

EJ2201-HT19 Electrical Machines and Drives - course evaluation

Course evaluation for the course EJ2201 "Electrical machines and drives", given during autumn 2019.

Background knowledge *

I possessed the required background knowledge to follow the course.

	1	2	3	4	5	
I completely disagree	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	I fully agree

Additional comments on background knowledge

Long answer text

Course book content *

What is your opinion on the course book content?

	1	2	3	4	5	
Very poor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Excellent

Additional comments on the course book content

Long answer text

Course book usability *

How useful was the course book to achieve the intended learning outcomes and pass the examination?

	1	2	3	4	5	
Very little	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much

Additional comments on the book usability

Long answer text

Lecture quality *



Additional comments on the lectures quality

Long answer text
.....

Examination structure *

Do you find the examination structure (two short tests, the final exam, the laboratories, the project) suitable for your semester workload?

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much indeed

Additional comments on the examination structure

Long answer text
.....

Examination content *

Does the examination content reflect the course content?

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much indeed

Additional comments on the examination content

Long answer text
.....

Course workload *

This course corresponds to 6 ETCS, which are equivalent of a workload of 160 hours. How much was your workload, approximately?

	1	2	3	4	5	
Much less than the equivalent workload	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Much more than the equivalent workload

Additional comments regarding the course workload

Long answer text
.....

Course quality *



Additional quality regarding the course quality

Long answer text

Expectations *

Did the course fulfill your expectations?

	1	2	3	4	5	
Not at all	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very much indeed

Additional comments on the expectations

Long answer text

What was best?

Long answer text

What was worst?

Long answer text

Do you have suggestions for improvements?

