2019-20 Mechatronics Track Course Evaluation

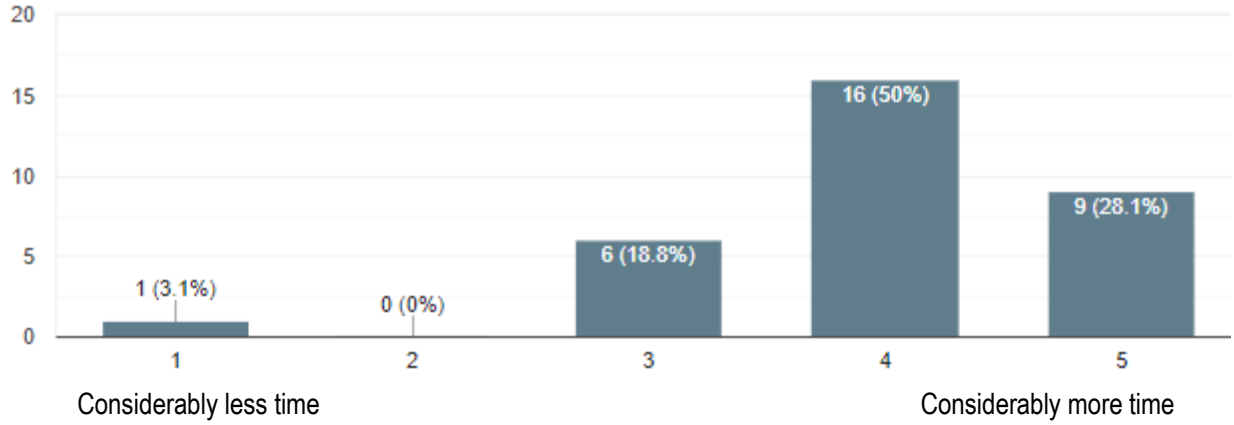
MF2007 Dynamics & Motion Control (HT19)

Please answer the questions below to help us evaluate the course (and its role in the Mechatronics Track).

Section 1: Overall Course Set-up

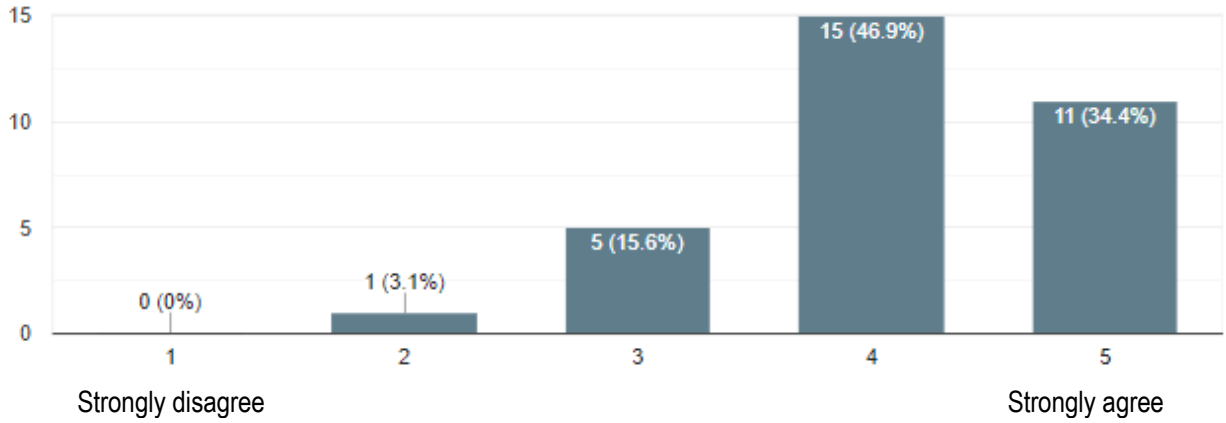
1. Estimate how much time you spent on this course overall, compared to the number of credits given. 1 course credit = about 27 hours of work. 9 credits = 6 weeks full time.

32 responses



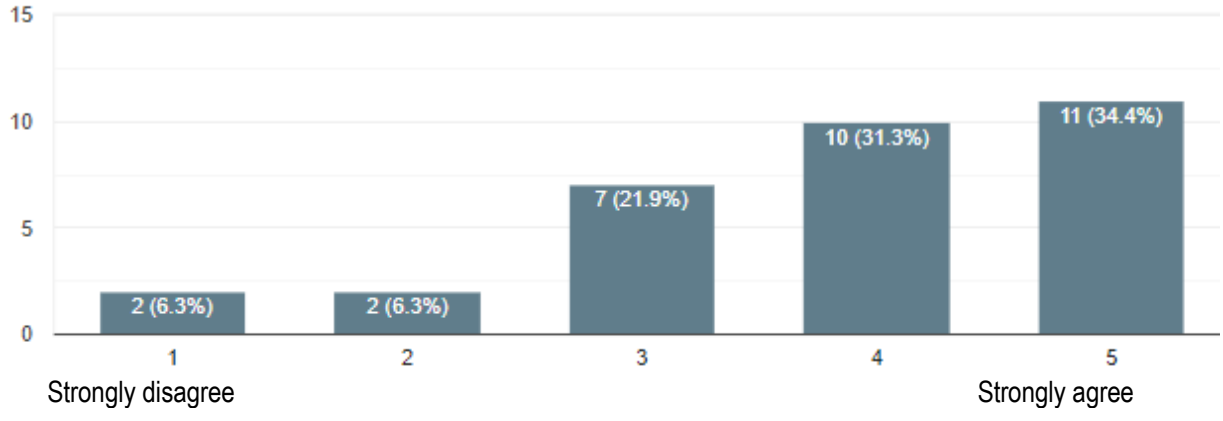
2. The course content corresponded well to the course's stated learning goals.

