

ADVIES OPLEIDINGSCOMMISSIE TBK

To : BMS Faculty Council, Program Director TBK

From : OLC TBK

Date : 15-06-2017

Subject : Recommendation concerning the changes in the GUIDELINE FOR TEACHING AND EXAMINATION REGULATIONS FOR BACHELOR'S PROGRAMMES, and in the Program Specific Annex of the TEACHING AND EXAMINATION REGULATIONS

OLC TBK Recommendations:

1. The recommendation of the OLC TBK is negative with respect to the adoption of the modifications proposed in the GUIDELINE FOR TEACHING AND EXAMINATION REGULATIONS FOR BACHELOR'S PROGRAMMES for the reasons explained in the motivation section of this document. Our advice is to delay the adoption of these guideline with one year, and to request their improvement at least on the points mentioned in the motivation section.
2. The recommendation of the OLC TBK is also negative with respect to the modification of the current program specific annex of the EER, as result of the changes that are currently proposed in the Guideline for Teaching and Examination Regulation based on the arguments given in the motivation section of this document (see 2.A, 2.B, and 2.C).
3. The recommendation of the OLC TBK is positive with respect to the EER of IEM master.

Note 1: Recommendation 1 is supported by all the members of the OLC TBK. The motivation 2.A given as explanation for the Recommendation 2 (with respect to the program specific annex of the EER) is supported by the following members of the OLC: Maria Iacob (chairperson), Derya Demirtas (lecturer), Sandor Lowik (lecturer). All student members also give a negative recommendation but for different reasons. Since the students do not adhere to the lecturers' motivation/recommendations, the student's motivation and

Bonte, E. (BMS)

From: Schutten, J.M.J. (BMS)
Sent: dinsdag 20 juni 2017 16:52
To: Bonte, E. (BMS)
Cc: Pol, B.G.F. (BMS)
Subject: FW: OLC TBK's advise on the EER Guidelines and on the program specific annex of the EER
Attachments: ADVIES OPLEIDINGSCOMMISSIE TBK15-06-2017.pdf; OLCStudentsAnnex.pdf; FSS 2017-2018 IEM (vs1).docx; FSS 2017-2018 TBK (vs10) 21-6-2017.docx

Dear members of the Faculty Council,

Please find attached the documents of the OLC of TBK / IEM with their advices on the EER and the program specific annex of this EER.

As you can find in these documents, the OLC advices negatively on both the EER and the program specific annex. Moreover, the student members and the lecturer members have different motivations why their advice is negative. The program management agrees with the OLC about the lack of clarity in the BSc EER.

Based on the advice of and the discussion with the OLC and the student association Stress, we observed the following:

- The program management strives for full integration / cohesion of module parts within a module.
- The student members of the OLC believe that several module parts are not integrated with the core of the module. In consultation with their bachelor students, Stress advices to exclude only the Mathematics part of the modules from the core, due to an insufficient relation between the Mathematics parts and the module cores.
- Very recently (2nd half of May), the contents of the Mathematics learning line for next year has been reshuffled over the modules.
- Our cooperating programs have decided to exclude the Mathematics from the module cores.

Based on the following arguments, we decided to **exclude the Mathematics learning line** (i.e., Mathematics A, B1, B2, C, and D) **from the module cores, for at least the next 2 years:**

- The Mathematics is a UT learning line, on which we have little influence.
- For us, it is not feasible to adapt our modules of next year to the changes of the Mathematics learning line, due to illness of lecturers, including our Mathematics contact person.
- We value the students' honesty, commitment, and opinion.

Please find also attached the program specific annexes; the one for the BSc has been updated with respect to the decision above.

Of course, I am willing to clarify the observations and our conclusions on this matter.