Long answer text

Final comments on the course

Long answer text



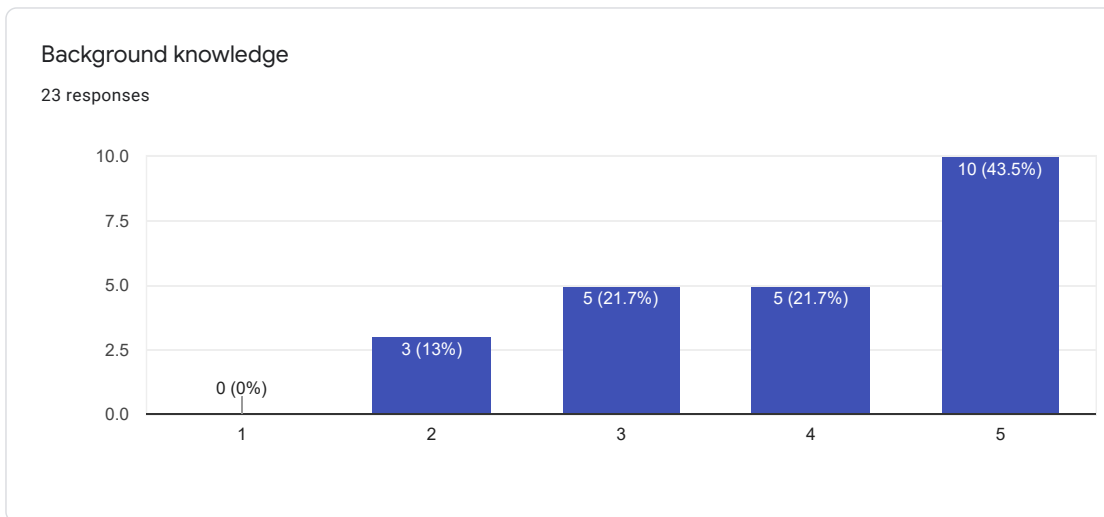
23 responses + ⋮

Not accepting responses

Message for respondents

This form is no longer accepting responses

Summary
Question
Individual



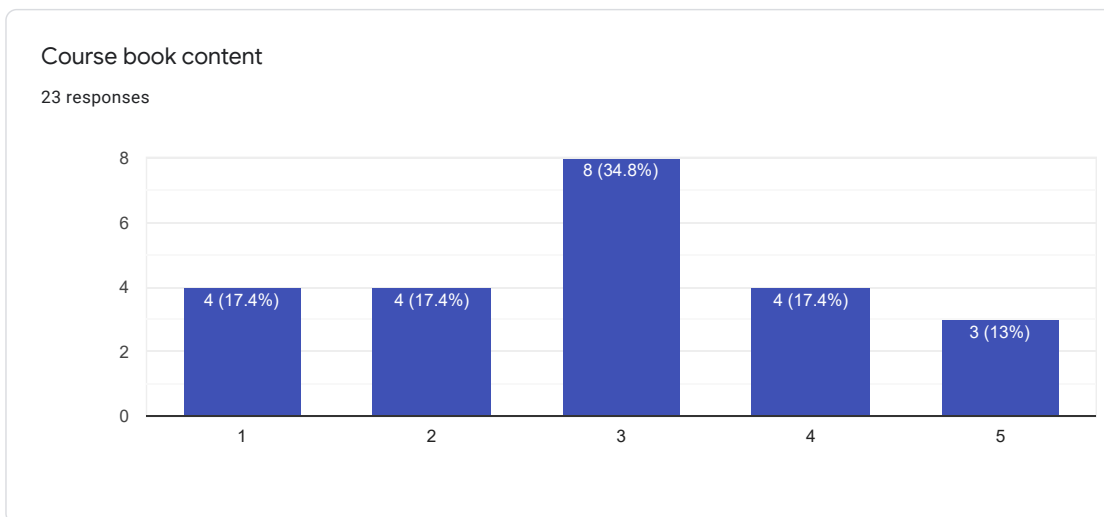
Additional comments on background knowledge

3 responses

There was not explained enough base information about the subject for those who didn't have the required background.

I had the background knowledge coming in, but it was still a sudden start. More my fault I suppose...

The background knowledge to have was not only the one you said at the engineering



Additional comments on the course book content

10 responses

Questions Responses 23

I thought it was easier to follow the lecture slides and I learnt more by doing that, I think.

Did not read it often due to good slides

I did not need the course book (or suggested books that were recommended to read) since the slides contained all things that we needed for the tests and projects.

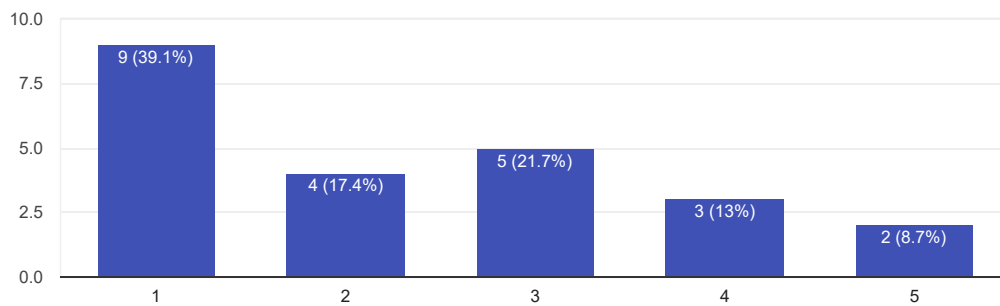
The book didn't really cover what was said in class

I really appreciate learning with the different lecture materials with are well presented with a very interesting content.

The book is useless, very difficult to understand

Course book usability

23 responses



Additional comments on the book usability

5 responses

I really found it difficult to relate the book to the course and consequently didn't use it often. It was a nice read when I did use it.

I have not used it concretely

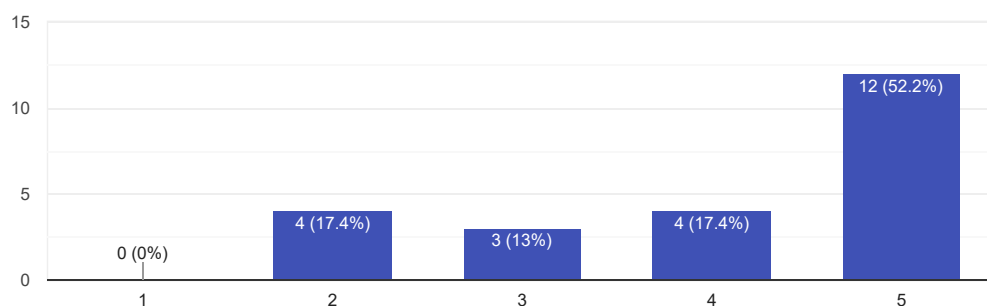
There are very less similarity between the slides and the book. So if we had something from the book then it would be good. Because we could get back to the book when we don't understand the slide or don't remember the lecture.