32 responses



3. The course materials and handouts helped me achieve the course's learning goals.

32 responses



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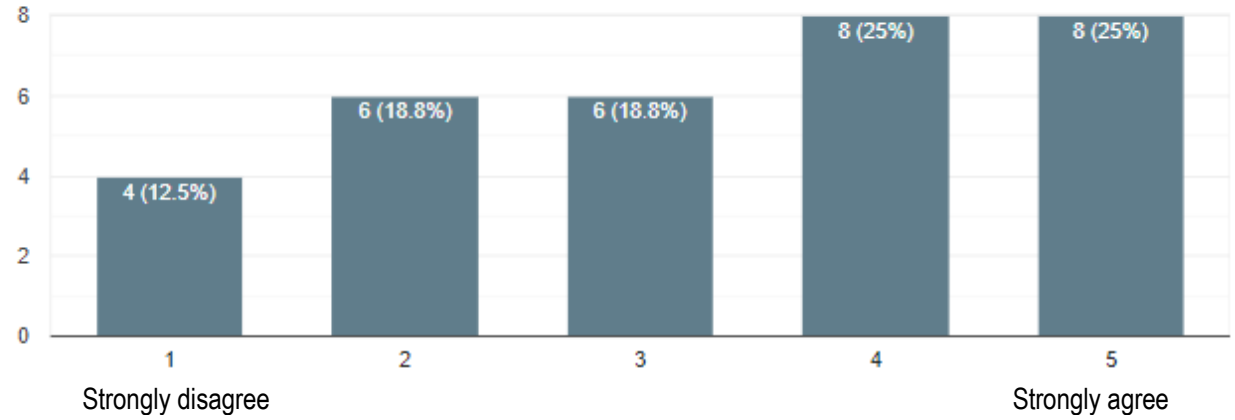
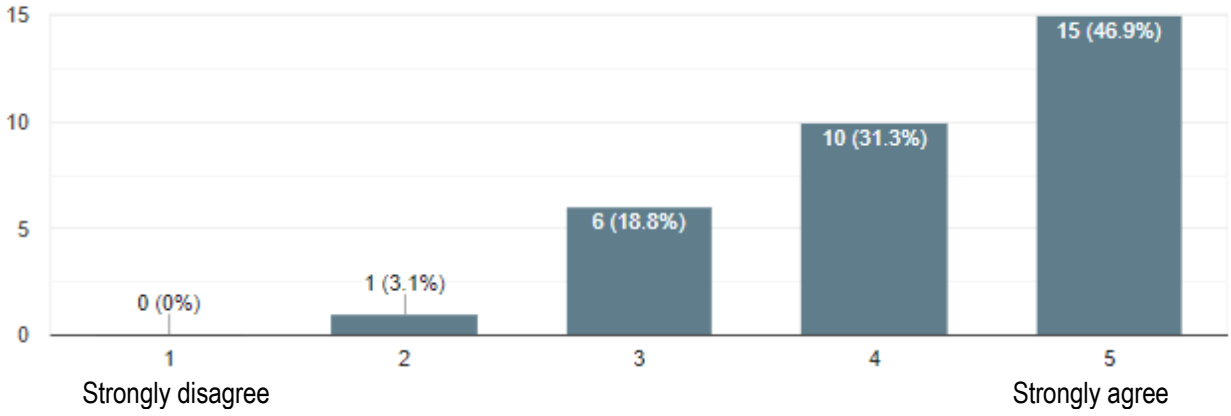
4. The way the course was organized helped me achieve the learning goals.

32 responses



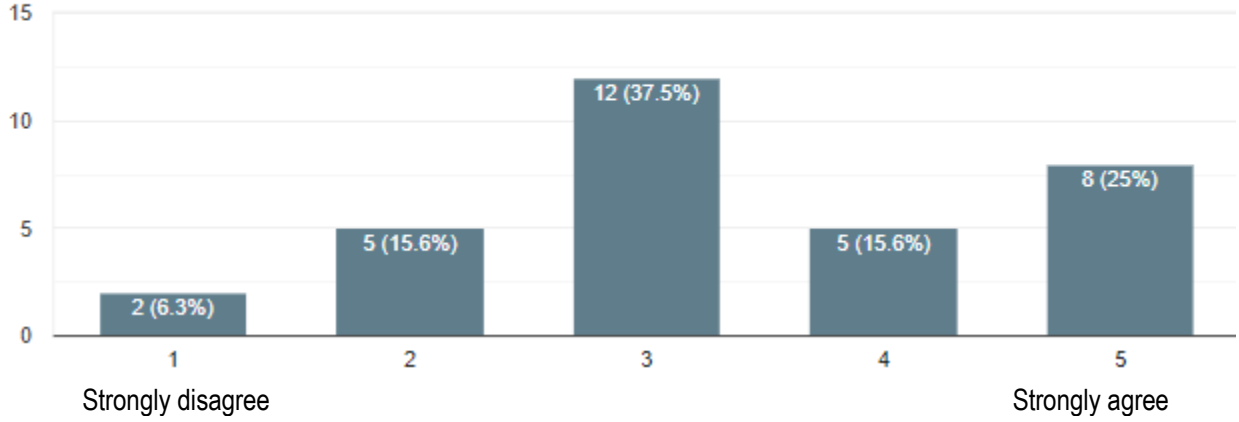
5. The LAB content was relevant to the course and improved my understanding.