Best regards,

Marco Schutten
Education Director TBK / IEM

From: Iacob, M.E. (BMS)

Sent: maandag 19 juni 2017 19:24

To: Schutten, J.M.J. (BMS) <m.schutten@utwente.nl>; Pol, B.G.F. (BMS) <b.g.f.pol@utwente.nl>

Cc: Hottenhuis, B.R. (Bas, Student B-TBK) <b.r.hottenhuis@student.utwente.nl>; Schuitema, T. (Tim, Student B-TBK) <t.schuitema@student.utwente.nl>; Sipma, K.E. (Koos, Student B-TBK) <k.e.sipma@student.utwente.nl>; Stroet, H.P.J. (Huub, Student B-IBA) <h.p.j.stroet@student.utwente.nl>; Laar, J.S.M. van (Jade, Student B-TBK) <j.s.m.vanlaar@student.utwente.nl>; Demirtas, D. (BMS) <d.demirtas@utwente.nl>; Löwik, S.J.A. (BMS) <s.j.a.lowik@utwente.nl>

Subject: OLC TBK's advise on the EER Guidelines and on the program specific annex of the EER

Dear Marco and Bernadette,

Please find enclosed the multiple advice of the OLC on the OER matter. There is also a second attachment that belongs to the students' advice, as formulated in 2.B. The document also contains a brief position statement of the STRESS association at point 2.C.

Please forward this advice + attachment to the Faculty Council for consideration.

My best regards,

Maria Iacob

/ MODULE 1	Category	Notes			
<u>INTRODUCTION TO IEM</u>					
MATH A & MATH B1	1				
PROBABILITY	1				
CORE TOPICS	2				
RESEARCH METH. SKILLS	3				
TBK PROGRAMMING	3				
PROJECT REPORT & PRODUCT	3				
SKILLS	-				
/ MODULE 2					
<u>OPERATIONS MANAGEMENT</u>					
MATHEMATICS B2	1				
OPERATIONS STRATEGY	3				
OPERATIONS RESEARCH	3				
PROJECT WORK	3				
SKILLS	-				
/ MODULE 3					
<u>BUSINESS INTELLIGENCE AND IT</u>					
STATISTICS	1				
METHODOLOGY LINE	2				
DATABASES & BUSINESS INTELLIGENCE	3				
BUSINESS PROCESS MANAGEMENT & ENTREPRISE ARCHITECTURE	3				
M3 PRJOECT	3				
SKILLS	-				
/ MODULE 4					
<u>SUPPLY CHAIN MANAGEMENT</u>					
BUSINESS GAME. THE FRESH CONNECTION	3				
DEMAND/SUPPLY PLAN, INVENTORY	3				
SOURCING, TRANSPORT, NETWORK DESIGN	3				
STATISTICS	1				
MATHEMATICS D1	1				
SKILLS	-				
/ MODULE 5					
<u>FINANCE FOR ENGINEERS</u>					
ACCOUNTING AND FINANCE	3				
OPTION PRICING	2				
METHODOLOGY	1				
PROJECT	3				
/ MODULE 6					
<u>CONSUMER PRODUCTS</u>					
PROJECT CONSUMER PRODUCTS	3				
TECHNICAL PRODUCT MODELLING 1	3				
MANUFACTURING 1	3				
PRODUCT - MARKET RELATIONS	3				
/ MODULE 7					
<u>FROM PRODUCT DESIGN TO ONLINE BUSINESS</u>					
PRODUCT DESIGN TO ONLINE BUSINESS THEORY	3				
MATHEMATICS 2A	1				
PROJECT REPORT	3				
SKILLS	-				
/ MODULE 8					
<u>MOD. & ANALYSIS OF STOCH. PROCESSES IEM</u>					
STOCHASTIC MODELS	2	Vakken wel met project geïntegreerd, maar projecten niet met elkaar			
PROJECT STOCHASTIC MODELS	2				
SIMULATION AND HEURISTICS	2				
PROJECT SIMULATION AND HEURISTICS	2				
MULTIDISCIPLINARY PROJECT	2				
/ MODULE 9					
<u>MINOR / STUDY ABROAD</u>					
MINOR	-				
/ MODULE 10					

<u>MINOR / STUDY ABROAD</u>					
MINOR	-				
/ MODULE 11					
<u>PREPARATION THESIS</u>					
PROJECT PLAN	-				
SKILLS PORTFOLIO	-				
/ MODULE 12					
<u>BSC THESIS TBK</u>					
THESIS	-				

detailed recommendations are presented separately as 2.B and included in the motivation part of this document as well.