I did not use it since the slides were enough.

The lectures materials helped me a lot to achieve the intended learning.

Lectures quality

23 responses



I think that lectures involving the working on material together worked well, but often the oral lectures were difficult to follow. The Matlab lectures could be improved in a way so that students could follow along properly (might have been more of a technological problem there).

The lectures were generally very good.

I would usually prefer the blackboard but I found the lectures good all the same

I think the lectures was good with both hands on and the regular oral lectures.

I was not able to attend lectures and therefore cannot give an adequate answer for this

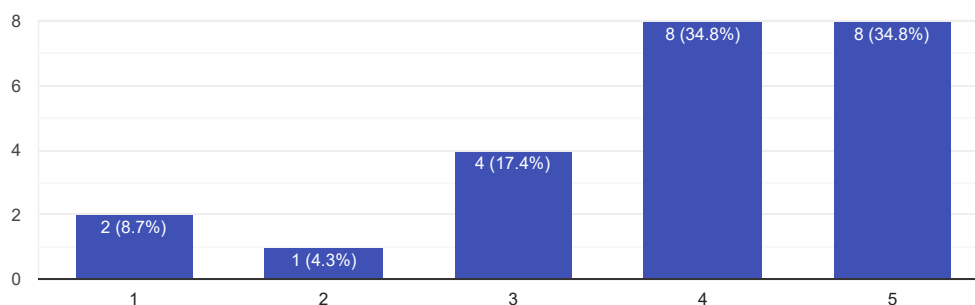
Luca is an awesome professor, thumbs up!

Luca was excellent at giving lectures. He was always able to ask questions and even stayed after the lectures to answer additional questions and thoughts that we had.

The topics were treated too fast without doing exercises in class

Examination structure

23 responses



Additional comments on the examination structure

10 responses

Format is pretty good, but examination time could be longer. Students are very different, everyone has different pace. It doesn't cost anything to teacher, but for student it may be critical.

There is no enough time in 2 hours to finish it.

It actually works out well I believe

There is too little time for the tests. Why not make it 3 hours for each short test?

The examination structure is extremely convenient and helps the students a lot, still without having to make the examinations themselves easy

The questions are very difficult for me, at least. I think passing in general would be good instead of passing everything question.

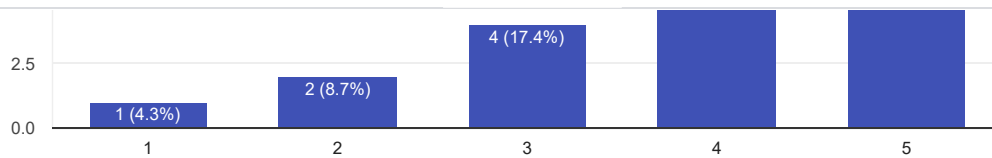
I think Luca solved alot of problems that ocured earlier years!

Especially the lab is good to get some hands on experience

Examination content

23 responses

Questions Responses 23



Additional comments on the examination content

11 responses

Examination is practical analysis, while lectures very theoretical. Introducing some practice of problems in each lecture would help significantly. Staring to derivation of models is useless if we don't follow it together. Students who are interested will read that material anyway later. In my opinion, lectures should be more practical and follow top down approach.

Questions were not related to the independent excercises.

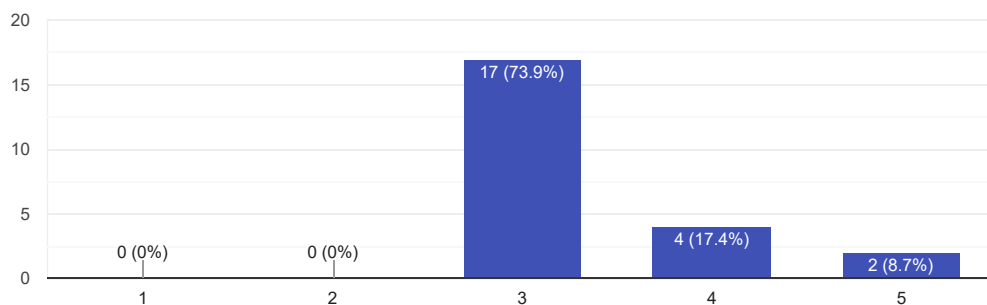
I think so... I feel as if what is put on the exams has been reviewed, but then I feel like I am lost. Might be some lacking on my part. When doing the independent exercises I feel like I understand by the end, but I'm not sure if that really translates into the exam.

