Evaluation TOM 5 ST

2015/10/01

Present students	5 Students
Present committee members	Jelle (Chairman) & Ruben (Secretary)
Present teachers	Edwin Dertien & Erik Faber

Opening of the meeting at 12:50

General Remarks

The module fits within the curriculum, but students are very busy since they have everyday lectures from 9 till 5. It is a heavy start with difficult subjects and long days. However this also has its positive points, since you get your study rhythm instead back. Also the pressure is high since students have a test every week.

The test in week 1 was not necessary according to a student. Especially since the announcement was late. Other students did not bother too much, since it was a diagnostic test

All the teachers are all right and give good explanations, especially Erik Faber. Only Paublo Frasca is chaotic in his explanation, this makes the assignments seem harder than they really are.

Some students dislike the jokes of Edwin and find it a bit annoying, other students don't mind. Furthermore Edwin knows is material very well and his teaching skills are also great.

There are communication errors between teachers about what students already know, since there is a lot of overlap in the subject. Students fear this causes a loss for courses to go more in depth on their subject. The students suggest to give the teachers if, and if so where, the content is already presented in the courses. In this way teachers know what to discuss and what students (should) already know. However a very small recap from 5-10 minutes, like the recaps from Erik Faber, are always appreciated.

The peer reviewing on Friday are very helpful. Students gave an example where someone with a 5.8 was teaching someone with a 5.3 the material, this was found weird. Also it's suggested to make groups with an equal distribution between high and low grades.
At some points students with an insufficient grade had to walk to the front to get their grade, students found this humiliating. The half point bonus is an incentive to come.

Suggestion for students, let someone (maybe Proto) organize an evening on the basics of excel, there is a lot of interest from students.

There was a question if students are bothered by other people who are showing up late on. This is not the case.

Courses

Sensors

The pressure of getting this done in one day is really hard. Luckily signing off doesn't have to do the day itself. Just the full 8 hours is too intensive. Better to divide the 4 hours. In theory the full 8 hours works, but sometimes it too intensive.
The exact assignment is not really clear, since half an hour before the end extra information is added to the assignment. The unclarity was for example that the outcome should be processing.
The teaching materials are fine, some links need to be updated.
The test for sensors was what you could expected. The reader was good, learning for the test was hard since the subject was too broad and it wasn't specified what you should really know. Students feel like if you are able to get a decent grade, then you really know the material.

Circuits & Electronics

It's fine. The material is clear, the related questions and chapters are also really good.
The worked out answers are also very nice, makes it clear.
The tests are fine. But there is a difference between the slides and the book material and this is notable in the tests.
The group test was really good since you learn to work together in a short amount of time. Everybody can work on separate questions.
More general term, the sequence in which content is taught is confusing. Some things need to come little bit earlier.
Less people show up too lectures, since people already having enough points.

Control Systems

Peter Breedveld, quote by student: "he stepped up is game". He gives graphical examples which is much appreciated. However students still have a problem with 20 SIM!. Suggestion is to look at MATLAB & Simulink if these are easier programs to use for students.

Telecommunications

I doesn't fit in the module. It doesn't have anything to do with the rest of the module.
It does connect to the module topic-wise, but not organizational-wise (no examples given).
It is a really nice and interesting course.
Students want step by step solutions to check their assignments.
The teacher Mark Van Bentum is really enthusiastic which makes the course great to follow.

Literature Research Project

One of the best courses of this module. Since combination of (real) research and building your installation. It is not clear if the topic is important. Some students need guidelines on how to do this research. Suggestion to invite someone who already done such a project, and how he did it. Preferably a student from the year before.

System and Signals

The book isn't used, sometimes he references it on blackboard, but not in his lectures. This is a waste of money. So start using the book or don't make it obligatory to get it.

Also his lectures are very chaotic. He skips things you need extra explanation about and goes on and on about things you already know. He already adapted his lectures on requests of students and now added examples, which was really appreciated. He could improve by giving step by step solutions, according to the students he sometimes goes too fast. Also he might take a look at the material from M.C. Boldy who gave an overview what you should know. Also students want more assignments and less reading. The reason for this is that they learn better by doing assignments.

Closing

Closing of the meeting at 13:34

Evaluation TOM 5 ST

2015/10/01

Present students	5 Students
Present committee members	Beerend (Chairman) & Tom (Secretary)
Present teachers	Edwin Dertien & Erik Faber

Opening of the meeting at 12:40

General Remarks

The module is experienced as a busy one. But it is rightfully busy. The course manual was fine at the time but it kept changing. There was also a certain lack of structure and some things where not up to date and the teachers did not always stick to the module manual.