Note 2. As you may recall, the STRESS association is also an observer of all the OLC activities. Considering the divergence in opinions within the OLC, they also felt compelled to make known to the Faculty Council, and the Program Director their position with respect to the program specific annex, which is included as 2. C in the motivation part of this document.

Motivation for the recommendations:

1. We have carefully analyzed and discussed the document entitled “GUIDELINE FOR TEACHING AND EXAMINATION REGULATIONS FOR BACHELOR’S PROGRAMMES” and the accompanying “Explanatory notes for Education and Examination Regulation (EER) Guideline 2017-2018”. There are several major issues, and inconsistencies throughout this document that make room for all kinds of ambiguities and interpretations, and that are in our opinion not acceptable for this kind of legally binding document, in particular when also taking into account the consequences they have for the program specific annex to the EER. Hence we recommend the faculty council and the program director to postpone the adoption of this document with one year, until this document reaches the required quality and precision. Below we give some of our most important arguments for this negative recommendation:

- **Art. 1.2 Definition of terms:** One of the most essential change in this Guidelines document concerns the validity of test results which is also acknowledged by the explanatory notes document: “If a module is not fully integrated but contains parts that do not have a direct relation to the core of the module, these parts can be (re-)tested apart from the rest of the module. For these modules, the test result can stay valid for a longer period than the current academic year (which was the case under the previous guideline).” Sadly, Art. 1.2 omits to clarify the concept of fully integrated module, and the conditions in which this integration is achieved. This is essential for determining which results could be candidates for a longer validity and which not, and has a large impact on the program specific annex of the EER. This lack of clarity lead to a vivid debate within the OLC TBK, because of the different interpretations given to the concept of “fully integrated module”. To be more precise students adopt the position of a **strong form of integration** and consider that module parts in a module are integrated when knowledge and techniques from one module part are explicitly, and effectively used in the other module part, and/or vice versa. The module coordinators, and the program management interpret integration in a lighter way as **cohesion**, and consider that two module parts are also integrated when they are in some way related (i.e., there is a “samenhang” between module parts). To this end, the program management is of the opinion that all of the modules in the TBK program are therefore

integrated (with perhaps one exception in module 7). To give an example that caused some heated discussions we refer to Module 1 in which a half day math teaching-case was created to show the applicability of Math knowledge in a practical situation, that is typical for the TBK daily practice. The math knowledge is further not used in any of the other parts of M1. Students consider that this case does not qualify as sufficient integration of the math component with the core of the module, while the coordinator of M1, acknowledges the math case in the program specific annex of the EER as a (weaker) form of integration, as it showcases the utility of math techniques for the general TBK practice.

Considering all of the above we strongly recommend the formulation (in Art 1.2) of an unambiguous definition of integration of module parts, on the basis of which correct decisions can be made with respect to the lack of/partial/full integration of module parts, and subsequently the validity of test results.

- Art. 3.2 is very much formulated from the perspective of bachelor students that choose to follow minors within the UT. It is very unclear what happens if students decide to do their minors in another university and/or abroad.
- Art. 4.1.6: This article should add the clarification “Exam results falling exactly in the middle between two consecutive whole numbers are rounded up.” For instance 5.5 is equally close to both 5 and 6, so we better make a clear choice which of the two it is.
- Art. 4.4.2a states that Learning Goals should become part of the Program specific annex of the EER. We are opposing this idea. Because learning goals may easily change from one year to the other for various reasons, this article is generating a lot of bureaucracy in getting this learning goals on time and up to date in the EER every year. Furthermore, because the EER is revised only once a year (in May/June) and because it is a legally binding document this would mean that absolutely no modifications can be made after the EER is approved, for at least another year. For modules in the quarters 3 and 4, this would effectively mean that any change in the learning goals would have to wait 2 years to be implemented.
- Art. 4.4.2c: This article in the English version of the document says “c)The study-load of module-parts as meant under (b)”, while the Dutch version says “c) welke weging in EC’s de module-onderdelen hebben”. Not only the two versions are inconsistent with each other, they are also either incorrect, and/or unclear. First of all, in the accompanying “Explanatory notes for Education and Examination Regulation (EER) Guideline 2017-2018” it is stated that in this version of the guidelines a clear distinction has been made between the study load measured in EC and the weights of module parts measured in percentages and used in the procedure of determining a