32 responses



6. The LAB exercises were in pace with the course material / lectures.

32 responses



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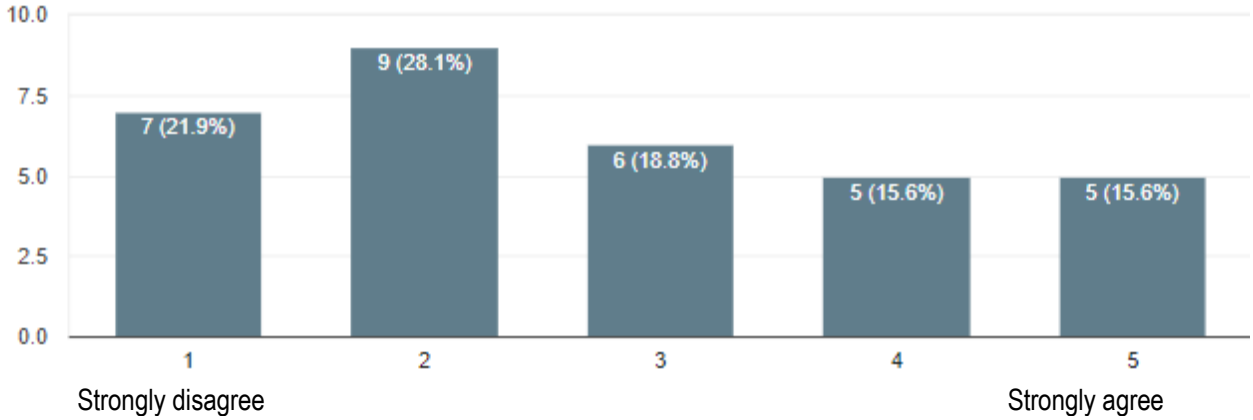
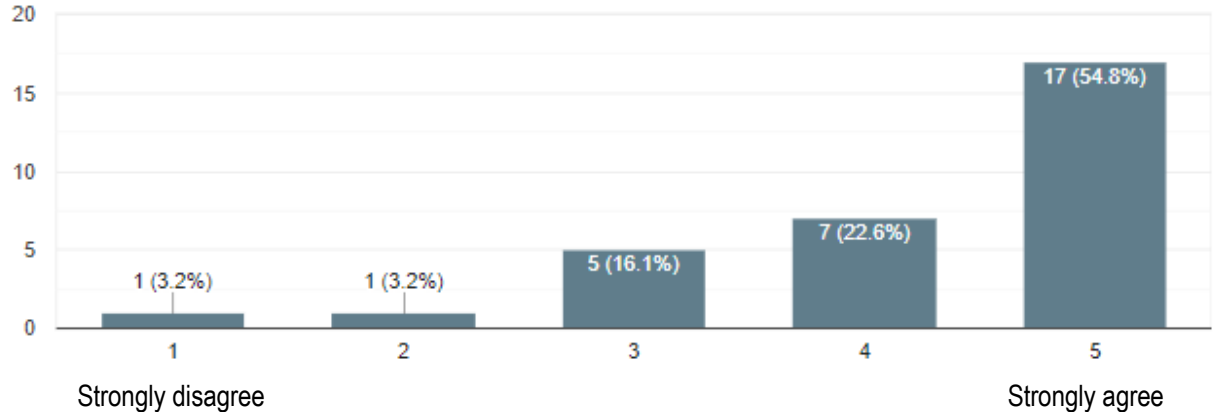
7. The workload in the course was reasonable.

32 responses



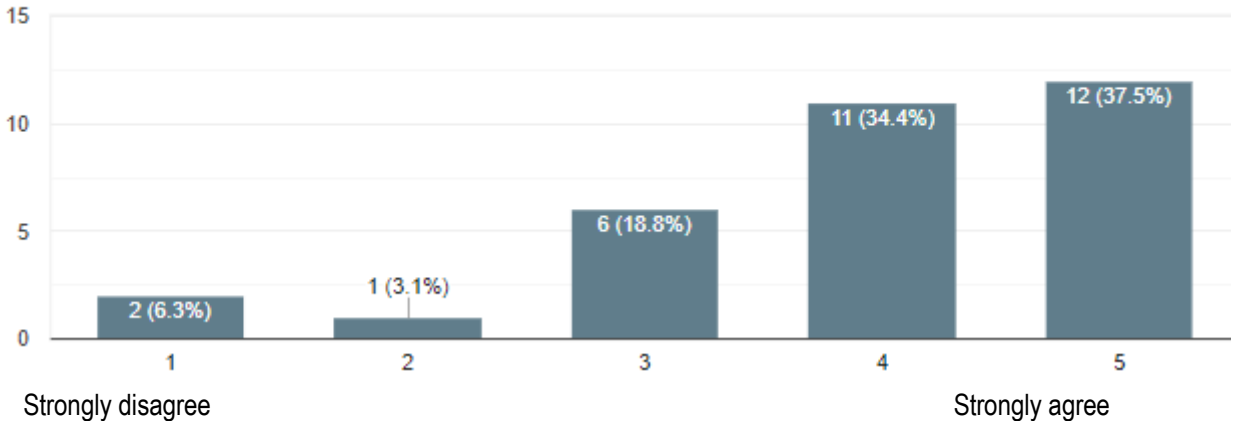
8. The course was intellectually challenging.