De module was experienced as a solid foundation. The contents where really good.

It was experienced like a good module but it should not be like this for 4 modules. The students had no regret for picking smart tech but they did not expect it would be SO busy! Also the planning of the weeks was not ideal. There was a exam on Monday with after that a practicum. This could better be planned on Thursday.

The test roster was a bit unclear. By circuits and electronics there was a complete explanation of what you had to know but with the rest of the subjects there was only the text “See blackboard”

There was a good integration of subjects. Only Telecom and Peter Breedveld’s subject where standing apart from the rest. But overall the integration was one of the best of all modules.

Also some people would rather see their grades separated. Especially mathematics. But this is only some people.

During the first few colleges there was a 80% attendance rate later that was a lot less. It was especially hard to stay focused with the amount of information coming towards you. But the colleges were pretty good.

Looking up things online works depending on the subject. Especially for math Khan Academy was very useful. It could be linked on blackboard.

Not everyone had mathematics B on high school. Some formulas could be at least shown so they can more easily understand some things since some things were glanced over because you should have had it during mathematics B.

The module is experienced as a very classic module with a lot of time spend reading books. It is not very Creative but very much technology. It also keeps it typical broadness of CreaTe.

It would also be fun to have something that combines all filters that we got. E.g. making a mixing panel

Edwins Pitches:

Instead of separate Subjects you will get one casus. This casus will be separated in the subjects given right now. For example a 3D printer exists of multiple parts that are linked to different subjects. For example the printhead is kind of like a PID controller. If there is a subject you can not put in to the casus you will get a regular test and have to study for it. Also your literature project will be about the casus you have so you will be more interested in the project.

This should not be implemented immediately is the consensus however it is a really good idea. If you do this you have to make sure that the subjects are of the same quality regardless of whether you took a casus. You can also implement it with sensors and the lab sessions since these are already practical tutorials.

There was also an idea that you should be planning your own module. For some students this would be good since it is more like classical studying in which you plan your own time but for some students it is not a good idea since they would do nothing. There are some students who pull the plug after a couple of weeks and stop altogether. But there is probably nothing that can be done about this

Courses

Sensors

There was a practical with OpAmps before there was a lecture. This was actually the point. The idea was that people would be interested in it and that you learned about it during the lecture. People would be more likely to spend attention this way. The only problem was that there was a lot of stress during the practicum.

Lesson materials:

The reader was pretty good. Only a lot of the links were expired. But they will be updated for next year.

Only nobody used the book from story. People did not know it existed. It would be good to link it somewhere in the reader.

Student Assistants were fine. There was still a lot of stress but this was due to the amount of work given. Some students felt like the exam from sensors was useless. You already understood everything just making the assignments. It felt a little bit useless to have an extra testing moment. But it was a good stick behind the door to do the assignments however childish it seemed

Edwin pitches for different signing off system:

Handed in during 1st moment + 0.2 on exam

Handed in later: + 0.1 on exam

Not handed in: -0.25 on exam

It might be that people will hand in things faster. It at least gives more decision freedom about whether you hand something in. Also it is better than a pass / fail system in the way that you can still make the module regardless of the fact whether you handed in everything or not.

Can there be an end assignment with sensors?

Circuits & Electronics

Good subject. Well given. Only new thing was the Vrijhof lab session. Some people want it in the end some in the beginning. It is better in the end because it feels like a rest moment for students and is regarded as more enjoyable.

Control Systems

The last 3 weeks of the module there came another gigantic subject. It was good that sensors was ended at that time and that then control systems came too. It was a good subject but very difficult. It felt like a complete masters course given in 3 weeks. The fact that the test was split was very nice.

There was a test about PID controllers but there were no lectures about that. The exam however was still pretty doable. It was probably simplified.

There were almost no student assistants. They were missed, especially during the lab sessions. The students had questions but nobody to ask them to. The student assistants that were present where not prepared for the subject they gave. They had to be filled in by the students about what they had to do. One group of students asked a student assistant something and the resistors he had to check were not checked correctly. So they made a soldering iron instead of a thermostat.

A lecture given by Edwin went a bit too fast. It was a good concept but he went through at lightspeed. It would have been better if it would have been a lecture instead of a hand in moment.

