

HOW TO LEARN USING ISC ENVIRONMENT

Spring 2019

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Learning environment : <http://isc.ttu.ee>

Materials : <http://isc.ttu.ee/martin>

About course and learning

- Course uses isc system:

ISC.TTU.EE

- Online e-learning environment
 - Everything will be done there – online
 - Can be accessed everywhere
 - Automatic evaluation (no teacher intervention)
- 100% web- based :
 - Internet is full of materials
 - Work in internet
 - communication in internet
- ***This doses not exclude talking, asking, ..***

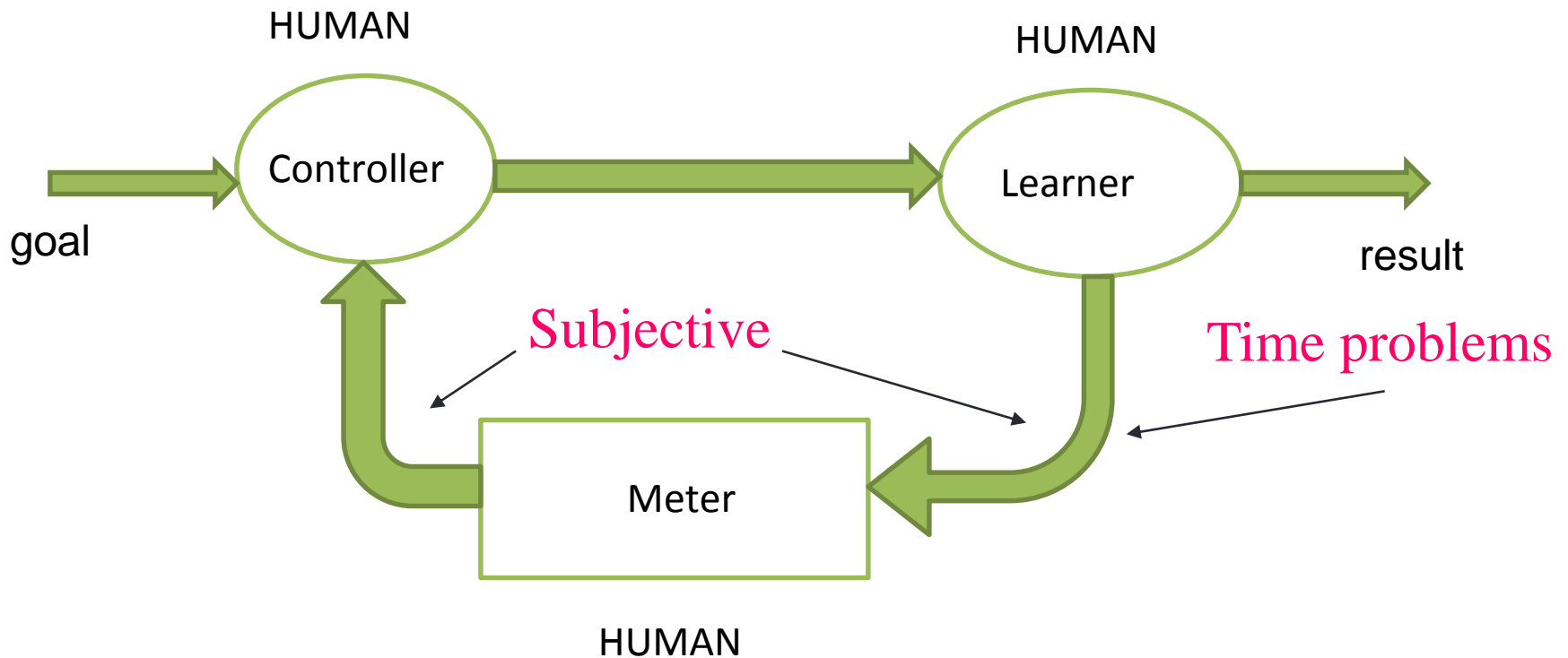
Assessment

- No official final exam:
 - Grade will be earned over the semester
 - Student him/herself decides what grade to take (more later)
- Tasks & lab experiments
 - Task are small exercises that can be done anywhere
 - Lab experiments will need lab kit (can be borrowed or can be used on-site lab)
 - What we measure, that we get (Proverb of automation people).
 - I hear- I forget, I see- i can remember, I do – I understand (Confucius)
 - **The main goal – just to become smarter !**
 - **Subject ends at 23. January 2019 .**