Felt that there is shortage of time during the examination.

All is fine except the two short exams. To solve all of the problems in 2 hours is almost impossible. One of the reasons is because the students are not exposed to many different types of problems. Therefore, more time is needed to first analyze the problems and see which kind of approaches we should use. The standard (problem to duration) of the exam here I think should be redefined.

Course workload

23 responses



Additional comments regarding the course workload

5 responses

Most of that time was wasted for unrelevant things, it wasn't very clear where to focus. Note here, that time spent is very disproportionate to result. Bigger part of evaluation could be from practical assignments or labs.

160 hours? I think I did about that.

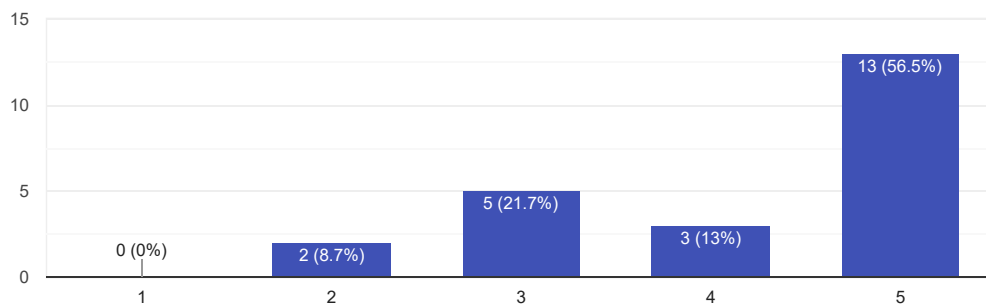
It was approximately 160 hours I would say.

I did not need to spend so much time with the course. I always went through the slides again and wrote all important formulas on a separate document (as repetition), redid the exercises one time and worked on the project with my colleagues. The amount of time I have put in too this course is much less than 160 hours I think.

Questions Responses 23

Course quality

23 responses



Additional quality regarding the course quality

6 responses

Teacher is very good engineer, but still young teacher.

This subject is almost focus in reaserch, so it is not very useful to those we are not thinking on doing a phd

At times yes. At times no.

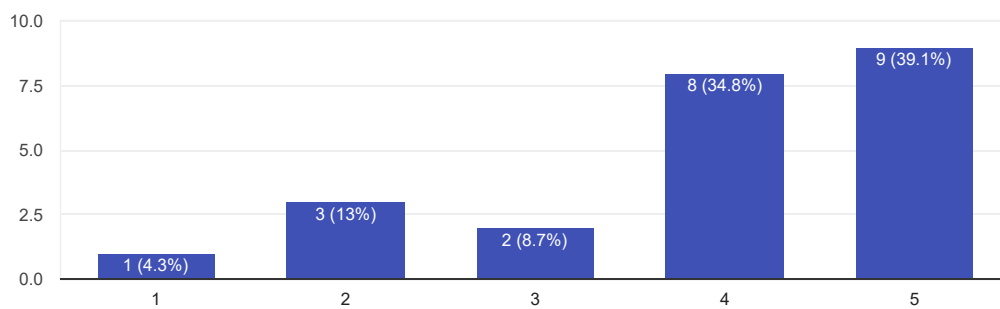
It is a good course that where you can learn the basics behind electrical machines and drives.

Very good course. Luca has made it really interesting and relevant for this time.

This permit me to have a deep understanding of electrical machines and drives.

Expectations

23 responses



Additional comments on the expectations

6 responses

Not much content on drives, even though it is in the course title.

Yes.

It was a really good experience, no better way to learn machines.

I wanted to learn a lot about motors, which I did. I am happy for it!