Telecommunications

The lectures are good. “Mark van Bentum is een held”. One annoying point however was that there was a lot of studying material ca 70 slides. People did not know what they had to know. There was also an article given that was very informative but with too much info. Might have been better if it would have been handouts.

-important: PDF instead of powerpoint!

Everyone thought the failed the test but they didn’t almost everyone made it. The way the questions were asked was very ambiguous. Almost every answer was correct in some way. Might be better to sharpen the questions a bit.

Also the lab session had a grade instead of it being a pass / fail. It would be nice if this would be communicated. But it was not bad.

Literature Research Project

It depends on your supervisor how this subject is given. The point of this project is that there would be an essay written and a poster made.

One drawback was that you had to explain how you got your results. This meant that you had to fill in your google searches and explain why you chose them. This was very high-school ish. This space could

have been better used. It depends on your supervisor when you get feedback and when you get it. You have to go after it yourself which was not a bad thing necessarily.

There was a student who had to rewrite a part because the guidelines changed. It Is important that the guidelines in the rubix are the same as the guidelines.

The project was the same for NM and ST that means that NM could have planned it better since they had more time in the start. They only got a lot of work in the end.

It might be an idea to have a couple of days just for the project. It is a bit of a ignored child with smart tech since there is no time for it. If you let people prepare for it beforehand and then let them work at it for a few days it might work better.

After the last test everyone starts with their research paper and then there was a lot of unclarity about what to be handed in when. The poster printing deadlines were unclear and the posters were made too fast because the deadline had to be made.

Also change the deadline between handing in the poster and the draft paper. People did not have a conclusion yet but they had to add one on their poster. It should be first the draft paper and then the poster.

Systems and Signals

It was good to see how the interaction was between system and signals. There were no separate mathematics tests. Some people liked this, some didn't but over all it was okay. It was a bit of a pity that you did not see your grade separately but it was no big deal. The problem was however that some people could compensate mathematics completely and actually did not understand it. But if you would split the tests you would get even more tests and even less people would make it.

If you would split it it should be explained better. Especially laplace and imaginary numbers. They are not explained very thoroughly. They especially missed some context which should be given before explaining what it is.

The lectures were ununderstandable and during the tutorials people figured out how it worked.

They started with simple laplace transformations then they skipped the partial integrations. The last part was skipped because people already understood it. But this was not the case.

The mathematics book was not used. It was not necessary, people used khan academy and Wikipedia. It should not be obliged to use it.

The student assistants were fine.

Closing

Closing of the meeting at 14:07

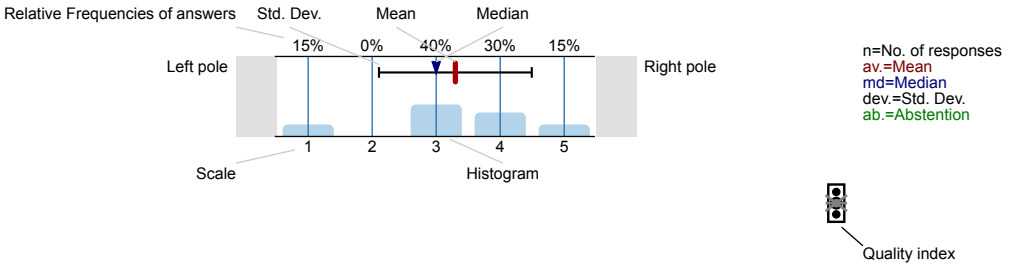
Smart Technology (201500171)
B-CREA, 1A 15/16
No. of responses =16; Response rate = 32.7%

UNIVERSITEIT TWENTE.

Survey Results

Legend

Question text



Description of quality symbol

- Mean value is below the quality guideline.
- Mean is within the range of tolerance for the quality guideline.
- Mean value is within the quality guideline.

1. General questions about the minor

1.1) Was this module part of your minor?

n=16

Yes	6.3%
No	93.8%

2. Organisation of the minor

3. Learning effect of the minor

4. Teachers of the minor

5. HTHT module

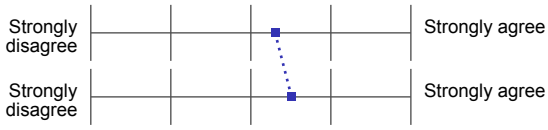
Profile

Subunit: SEQ 2015-2016
Responsible for modules: 201500171 B-CREA
Name of the course: (Name of the survey) MINOR2015