positive or negative BSA: "Paragraph 6.3.7 now states that all test results (i.e. results of tests within the module) that are valid beyond the current academic year should be calculated in the decision to 'give a BSA'. The threshold is now defined as 75% rather than 45 EC, because OSIRIS calculates weights of test-results." Regardless of this realization that weights of module parts are not the same as their study load in ECs, it seems that not the same logic is followed in the remainder of the guidelines, in particular in 4.4.2c. Thus, contrary to what Art. 4.3.2c says, a "weging" cannot be measured in ECs. We are also of the opinion that **both weights (%) and study-loads (ECs)** of the module parts should be explicitly mentioned in the program specific annex of the EER. As an example, again from Module 1, we refer to the module part TBK programming. This module part has a weight of 0, because it is finalized with a "Pass" or "Fail", and a study load of 1 EC. Nevertheless, a student cannot pass Module 1 without a "Pass" for TBK programming. This makes this particular example also interesting from the BSA calculation point of view. Should TBK programming matter for the BSA calculation or not? According to the new article 6.3.7 a, TBK programming should have no impact whatsoever on the BSA calculation. While in the previous situation it had.

Considering all of the above issues we strongly recommend the inclusion in Art. 1.2 (Definition of terms) of an unambiguous definition of "Study load" and "Weight of a test", and how they are measured (i.e., in ECs, and percentages respectively). Also we recommend this terminology to be consistently applied throughout the whole guidelines document, in particular in the formulation of Art. 6.3.7. that should very precisely determine the criterion and calculation method of the 75% needed for a positive BSA.

- An identical piece of text is included in both Art. 5.2.2 and 5.4.1.
- The most serious problem with Art. 6.3.7 is imprecision. It is now formulated as follows: "The final recommendation on continuation of studies , as referred to in paragraph 1, may involve expulsion from the programme if the student has completed less than 75% of study load in the first year of the programme./ Aan het definitieve studieadvies als bedoeld in lid 1 kan een afwijzing verbonden worden, indien als de student minder dan 45 EC75% van de studielast succesvol heeft behaald inafgerond." This formulation does not exclude the possibility that a student would receive a negative BSA also when he/she completed more than 75%, and that a student might still get a positive BSA with less than 75% study load completed. One should precisely say when a student will get a positive BSA, namely by completing three full modules. **Please also note that 75% study load is not equivalent with 3 full modules completed, which would be in line with the TOM philosophy!**

- Art. 6.3.9 Is not clear in regard with credits transferred from other programs when determining the BSA. What are these “vakspecifieke aanvullende eisen”? When are they established (in the beginning of the academic year? Before the BSA?) and by whom (the exam board? the lecturer that gives the respective course which is exempted?) And how do we deal with the calculation of the 75% in this case?
- Finally, we are not happy with the timeline that was imposed to us for processing these documents and for giving our recommendation on them, because it was hasty. The guidelines were made available to us on 18-05-2017, which was after our May OLC meeting. So we only had one OLC meeting in June in which we had to discuss these matters. The guidelines are already a large topic that required a lot of time, and even heated discussions. These are documents which we cannot process in a hurry: it took us several iterations and four years to come to the current form of the program specific EER. We cannot handle such massive changes quickly in a one and half hour meeting. We had almost no time to properly examine the consequences of the changes in the guidelines for the program specific annex, while we are expected to check very thoroughly whether there are inconsistencies between the guidelines and the program specific annex. **We recommend, that future iterations of these documents to be made available at least two months in advance, namely at the latest in the beginning of April.**
- **Art 8.9: We recommend to change the entry into force to Sept 1st 2018.**

2. **A. Recommendation of the lecturers, members of the OLC TBK:**

We have analyzed the current status of the program specific annex of the EER. We cannot stress enough how dependent this annex is on the EER guidelines. We are of the opinion that the EER guidelines and this annex are not yet well aligned, partly because there was not sufficient time to properly change the annex, and partly because many of the problems signaled in the guidelines cannot be solved in such a short time.