I am very satisfied.

What was best?

16 responses

Laboratory experience

The teachers explanations are good.

Course examples

Introduction of the knowledge which is not in the reference book but advanced or interesting, like multi-phase system.

Reference frames for the n phase systems

Very structured and well-prepared (specifically the lectures and the courses in general)

The explanation of asynchronous machines was very clear.

Independent exercises, especially from lecture 10-17 are very good and I enjoyed focusing on it. Even I didn't notice when I had full concentration. But the exercises on Lecture 1-9 are really difficult, even I don't understand.

What was worst?

14 responses

Lack of homework assignment, quizzes before lectures, additional exercise material.

How the subject focuses on research. There isn't enough material to pass the exam, one exercise per unit is very little. It was also difficult to remember all mentioned in class as there were not many explanations in the slides and a book to follow.

Difficult to follow lectures

Not much exercises and references

A lot of time was put towards synchronous machines, but I still felt that it was the part of the course that I understood the least of. Also the lack of old exams and other materials to practice with.

The exam. The content didn't match completely what was said in class and it was too difficult for people with low background. Also it is very difficult to finish the test in the hours given

The course is a bit difficult and even exam questions too :(

Do you have suggestions for improvements?

14 responses

Course structure has to be more involving and practical.

More practical exercises or material.

More direct feedback on independent exercises

A little bit more exercise! That can help us understand the knowledge and get a better preparation for the exam.

I hope you finish writing your book earlier. Looking forward to it. Maybe write a compendium first for the course.

More time on the tests. Focus more on synchronous machines, or limit the content about them.

Final comments on the course

8 responses

We see that teacher tries to do it right, puts a lot of effort in those slides. However, as Walter Lewin once said, students don't learn anything from that.

Thank you!

The project work was a bit strange. Since we were new to the field, it was difficult to find information and correctly analyze the application. A consistent part of our effort was spent looking for information on the internet rather than focusing on electrical machines.

It was a good course. Good job Luca :)

Excellent course I would take it again but I would highly recommend more exercise

A really good and interesting course

Thank you Luca for a excellent course. It has been my favorite by far of all my master courses. Also huge thanks to the assistants for helping out during the lab, I learned a lot there too.