Comparative line: Minor 1516 - blok 1A - alle minors

Values used in the profile line: Mean

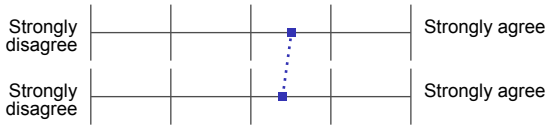
1. General questions about the minor



1.3) The content of the minor met my expectations (*) — n=293 av.=3,3 md=4,0 dev.=1,1

1.4) The minor content was appropriate for a third year student (*) — n=281 av.=3,5 md=4,0 dev.=1,1

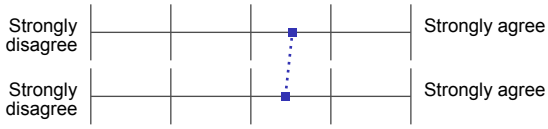
2. Organisation of the minor



2.1) The schedule was clear and was available on time (including notification about changes in schedule, if any) (*) — n=294 av.=3,5 md=4,0 dev.=1,2

2.2) The digital learning environment (e.g. Osiris, Blackboard, websites) were useful and well publicized (*) — n=292 av.=3,4 md=4,0 dev.=1,1

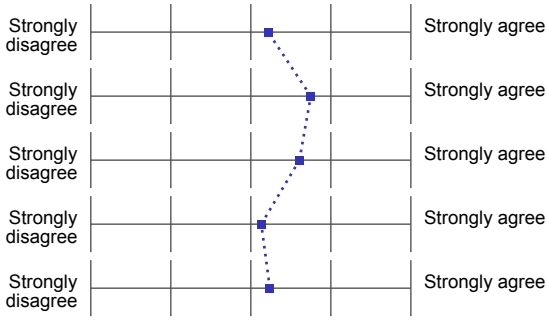
3. Learning effect of the minor



3.1) The minor was a valuable contribution to my Bachelor programme (*) — n=287 av.=3,5 md=4,0 dev.=1,2

3.2) I learned a lot from the cooperation with my fellow students (*) — n=292 av.=3,4 md=4,0 dev.=1,1

4. Teachers of the minor



4.1) The teachers motivated me to do my best. (*) — n=283 av.=3,2 md=3,0 dev.=1,1

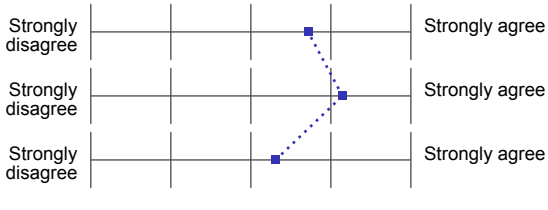
4.2) The teachers did their best to support me when I had questions about the material (*) — n=279 av.=3,7 md=4,0 dev.=1,0

4.3) I understood the explanations given by the teachers (*) — n=290 av.=3,6 md=4,0 dev.=0,9

4.4) The teachers had useful feedback on my work (*) — n=283 av.=3,1 md=3,0 dev.=1,1

4.5) The teachers inspired my interest in the material (*) — n=286 av.=3,2 md=3,0 dev.=1,1

5. HTHT module

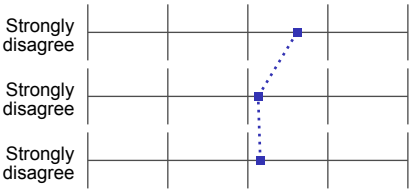


5.1) It was an advantage that my project group consisted of students from different disciplines (*) — n=144 av.=3,7 md=4,0 dev.=1,3

5.2) Besides my specific role, I was actively involved in the overall development of the project content (*) — n=172 av.=4,1 md=4,0 dev.=0,8

5.3) This minor helped me understand that a technical solution needs to be implemented into the broader social context (*) — n=165 av.=3,3 md=3,0 dev.=1,0

5.4)	During the education sessions with teachers, there was room for an exchange of ideas and/ or insights between students and teachers (*)	Strongly disagree	Strongly agree	n=166 av.=3,6 md=4,0 dev.=1,1
5.5)	The feedback I received from lecturers allowed me to proceed on my own (*)	Strongly disagree	Strongly agree	n=163 av.=3,1 md=3,0 dev.=0,9
5.6)	There was a good mix of different teaching methods (*)	Strongly disagree	Strongly agree	n=167 av.=3,2 md=3,0 dev.=1,0



Smart Technology (201500171)
B-CREA, 1A 15/16
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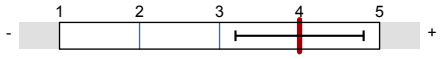
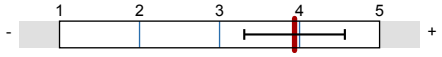
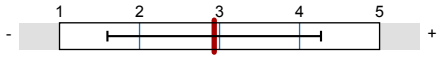
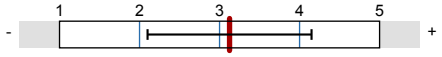
UNIVERSITEIT TWENTE.