Lectures

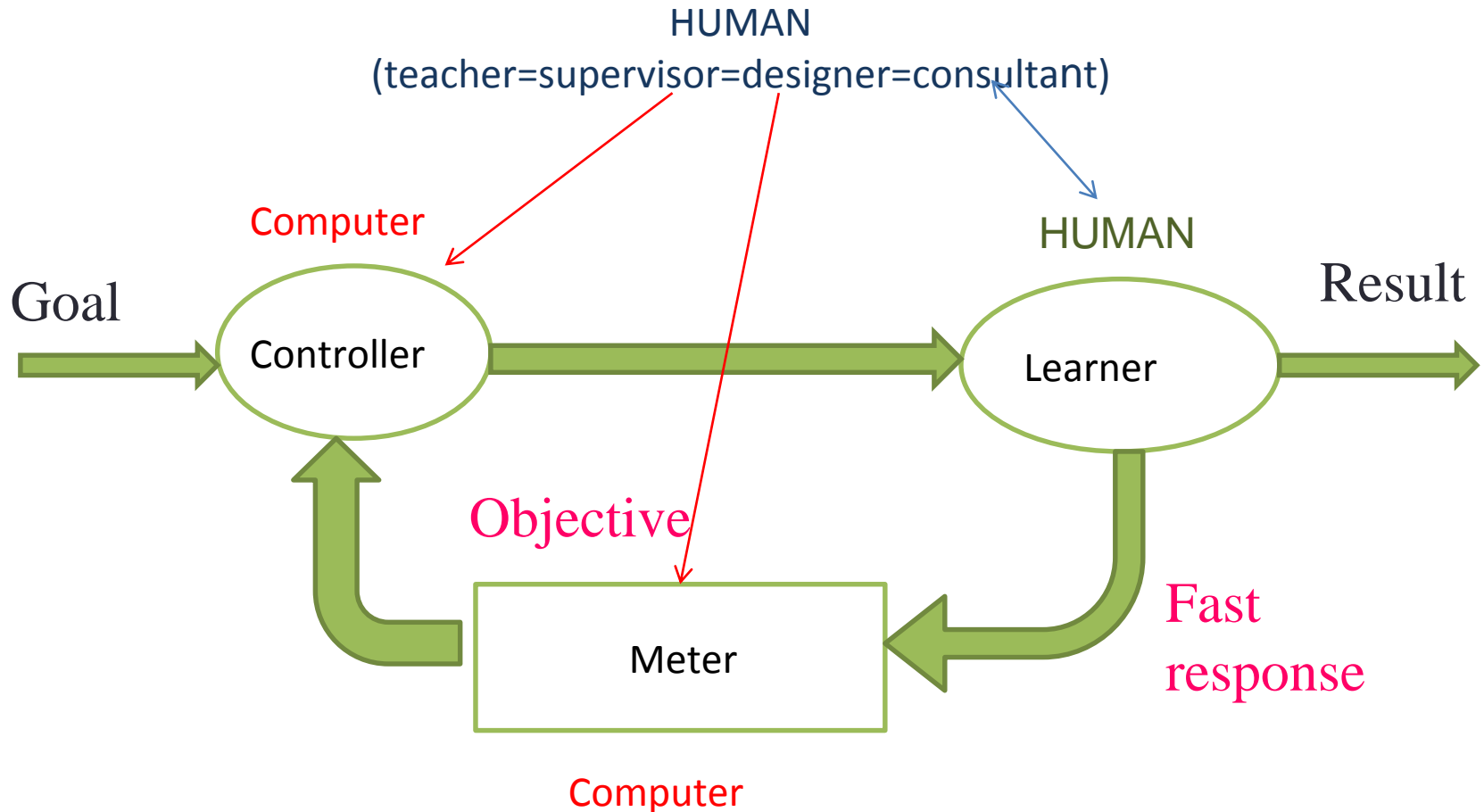
- Only first 4 week
 - „Learn by doing“
 - So, instead sitting in lectures, register to lab and start solving exercises.
 - I do not speak fluent English , as well as you. Much information will be lost !
 - The effectiveness of lecture is quite small.
 - You are different !!! (Skills, background, needs, motivation.)
 - We do'nt know your background !
- If you want to listen very good lecture about electronics
- <http://ocw.mit.edu/courses/electrical-engineering-and-computer-science/6-002-circuits-and-electronics-spring-2007/>