Timestamp	Background knowledge	Additional comments on background knowledge	Course book content	Additional comments on the course book content	Course book usability	Additional comments on the book usability	Lectures quality	Additional comments on the lectures quality	Examination structure	Additional comments on the examination structure	Examination content	Additional comments on the examination content	Course workload	Additional comments regarding the course workload	Course quality	Additional quality regarding the course quality	Examinators	Additional comments on the examinations	What was best?	What was worst?	Do you have suggestions for improvement?	Final comments on the course			
15-10-2019 18:49:51	5		3		2		3	I was not able to attend lectures and therefore cannot give an adequate answer for this	4		5		3		5		5		I like the idea of dividing the subjects into 6 different topics, and also being able to pass the course from the short list		2 hours was far too little time to solve 10 tasks in the short list. I had like the inverse factor was not always my knowledge, but sometimes that I did not have time to finish all the questions.				
15-10-2019 18:53:09	5		4	Did not read it often due to good slides	4		5	Lucia is an awesome professor, thumbs up!	5	Especially the lab is good to get some hands on experience	4		3		5		5		Lucia had always time to answer questions of the students in a way that the students can understand		The course is over now (
15-10-2019 17:29:09	5		3		3		3	Formed to pretty good, but examination time could be longer. Students are very different, everyone has different pace. I should not expect my teacher, but for student it may be critical.	3	Formed to pretty good, but examination time could be longer. Students are very different, everyone has different pace. I should not expect my teacher, but for student it may be critical.	3	Most of that time was needed for unrelated things, it wasn't very clear what to focus. There were some things that were not very appropriate in my opinion. The part of evaluation could be from practical assignments or lab.	4		3	Teacher is very good engineer, but still young teacher.	4		4	Laboratory experience	Course workload has to be more interesting and practical.	Lab of homework assignment, quizzes before lectures, additional exercises material.	We see that teacher tries to do a right job as a staff effort in those slides. However, as Professor Lucia once said, students don't seem anything from that.		
15-10-2019 17:44:14	4		1	The book is useless, very difficult to understand	1		2	It should be more practical and less research approach	5		1	We don't have any reference to know beforehand how to go in the type of exam	5		3		1		The project	Exams are a nightmare	Did it more practical. Follow a specific book with exercises that we can practice before the exam.				
15-10-2019 18:00:28	4	I had the background knowledge coming in, but it was still a sudden start, there were few I suggest.	3	Content was relevant I suppose, but not exactly matched to what was taught	3	I really found it difficult to relate the book to the course and consequently didn't use it often. It was a nice read when I did use it.	2	I think that lectures involving the working on related together worked well, but often the oral lectures were difficult to follow. The Matlab lectures could be improved in a way so that students could follow along properly (might have been more of a technological problem than).	4	It actually works out well I believe	4	I think so... but as I said on what on the exam has been reviewed, but then I had that I was not clear on some things on my part. When doing the independent exercises I had that I understood by the end, but I'm not sure if that really translates into the exam.	3	150 hours? I think I did about that.	3	At times yes. At times no.	3		Course examples	Difficult to follow lectures	More direct feedback on independent exercises	Thank you!			
15-10-2019 20:45:25	5		5		2		5		5		5		5		5		5		Reference frames for the n phase systems		Concretely I work as an Embedded Software that I am more oriented to Software Engineering, but I really appreciate being able to learn about the project work as a bit of a challenge.				
15-10-2019 21:19:35	5		5	I really appreciate learning with the different lecture materials with one well presented with a very interesting content.	5	The lecture materials helped me a bit to attend the intended learning	5	I really appreciate attending the oral lectures because it is always interesting how the teacher gives the course.	5	Yes, it is a very suitable and I with any other course could do the same.	5	Yes, the examination content is very suitable with the course content.	3	A worked a little less because I have some good background knowledge.	5	This permit me to have a clear understanding of electrical machines and drives.	5	I am very satisfied.	How the lecture materials (course book) are made and how the teacher explains the course (oral lectures).	Matlab simulation showing various courses.	I think the last module where we used Matlab simulation could be improved or deleted from the content.	Concretely I work as an Embedded Software, but I really appreciate being able to learn about the project work as a bit of a challenge.			
15-10-2019 21:57:02	3		1	In General, the book is good but instead of covering working principles, the book is designed for control systems. Even the lectures are based on control systems.	1	There are very few similarity between the slides and the book. Did not read anything from the book then it would be good. Sometimes we could talk to the book when we don't understand the slides or don't remember the content.	4	The questions are very difficult for me, at least I don't pass in general would be good instead of asking everything by lecture.	4	But when I think about tests, I couldn't match that much the course content and the exam questions.	3		3		3		3	3	Independent exercises, especially from lecture 10-17 are very good and I enjoyed working on it. Even I don't know when I had full concentration. But the exercises on Lecture 13 are really difficult when I don't understand.	The course is a bit difficult and even exam questions too. I can do it. But when I can't then I get demotivated.	Having a bit easy topic or easy questions would be helpful to get motivated. It would help me to have to stay motivated and that I can do it. But when I can't then I get demotivated.	The project work was a bit strange. Since we were new to the field, it was difficult to find information and I consider part of our effort was spent looking for information on the internet rather than focusing on electrical machines.			