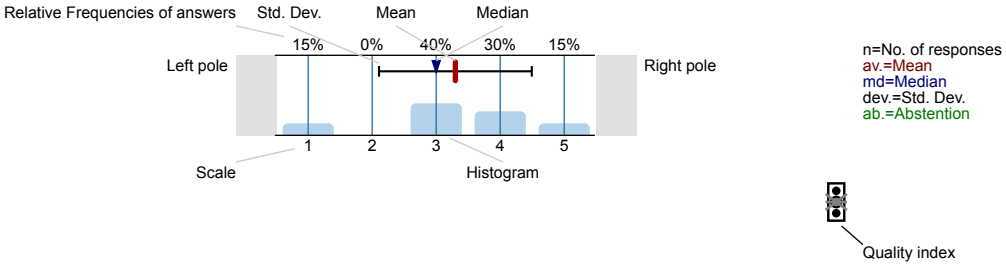
Overall indicators

Module (Scale width: 5)		av.=4 dev.=0,8
Learning (Scale width: 5)		av.=3,9 dev.=0,6
Project (Scale width: 5)		av.=2,9 dev.=1,3
Assessment (Scale width: 5)		av.=3,4 dev.=0,8
Effort to put into study (Scale width: 5)		av.=3,1 dev.=1
Appreciation (Scale width: 5)		av.=4,3 dev.=0,6
Appreciation (Scale width: 10)		av.=7,6 dev.=0,9

Survey Results

Legend

Question text



Description of quality symbol

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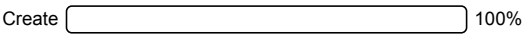
- Mean value is within the quality guideline.

1. General

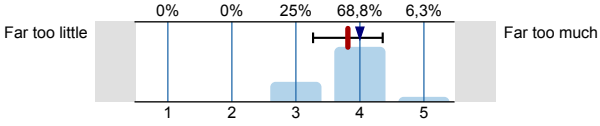
1.1) I am a student in....



n=16

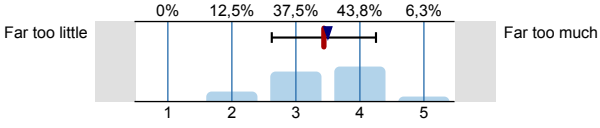
2. Module

2.1) As a whole, I found the module challenging



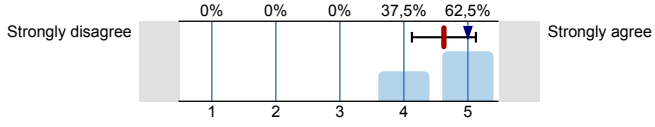
n=16
av.=3,8
md=4
dev.=0,5

2.2) In general, I had enough prior knowledge to successfully do the module



n=16
av.=3,4
md=3,5
dev.=0,8

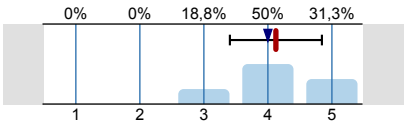
2.3) As a whole, I learned a lot in the module



n=16
av.=4,6
md=5
dev.=0,5

2.4) The module was logically put together. Consider for instance: parts of the module were connected well; good sequence of module parts

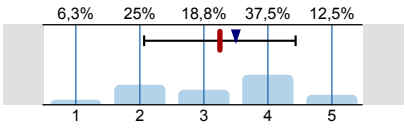
Strongly disagree — 0% 0% 18,8% 50% 31,3% — Strongly agree



n=16
av.=4,1
md=4
dev.=0,7

2.5) The module was well organised. Consider for instance: clear assignments, clear rules for assessments

Strongly disagree — 6,3% 25% 18,8% 37,5% 12,5% — Strongly agree

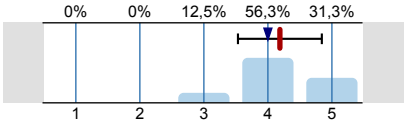


n=16
av.=3,3
md=3,5
dev.=1,2

3. Learning

3.1) I have learned a lot from the teachers, tutors, teaching assistants, etc.

