with their input. It is however argued that there have been several student meetings for this.
- 175

G. Stoffels proposes to select certain modules every year and focus on that to reduce the workload. Every year different modules could be selected so students will do a course evaluation for one module each year. An addition could be to check courses two years in a row if changes were made. Now, two courses from modules are selected each year to evaluate.

180 The evaluation reviews have to be communicated. At the moment teachers do not get the
results for the mid-module Newton evaluations. Reviews should be spread to module-
coordinators who should then communicate it to the teachers so modules can be improved. L.
Gommer proposes that two people talk to J. Kemna and A. Knijnenburg about their plan for the
evaluations. **AP** G. Stoffels and F. Krekt. The SEQ is compulsory but evaluation points are not
185 always clear (i.e. the learning goals are unclear). It is proposed to add questions to the SEQ.

7. Education

- BSc: New design Modelling and Programming

190 L. Gommer had a meeting about ModPro due to many complaints from students and teacher. It
was decided to search for a new teacher; Jos Havinga was appointed. The course will get a new
set-up. The new teacher intends to make the course more accessible and focus on what ME
students would need to work and become familiar with Matlab. There will be more coherence
with Thermodynamics and Statics and the grade will still be implemented.

195 The course set-up is still being discussed, for instance how students can be assessed
individually on their knowledge, what the assessment time should be, if extra persons should be
available to walk around and answer questions. It will not be changed yet for the premaster but
this could be considered if the changes work fine for the first year students. There will be an
arrangement for first year students that have to redo ModPro next year. The scores for ModPro 2
have been adjusted. There will also be an extra resit for ModPro and Statics this year in summer.
200 This agenda topic will be discussed further during the June meeting. L. Gommer will keep the PC
updated. The next ModPro meeting is planned for May 29th.

- BSc: Assessment EER 2018-2019

205 The question is posed if there are any comments in the EER that are not being lived up to.

Page 16: Article 6.3.7 – Binding Recommendation on Continuation of Studies (BSA)

H. Riaz questions if 75% study load is the same as 45 credits and how the failing of two modules
would fit into this rule. It is determined that this is part of the central EER and not the BSc EER. It
is probably formulated like this to offer possibilities. If it is stated you have to finish three modules,
210 you should finish three modules. But this way exceptions are possible.

Page 27: Section N – Admission Requirements Minor

215 The reason why these admission requirements exist this way is to prevent students from delaying
too much. Students should first finish the first year and two modules in the second year so they
have finished a substantial part of the bachelor. In principle this means students cannot start the
minor when they only have M3 left to finish. L. Gommer argues that it does not have to be
repeated to 90EC in the EER as it is preferred for students to have the first year finished. This is
agreed upon.

Page 24: Section G – Bachelor's Programme

220 How does the Binding Recommendation work when you do not finish the whole module but only
parts of it? The table means that you can redo a part next year if you did not finish it. G. Stoffels
adds that if, for instance, a student finishes M1 and M2, and one component for M3 and M4 each,
he/she can redo those module components next year and will get a positive BSA. If you miss
225 more components then you will officially not get a positive BSA. Students are however allowed to
compensate one five. There is an Examination Board meeting dedicated to these matters to
decide on giving positive BSA. The BSA will probably be counted in regards to module
components next year. The discussion about having calculus as a module component should
then also not matter anymore.

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Sample questions

235 Would it be possible to add a requirement to EER in regards to teachers providing sample
exams? L. Gommer is in favour of transparency but not in favour of sample exams. Students
have a right to prepare for examinations. It is a problem when bachelor students only study the
course material, including sample exams, and not the book. Students understand how to answer
the exam questions but do not understand the content. These effects have become bigger since
the start of the 0 vs 15 EC rule. It is questioned if it would be a possibility to have one sample
exam as requirement. That way students can see the lay-out, the set-up of questions, and what
they have to do. This should be the purpose of a sample exam. There are already Dutch sample
240 exams available.

Students could also be given the opportunity to see how well they would do on an exam. An example would be Mechanics where there was an actual test exam during the lecture. Transparency and sample exams will have to be further discussed. The next meeting on 12 June will focus on the EER.

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8. Any other business

Should the academic block for M8 be changed to M6 because of its relation to M5? This used to be the case, however, it was too early in the programme for students to finish these subjects resulting in many students failing. Another problem with the current academic blocks could be Dynamics. Dynamics 2 is a course with the least passing grades. There is a good chance students will have to delay their thesis when having to redo the course in M12. **AP L. Gommer will look into the pass rate for Dynamics 2 (M8).**

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9. Closure

255 The chairman closes the meeting at 10.33 hr.

<i>Action points</i>				
	Action: (Agenda point)	Introduced on:	To be completed on:	To be completed by:
41	Ask for FR minutes from FC	08-06-2016		BOZ
1	Let the evaluation committee discuss the course evaluations (in response to PC-377)	01-11-2001		
102	Write proposal regarding splitting the bachelor and master PC	27-02-2019		B. Geijselaers
103	Talk to the teacher about Manufacturing facility design	03-04-2019		L. Gommer
104	Organize event / get together to familiarize people with the BOO staff	03-04-2019		L. Gommer
105	Ask the study advisor about the reason to connect the passing of module 5 to module 8	03-04-2019		L. Gommer
107	Mail R.E. van Luijk about the attendance of B.R. van Eijk (in cc) in the peer review panel	08-05-2019	08-05-2019	F. Krekt
108	Communicate positive advice splitting NMME to R. Loendersloot and E. van der Weide	08-05-2019		F. Krekt
109	Communicate positive advice splitting Dynamics & Control	08-05-2019		F. Krekt
110	Communicate advice Advanced Motion Control	08-05-2019		F. Krekt
111	Add agenda topic 'delays in master due to internship' when annex is finished	08-05-2019		BOZ
112	Talk to J. Kemna and A. Knijnenburg about their plan for the evaluations	08-05-2019		G. Stoffels & F. Krekt
113	Look into pass rates for Dynamics 2	08-05-2019		L. Gommer