31 responses



9. The course has developed my problem-solving skills.

32 responses



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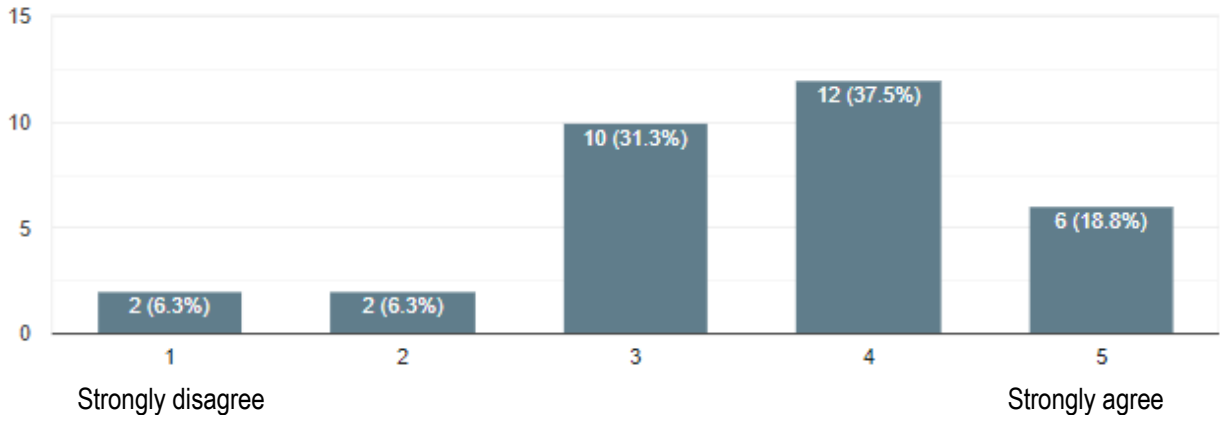
10. The course has sharpened my analytical skills.

32 responses

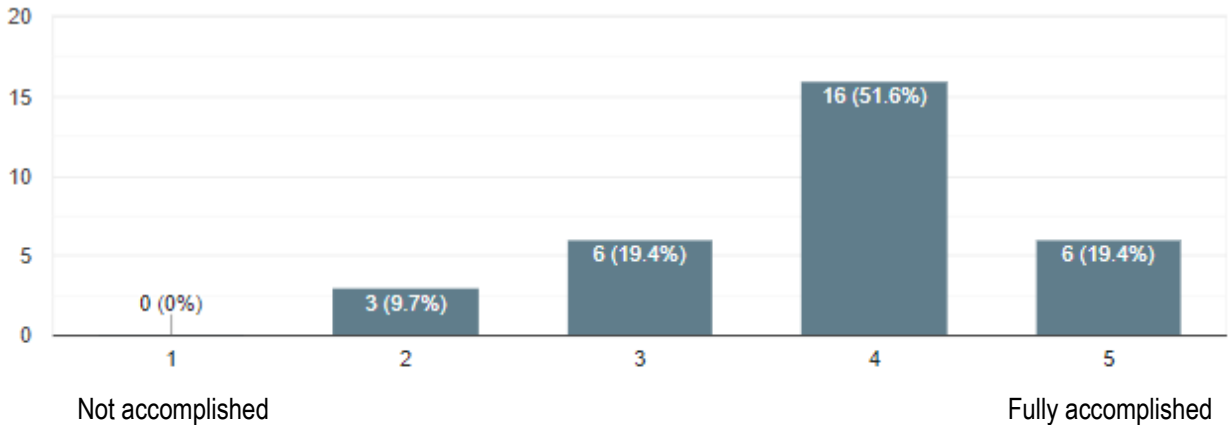


Section 2: Course-specific Learning Objectives

Based on the learning objectives laid out in the Course Plan, these questions ask how well you feel you achieved the learning goals of this course. Next to each objective listed, choose the option that best describes YOUR accomplishment of that objective.

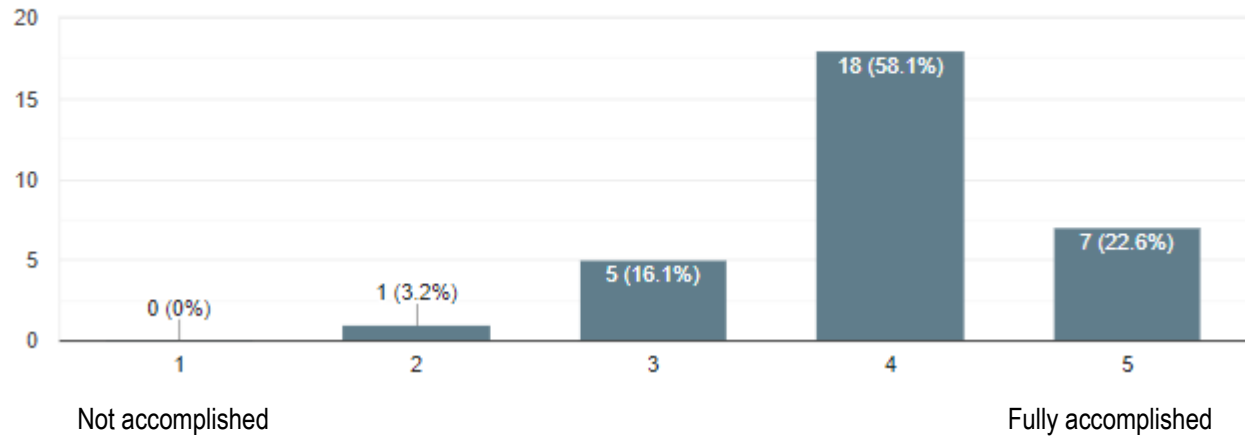
11. Specify overall performance requirements for a motion control system.