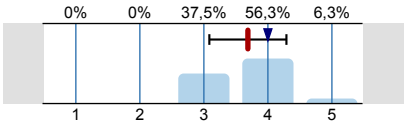
Strongly disagree — 0% 0% 12,5% 56,3% 31,3% — Strongly agree



n=16
av.=4,2
md=4
dev.=0,7

3.2) In general, the teaching and learning in the module were a good fit for how I learn. Consider for instance: thinking things through before taking action; learning in cooperation; applying theory in reality.

Strongly disagree — 0% 0% 37,5% 56,3% 6,3% — Strongly agree

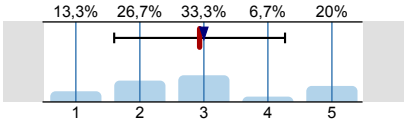


n=16
av.=3,7
md=4
dev.=0,6

4. Project

4.1) I have learned a lot from doing the project

Strongly disagree — 13,3% 26,7% 33,3% 6,7% 20% — Strongly agree



n=15
av.=2,9
md=3
dev.=1,3
ab.=1

4.2) I found the following aspects of the project very valuable (more than one answer possible)

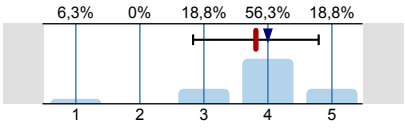
n=16

the application of previously gained knowledge	25%
the integration of (the) various subjects learned in the module	25%
the development of new knowledge and insights	68.8%
the motivational effect	6.3%
the cooperation with other students	6.3%
the development of skills, namely... (answer question 4.3)	43.8%
another aspect, namely... (anwer question 4.4)	6.3%

5. Assessment

5.1) Throughout the module I knew on time how I would be assessed. Consider form and content (e. g. written/verbal exams, presentations, assignments)

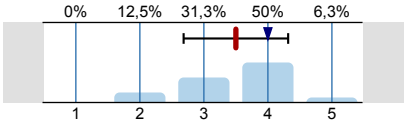
Strongly disagree — 6,3% 0% 18,8% 56,3% 18,8% — Strongly agree



n=16
av.=3,8
md=4
dev.=1

5.2) The tests were suitable to determine whether I'd learned sufficiently

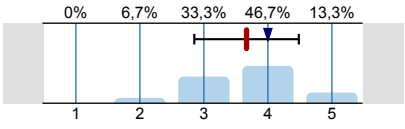
Strongly disagree — 0% 12,5% 31,3% 50% 6,3% — Strongly agree



n=16
av.=3,5
md=4
dev.=0,8

5.3) I got useful feedback on the assessments I made (including possible intermediate assessments)

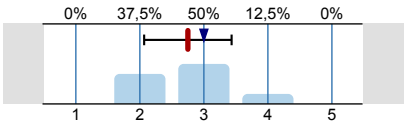
Strongly disagree — 0% 6,7% 33,3% 46,7% 13,3% — Strongly agree



n=15
av.=3,7
md=4
dev.=0,8
ab.=1

5.4) Throughout the module I had enough time to prepare for each assessment

Strongly disagree — 0% 37,5% 50% 12,5% 0% — Strongly agree

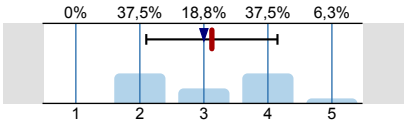


n=16
av.=2,8
md=3
dev.=0,7

6. Effort to put into study

6.1) In general, the amount of study time I had to put in was doable. Consider the entire module and possible fluctuations of workload in it.

Strongly disagree



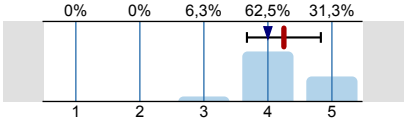
Strongly agree

n=16
av.=3,1
md=3
dev.=1

7. Appreciation

7.1) Based on the module, I would recommend this UT study programme to others

Strongly disagree

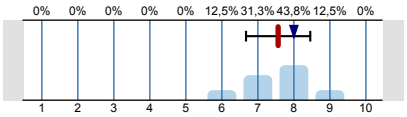


Strongly agree

n=16
av.=4,3
md=4
dev.=0,6

7.2) In summary, I give the module the following grade.
1 = very poor; 10 = excellent