We therefore recommend to postpone the modification of this annex, and use the current annex (which was consistent and correct) for another year, and give sufficient time to the program management and the OLC to process these major changes and work on these issues in the right way.

More concretely we recommend a thorough check of the completeness of the program specific annex with respect to the issues that are prescribed as mandatory parts of this annex by the EER Guidelines:

- The weights of module components
- The precise description/justification of the implicit and explicit relationships intended by design, by the each of the module coordinators, between the different module parts.
- The way evaluation and safeguarding the quality of the program is organized, which should be described in the program specific annex. The quality of the program should not only refer to the

assessment of the different module parts of a module, but should also consider the quality of modules as a whole, in particular with a focus on integration issues.

2.B. Recommendation of the students, members of the OLC TBK:

We have analyzed the current status of the program specific annex of the EER. We cannot stress enough how dependent this annex is on the EER guidelines. We are of the opinion that the EER guidelines and this annex are not yet well aligned, and that there are a few things that need a lot of extra attention. The main problem that we as students see is that the cohesion/integration as stated in the documents provided by the module coordinators and the TBK-management doesn't represent the reality. We also spoke about this **together with the teachers** from the OLC, and made an overview about the problems within each module concerning the integration/cohesion. We have assigned all subjects into three categories: 1) Subject doesn't have a connection with the core of the module. 2) Subject has a connection with the core of the module, but isn't integrated with the project or with other parts of the module. 3) Subject is integrated with the core of the module. We have enclosed an overview with all subjects per module and the category in which we think they belong. We would like to stress on the fact that, for example, a single mathematics case doesn't provide enough cohesion within a module and should therefore be considered as a separate module part.

We therefore recommend to take out the subjects that belong to category 1 as described in the overview enclosed and consider them as separate module parts, of which the partial grades can be maintained for more than one year. This means that we will have to use a new annex for next year. This will give sufficient time to the program management and the OLC to process these major changes and work on these issues in the right way to make our education program work again. When this is done correctly, we can have a look at the annex again, and maybe put it back in the current state for the years after next year. For subjects in category 2 we recommend that an effort is made to strengthen the integration of the subject(s). We strongly advice to adopt these changes for upcoming year.

More concretely we recommend a thorough check of the completeness of the program specific annex with respect to the issues that are prescribed as mandatory parts of this annex by the EER Guidelines:

- The weights of module components (what are weights? Percentages or EC's?)
- The precise description/justification of the implicit and explicit relationships as: **1)** intended by design, by the each of the module coordinators, between the different module parts. And, **2)** how this turns out to work in reality.
- The way evaluation and safeguarding the quality of the program is organized, which should be described in the program specific annex. The quality of the program should not only refer to the assessment of the different module parts of a module, but

should also consider the quality of modules as a whole, in particular with a focus on integration issues.

2.C Recommendation of the STRESS association:

“The opinion of Stress about the OLC advices above, on the new EER, is as follows. Stress supports the need for change in the description of cohesion/integration within the modules, but Stress does not agree with any of the two recommendations that are currently presented by the OLC. Stress searches for a way between both pieces of advice. For example, a good first step would be the alteration of the way the mathematics line is included in the modules. The desired state would then be to separate mathematics from the core of the module, resulting in grades being valid for more than one academic year. Stress thinks it is important to change, but bit by bit while continuously monitoring the program quality.”

Signature: 

Chair of the OLC TBK: prof. dr. M.E. Jacob

Date: 19-th June 2017