31 responses



12. Derive dynamic models of typical mechatronic applications.

31 responses



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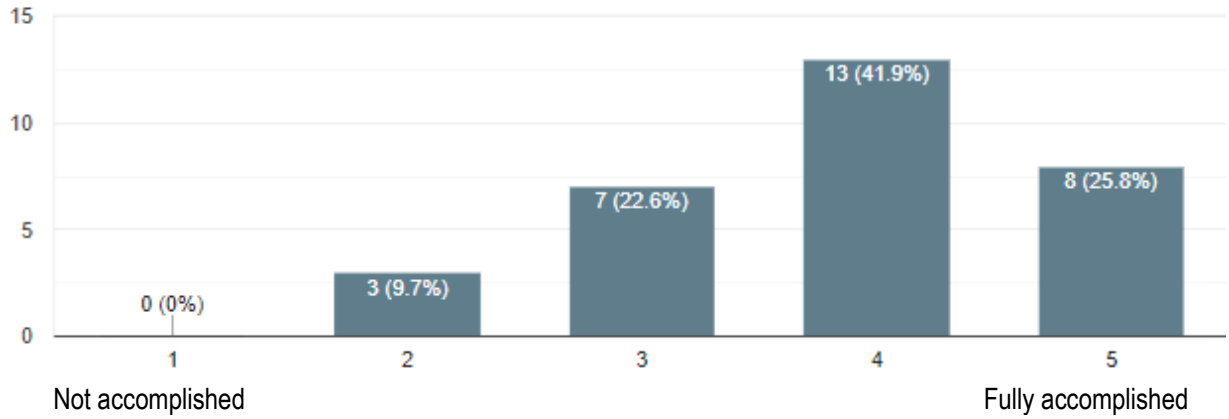
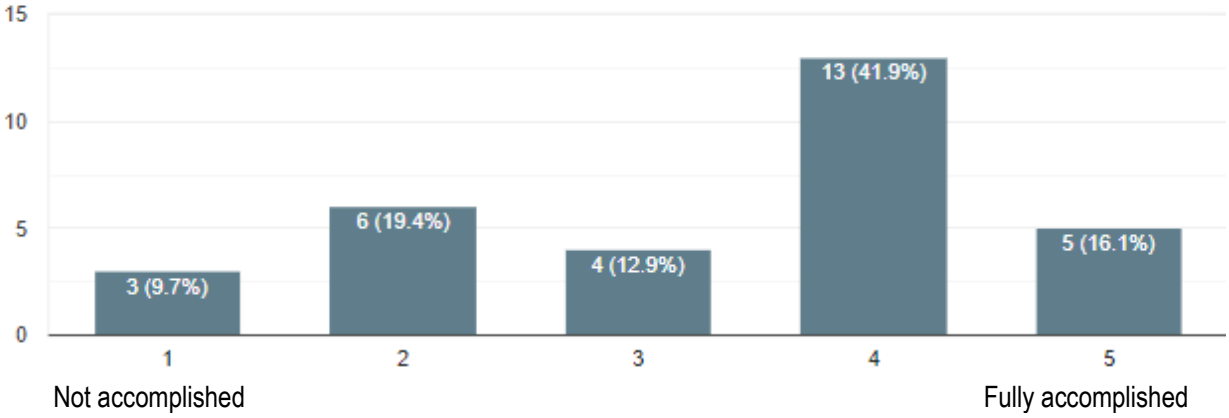
13. Design model based feedback and model following control, i.e. servo control, both in continuous and discrete time.

31 responses



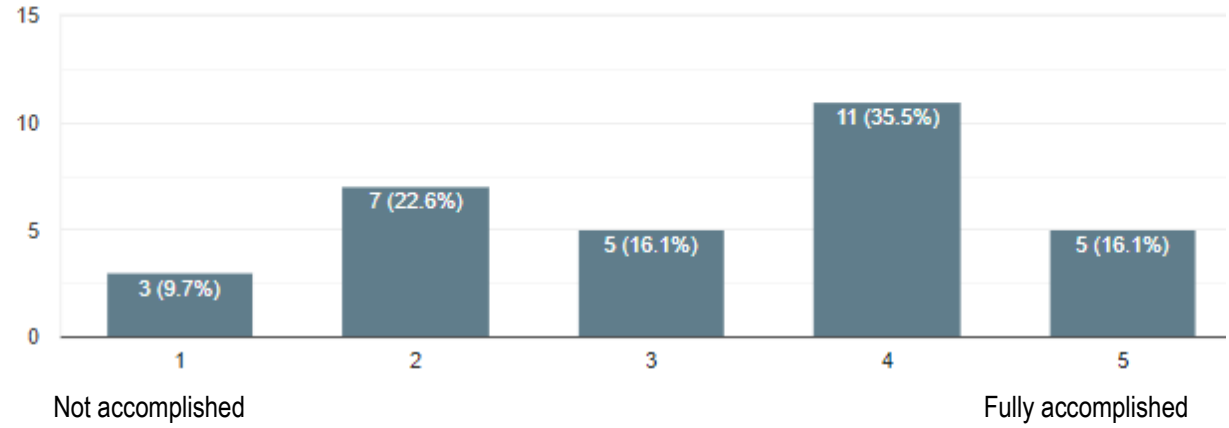
14. Implement and structure the controller software for microprocessor implementation.