1



10

n=16
av.=7,6
md=8
dev.=0,9

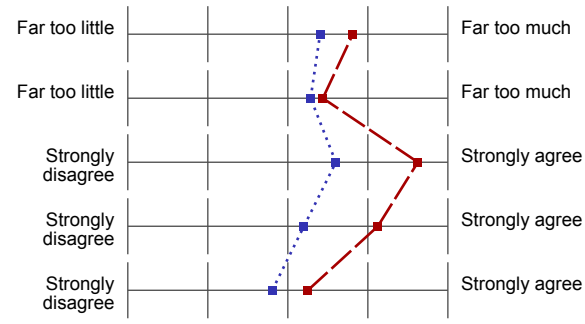
Profile

Subunit: SEQ 2015-2016
Responsible for modules: 201500171 B-CREA
Name of the course: (Name of the survey) SEQ2015

Comparative line: SEQ 1516 - blok 1A - B2-modules - alle opleidingen

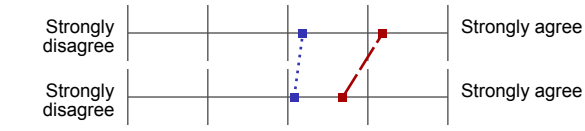
Values used in the profile line: Mean

2. Module



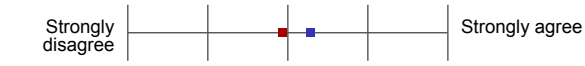
2.1)	As a whole, I found the module challenging	Far too little	Far too much	n=16 av.=3,8 md=4,0 dev.=0,5 n=665 av.=3,4 md=3,0 dev.=0,9
2.2)	In general, I had enough prior knowledge to successfully do the module	Far too little	Far too much	n=16 av.=3,4 md=3,5 dev.=0,8 n=664 av.=3,3 md=3,0 dev.=0,9
2.3)	As a whole, I learned a lot in the module	Strongly disagree	Strongly agree	n=16 av.=4,6 md=5,0 dev.=0,5 n=668 av.=3,6 md=4,0 dev.=1,0
2.4)	The module was logically put together. Consider for instance: parts of the module were connected well; good sequence of	Strongly disagree	Strongly agree	n=16 av.=4,1 md=4,0 dev.=0,7 n=665 av.=3,2 md=3,0 dev.=1,2
2.5)	The module was well organised. Consider for instance: clear assignments, clear rules for assessments	Strongly disagree	Strongly agree	n=16 av.=3,3 md=3,5 dev.=1,2 n=667 av.=2,8 md=3,0 dev.=1,2

3. Learning



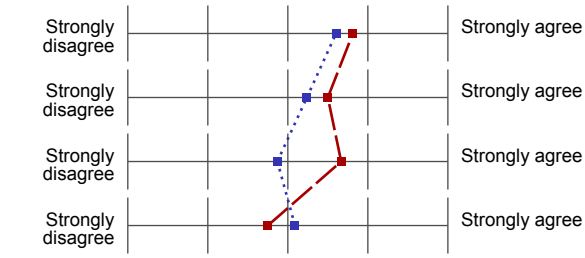
3.1)	I have learned a lot from the teachers, tutors, teaching assistants, etc.	Strongly disagree	Strongly agree	n=16 av.=4,2 md=4,0 dev.=0,7 n=661 av.=3,2 md=3,0 dev.=1,1
3.2)	In general, the teaching and learning in the module were a good fit for how I learn. Consider for instance: thinking things through	Strongly disagree	Strongly agree	n=16 av.=3,7 md=4,0 dev.=0,6 n=643 av.=3,1 md=3,0 dev.=1,1

4. Project



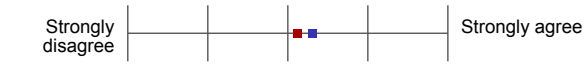
4.1)	I have learned a lot from doing the project	Strongly disagree	Strongly agree	n=15 av.=2,9 md=3,0 dev.=1,3 n=654 av.=3,3 md=3,5 dev.=1,1