15-10-2019 23:23:16	5		3	I have not used it concretely	3	I have not used it concretely	4	I would usually prefer the blackboard but I found the lectures good at the exams	5	The examination structure is extremely convenient and helps the students a bit, still without having to make the examinations themselves easy	5		3		4		4								
15-10-2019 1:50:54	5		5		5		5		5		5		5		5		5		It was a really good experience, no better way to learn machines.	The best part about the course is that Professor Lucia taught with complete passion, and was successfully able to pass it on to his students.	Nothing, everything was good	None	A really good and interesting course		
15-10-2019 0:04:44	4		3		2		5		4		4		4		5		5								
15-10-2019 19:10:31	2		4		3		4		3		3		3		5		4								
15-10-2019 13:31:27	3	The background knowledge to have was not only the one you said at the beginning	1	The book didn't really cover what was said in class	1		2	The topics were treated too fast without doing exercises in class	1		1		2		2		2					More exercises and material. Too many things are unclear.			
15-10-2019 13:33:34	2		1		1		2		1		3		3		2		2					The exam, the content didn't match completely what was said in class and it was too difficult for people with low background. Also it is very difficult to finish the lab in 2 hours given.			
15-10-2019 13:18:32	2	There was not explained enough basic information about the subject for those who didn't have the required background.	2		1		3		4	There is no enough time to 2 hours for lab 4.	2	Questions were not related to the independent exercises.	4		3	This subject is almost too much material, but it is not very useful to those who are not working on doing a PhD.	2		The teachers explanations are good.		More practical exercises or material.				
15-10-2019 13:25:14	3		2		1		5		4	All in the except the two short exams. To solve all of the problems in 2 hours is almost impossible. One of the reasons is because the students are not exposed to many different types of problems. Therefore, more time is needed to first analyze the problems and see which kind of approaches we should use. The standard (problem to discuss) of the exam leaves I think should be redefined.	4		4		4		4		4		4	Very structured and well-prepared (specifically the lectures and the courses in general)	Not much exercises and references	I hope you finish writing your book earlier. Looking forward to it. Maybe with a complementary first to the course.	
15-10-2019 14:37:31	3		4		3		5		3		5		3		5		4		Introduction of the knowledge which is not in the reference book but advanced or interesting, the multi-phase system.		A little bit more exercises! That can help us understand the knowledge and get a better preparation for the exam.				
15-10-2019 10:04:58	4	I did not read the course book (or suggested books that were recommended to read) since the slides contained all things that we needed for the tests and projects.	1	I did not use it since the slides were enough.	1		3	Lucia was excellent at giving lectures. He was always able to ask questions and even stayed after the lectures to answer additional questions and thoughts that we had.	3	Everything in the slides and the different sections of the course (DC-machines, AC-machines, Reference Frames etc.) was covered. The test seemed to be balanced throughout all of the different topics.	5		3		5	I did not need to spend so much time with the course. I always went through the slides again and wrote all important formulas on an exercise document (as a reference) with the exercises one time and worked on the project with my colleagues. The amount of time I have put in for the course is much less than 150 hours I think.	3		Very good course. Lucia has made it really interesting and relevant for the time.	I would like to learn a bit about induction, which I did a bit happy for it.	To learn about the basics of induction, both DC and AC.	Multi-phase reference frames, a bit. More exercises that we can work on during the periods.	Thank you Lucia for a excellent course. It has been my favorite by far of all my master courses. Also huge thanks to the assistants for helping out during the lab. I learned a lot there too.		
15-10-2019 14:29:43	5		4		4		4		5		5		3		4		4								
15-10-2019 15:29:34	3		2		2		4		5		5		3		4		4								
15-10-2019 14:38:01	4		3		1		5		4		4		5		5		4		I really enjoyed the lectures. There was a lot to learn and the instructor made them a bit interesting to follow. Also, the material was very comprehensive with students. The test had to be more everyone is learning from the course.		Excellent course I would take again but I would highly recommend more exercises.				
15-10-2019 15:05:22	5		4	The course book is quite good, but it would be nice if the conventions of the book were used throughout the course instead of using different conventions on the lectures.	4		5	The lectures were generally very good.	3	There is too little time for the lab. Why not make 3 hours for each short lab?	5		4		5		5		Not much content on drives, even though it is in the course title.	The explanation of asynchronous machines was very clear.	More time on the lab. Focus more on synchronous machines, or limit the content about them.				
15-10-2019 13:22:18	5		2	I thought it was easier to follow the lecture slides and I learnt more by using that. I think.	1		5	I think the lectures were good with both hands on and the regular oral lectures.	5	I think Lucia solved a lot of problems that occurred earlier years.	5	Yes, the examination covers the whole course.	3	It was approximately 150 hours I would say.	5		5		It is a good course that where you can learn the basic hand-drawn machines and drives.	Yes.	I liked Lucia's commitment on the lectures. You could tell that he really liked the subject.	I don't know. Maybe have project subject that you can learn the basic hand-drawn machines and drives. I would like to have some prepared papers for all the project subjects.	It was a good course. Good job Lucia!		