31 responses



15. Design and use both digital and analogue filters.

31 responses



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16. What did you appreciate the MOST in this course?

23 responses

Nils

Practice and lecture. Very nicely organised. Loved studying this course.

More deep knowledge about control application

The labs

The course content and the structure as well as the lectures.

Printed powerpoints

Lab

Controller implementation

The review part of the lectures

simulink, deeper knowledge about control

Lecture notes and application of automatic control. That Lei reiterates every lecture.

The excellent notes! Implementation of more advanced control methods.

We got to work hands-on with different problems.

The lecturer repeated previous lecture ==> GOOD!

Good content on Canvas (eg lecture slides) but could be better organised.

Fun exercises! (but too many)

Lecture short review. Great TAs and lecturer

Problem solving, design, simulation, control

The TAs. Workshop sessions are the best for learning.

It talks about relevant topics that are necessary in understanding current and future topics of mechatronics.

I burnt a DC motor

Interesting with the practical workshops. Organised lectures.

17. What did you appreciate the LEAST in this course?

23 responses

Keeping pace with exercises and workshops is quite difficult, alongside another 7.5 credit course.

The exercises and the labs are a bit time consuming.

A lot of the material in the beginning of the course was already covered in Mechatronics Basic course

The overload of work

The workshops take a lot of time and our group needed more help. Lack of resources with only 6 dSpace computers.

Messy workshop and exercise tasks. Too few assistants.

The amount of exercises / workshops

Took way too much time and not enough help was given

Lack of clarity in some subjects - why are we learning x or y and what is it used for - how are those related to the labs?

That Nils had lots to do

THE WORKLOAD!!!

Too many tasks / exercises / homework and not so clear sometimes what the questions in the exercises / workshops wanted. ==> Unclear questions.

The lack of help opportunities during exercises and workshops.

Not enough help hours. Definitely need more TAs!

Overpopulated and understaffed. Need exercise hours when examples of pole-placement are worked.

WAY TOO LITTLE HELP. WAY TOO FEW TAs

Lack of computers with hardware. Needed more time for workshops before last 2 weeks.

The workload is high

We are too many students.

The workload is way too big for the amount of time available, even when you work after scheduled hours. Labs and assignments that need to be presented / need assistance from TAs and lecturers should be able to be finished before the course end. But it's not if you don't have experience from before and if you have other courses running parallel. I have had to drop assignments in other courses in order to finish to keep up with this one and I'm still behind.

Too easy without AC motors

Unclear lab instructions. We have to wait very long to get help during the workshops.

18. What did you appreciate the MOST about the LABS?

19 responses

They start with basic problems, slowly moving onto difficult ones. TAs are helpful.

The application of Simulink

The exercises

Workshop sync with the exercises

present

The implementation

Workshop and exercises

Application of automatic control

Application of theory

Nils

I learnt a lot by working with things from start to finish.

The assistance from the teacher and TA

good / fun

You learn so much about practical usage

Understanding

To have the opportunity to ask questions and having to answer some myself. Great work by the TAs.

The cover interesting and important topics.

Nope

Good to get practical experience.

19. What did you appreciate the LEAST about the LABS?

20 responses

Presentation perspective. There are so many student groups to give presentations and only a few TAs. Could be managed better. Deadline day becomes difficult to manage for everyone in just 3 hours.

The questions were a much more than the TAs. Most of the lab sessions we didn't get any help because the list was huge and the TAs were only 2-3.

Time consuming

Too few assistants

The content of workshops is a bit much. You have to finish exercise 3 to work on the latter part of workshop A.

I would have liked more help for workshops.

The amount of labs /exercises was too much

Lack of help and guidance leads to a lot of guess work rather than doing things properly. If amount of lab work was less this would be ok, but now everyone just gets stressed and wants to be done rather than learn.

That Nils had lots to do

They they take way too much time.

The work overload

Took 1.5 hours to present exercise 2 maybe too big / too much to present

The length of each lab, have to prepare material for ~30 questions

TOO FEW TAs. TOO FEW BOOKED WORKSHOPS

Very long waiting time for help / presentations in workshops / labs

Hard to finish the labs on time

Too few computers and TAs

The amount. It is way too many exercises for just one period. The course should have a higher credits or be run over two periods. As it is now, the credits doesn't at all represent the amount of time you put into it.

Too simple, not challenging at all.

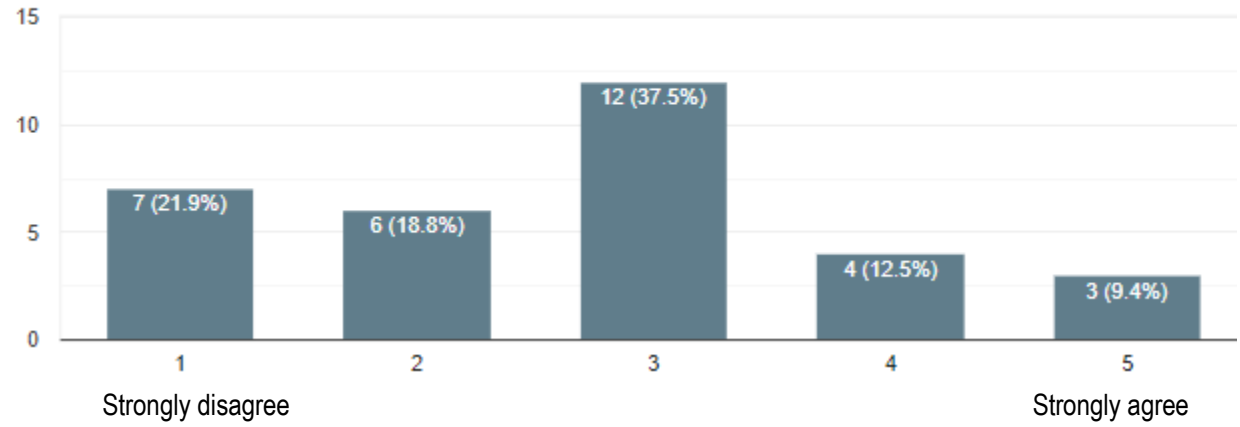
So long wait time to get help / present results. Very busy in the lab. Sometimes hard to find a D-Space PC.