5. Assessment



5.1)	Throughout the module I knew on time how I would be assessed. Consider form and content (e.g. written/verbal exams, presentations,	Strongly disagree	Strongly agree	n=16 av.=3,8 md=4,0 dev.=1,0 n=665 av.=3,6 md=4,0 dev.=1,1
5.2)	The tests were suitable to determine whether I'd learned sufficiently	Strongly disagree	Strongly agree	n=16 av.=3,5 md=4,0 dev.=0,8 n=668 av.=3,2 md=3,0 dev.=1,1
5.3)	I got useful feedback on the assessments I made (including possible intermediate assessments)	Strongly disagree	Strongly agree	n=15 av.=3,7 md=4,0 dev.=0,8 n=628 av.=2,9 md=3,0 dev.=1,2
5.4)	Throughout the module I had enough time to prepare for each assessment	Strongly disagree	Strongly agree	n=16 av.=2,8 md=3,0 dev.=0,7 n=662 av.=3,1 md=3,0 dev.=1,2

6. Effort to put into study



6.1)	In general, the amount of study time I had to put in was doable. Consider the entire module and possible fluctuations of workload in it.	Strongly disagree	Strongly agree	n=16 av.=3,1 md=3,0 dev.=1,0 n=664 av.=3,3 md=4,0 dev.=1,1

7. Appreciation

7.1) Based on the module, I would recommend this UT study programme to others

n=16 av.=4,3 md=4,0 dev.=0,6
n=655 av.=3,2 md=3,0 dev.=1,2

7.2) In summary, I give the module the following grade.
1 = very poor; 10 = excellent

n=16 av.=7,6 md=8,0 dev.=0,9
n=670 av.=6,1 md=6,0 dev.=1,8

Comments Report

4. Project

4.5) I would like to suggest the following improvements of the project to the teachers:

- -
- /
- Grading system is not very clear especially for the assignments and the lab work
- Instead of handing in a whole draft report to get feedback. Maybe let us hand in section by section to get feedback on. So one week deliver the Introduction, another week the Method and so on.
- Let students in the first couple of weeks write a proper introduction and method, this saves time in the end. Now partly assignments are given that could be implemented in the introduction and method but it feels like a waste of time.
- More clarity, quite some things had been unclear from the beginning
- More resit options, put less materials in some of the exams- the studyload for some exams was way too much, considering there was an exam every week..

  Less preparational exercises for the lab sessions- that preparation often took almost an entire day for one session not including finishing the journal afterwards
- The distribution of deadlines throughout the module might be changed. For instance, you had two weeks to come up with a research question, but just one to write your whole draft report!
- The project was a little out of place with the rest of the courses.

7. Appreciation

7.3) I found the following to be the strongest points of the module:

- -
- - Well organized, I knew what I was up to
  - Good lectures, mostly clear and insightful. The lab sessions where even better, I think I learned the most from lab sessions.
  - I learned a lot
  - Smart tech was really fun!
- - You learn a lot in a short amount of time
  - Finally some theory that is more in-depth
  - The courses were all interconnected
  - Theory as well as practice
  - Finally some academic skills learned
- Integration of different subjects
- It was really what i was looking for
- Lots of great material
- The amount of new knowledge gained, was impeccable!
- The subjects were working well together.
- Topics and implementation in all subjects
- Very interesting courses courses
- the bonding between the different courses.

  If the connection between the courses was found, people would have feeling of success. Meanwhile, it could deepen the interest on the module.

  In addition, the overall content was comprehensive.

7.4) These are my suggestions for the improvement of the module:

- -
- - Better organization of the project deadlines
  - Better spreading of the workload
  - Switch the Circuits & Electronic labs in order
- - The workload was very high. Finishing the module was heavy. There where a lot of tests planned and at one moment I couldn't fit it in my schedule anymore.
  - 8 hours long 'sensors' on Tuesday was a bit too much.
  - The 'literature research project' seemed like it did not fit very well in the course.
- Better and clear module manual
- It's hard what to expect for the telecom test.
- Teachers should be more clear on how one course correlates with another course, for example Telecom with Controls or Systems and Controls.

  For example Systems and Signals was also learning a lot of math, but not actually knowing where this math is applied in the practical use.
- The time between tests was too little, we jumped from test to test. FOr me it was too much
- as already mentioned the lab sessions took way too much time in total

  Some of the exams included too much studyload
- better division of the workload
- change the timetable, not monday test+labsession
- the Bond graph was explain a little bit not enough and the supply material for modelling part is not enough.
- the module is a bit dull, especially because of the project, we're used to having a cool project to put our hands on, and in a module that's already a bit more tough than the rest it's nice to have a project that's more free and creative. Although i say this, i found the project to be very good for developping skills in academic reading and writing. It just didn't really fit the module