Section 3: Your Thoughts on this Course

Looking back over the course and labs as a whole, please rate your feelings on the following statements.

20 (a) During the course I received a lot of valuable feedback on my progress and achievements

32 responses



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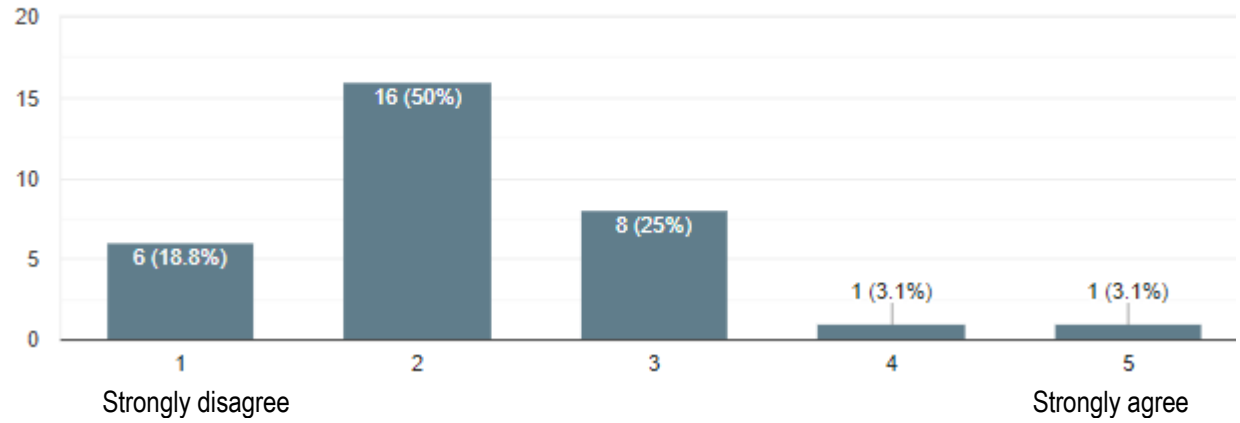
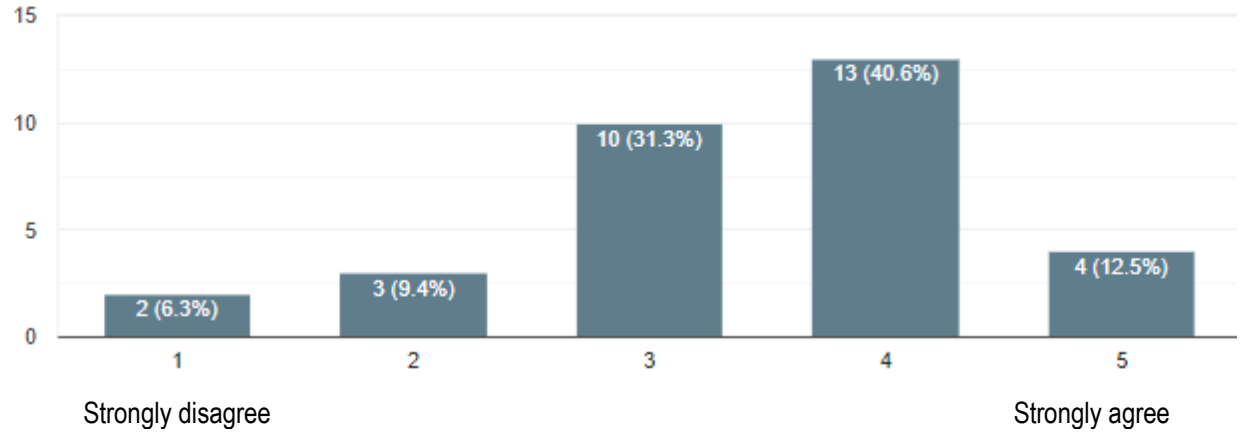
20 (b) To do well in this course, all you really needed was a good memory.

32 responses



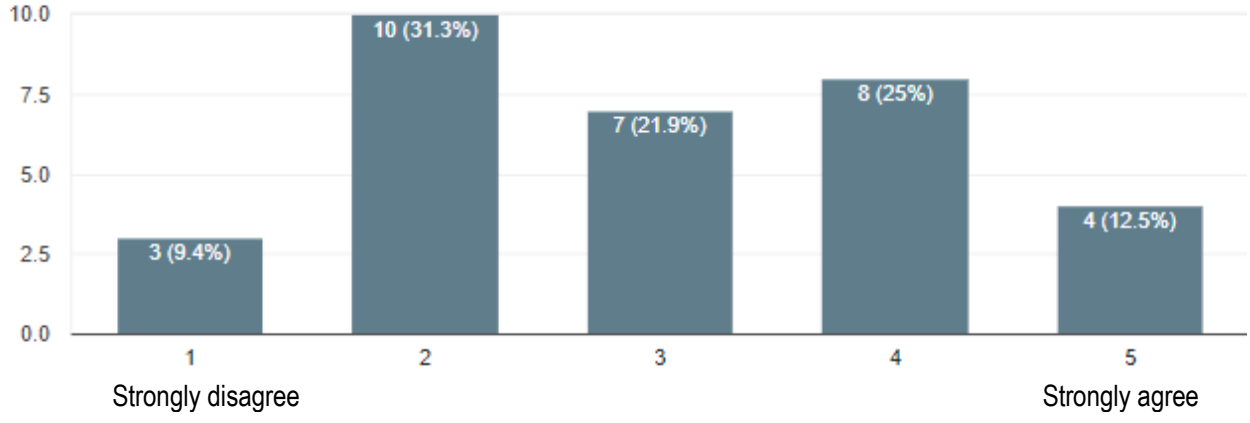
20 (c) The course has made me feel more confident about tackling new and unfamiliar problems.

32 responses



20 (d) It was always clear what was expected of me in this course.

32 responses



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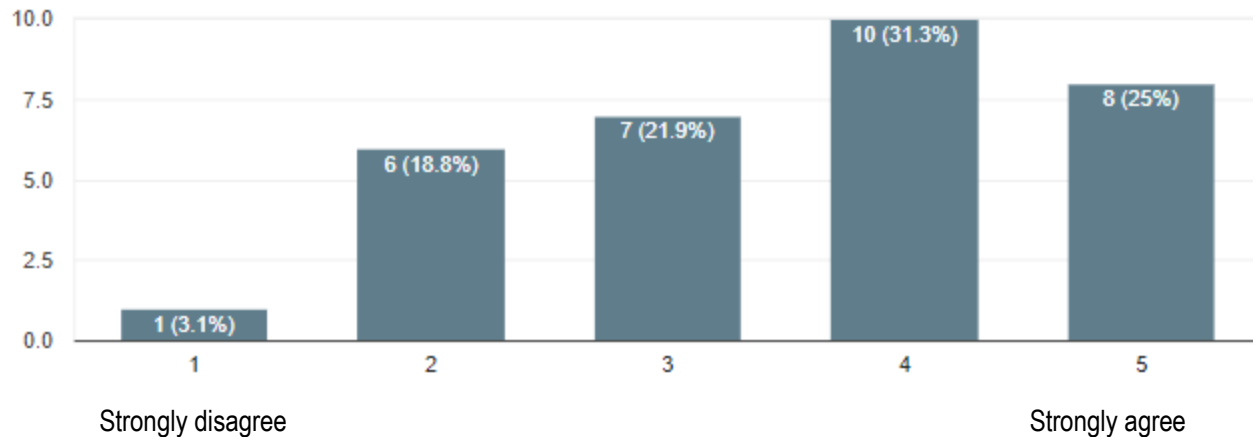
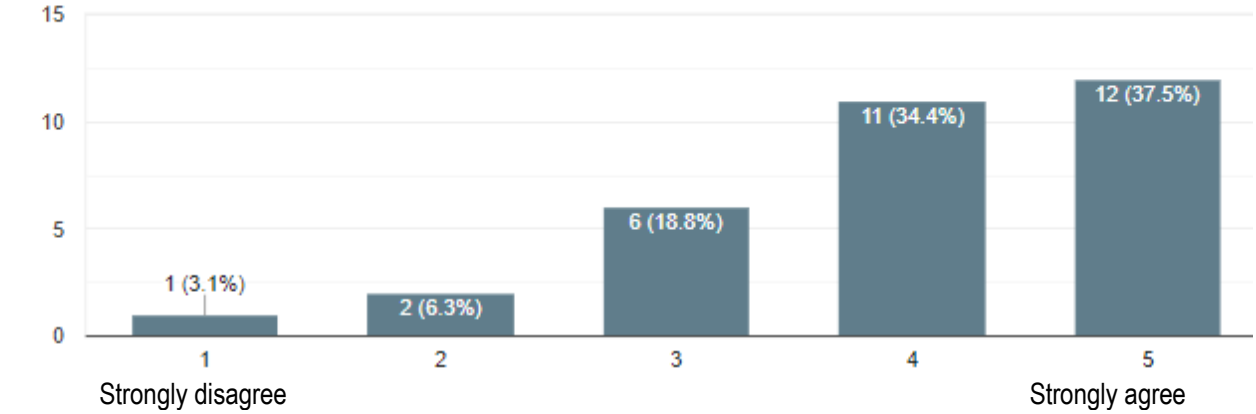
20 (e) The teachers and lab staff made a real effort to understand the problems and difficulties one might be having in this course.

32 responses



20 (f) I feel this course has contributed to my overall education.

32 responses



If you have extra comments for Section 3, please add them on the next page.

3 responses

I am guessing that you get this comment every time you give this course: the workload is way too big for being 9 credits. We have worked all the time we had available from week 1, and we have only completed exercise 1 (and done most of the work on ex.2 and ex.3). We have not even started on the workshops yet, and this is the last week. We are not the only group in this situation. Can you send us a message with an explanation on why you think this is ok? (I am assuming you are aware that your students spend way more than 9 credits worth of time on this course.) It was the same issue with the Robust course, but it seems it is still the same despite feedback like this.

It was really hard to get time for help and presentation on the labs and workshops, makes it difficult to finish the labs.

Evaluating a course just on how many pass is not a proper way of doing it because you don't see how much of our life such as physical health, mental health and other courses suffer from this.