Learning as Closed Loop System



- E-tools only for organization

Learning as Closed Loop System



Learning environment

- <http://isc.ttu.ee>



ISC

Competence-based Learning Environment

[Forgot password?](#) | [Not registered](#)

Announcements

There is open course ISC0100 Cyberelectronics
1.st lecture of Martin Jaanus (estonian) 31.01.2018 (pdf)
Martin Jaanus materials

[Read more](#)

[About](#) | [User Guide](#) | [Course description](#) | [Publications](#)



tiigriülikool

IT Akadeemia

toetab Skype™



If you haven't registered before:

ISC
Competence-based Learning Environment

Forgot password?

Not registered

Announcements

There is open course ISC0100 Cyberelectronics
lecture of Martin Jaanus (estonian) 31.01.2018 (pdf)
Martin Jaanus materials

ISC

Competence-based Learning Environment

Please register yourself in the system. Insert your student code and click 'Continue'

<-Back

If you haven't registered before:

...and you are not in database

Fill those fields carefullyv !!!

ISC

Competence-based Learning Environment

Code **0899006** cannot be found from ISC database.
If the code is correct, please submit your data for verification.

0899006 *
First name *
Last name *
Estonian ID code *
Email *
Send

<-Back

ISC

Competence-based Learning Environment

Code **0899006** cannot be found from ISC database.
If the code is correct, please submit your data for verification.

0899006 *
Test *
Kasutaja *
37706162218 *
martinj@martinjott.ee *
Send

<-Back

If you haven't registered before:

ISC

Competence-based Learning Environment

Data has been saved. You will be contacted when Your data has been verified.

<-Back

- Teacher must confirm you data. And you will get mail like this.

↩ | 📧 Sinu kood on lisatud ISC andmebaasi

Kustuta **Vasta** Vasta kõikidele Edasta Spämm Liiguta ▼ Tähistage kui ▼ Veel ▼

Kellelt: kadri.umbleja@ttu.ee ▼

Kellele: martin38@mail.ee ▼

Tere
Sinu andmed on peju poolt le vaadatud ja kontrollitud vastavust ISiga. Sa saad nd registreerida end ISC steemis.

Kui sul on veel ksimusi vi probleeme, palun prdu ppeju poole.

Kustuta Vasta Vasta kõikidele Edasta Spämm Liiguta ▼ Tähistage kui ▼ Veel ▼

If you haven't registered before:

- If you have teacher response

ISC
Competence-based Learning Environment

Forgot password?

Not registered

Announcements

ISC

Competence-based Learning Environment

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<-Back

There is open course ISC0100 Cyberelectronics
lecture of Martin Jaanus (estonian) 31.01.2018 (pdf)
Martin Jaanus materials

If you haven't registered before:

ISC

Competence-based Learning Environment

Please select your name from the list:

A-G	H-O	P-T	U-Y
Ago	Heinar	Raigo	Uku
Anni	Heivi	Rain	Uku-Rasmus
Antonina	Helmet	Rami	Ülar
Anu	Iivika	Raner	Ülari
Are	Irene	Ready	Uljana
Brita	Iris	Rebekka	Ullabritt
Cariina	Jaana	Ruben	Ülle
Carl Christian	Kristi-Jana	SandeepJaganna	Ülo
Carol	Leila	Sepo	Ulvi
Cleelia	Lemme	Tago	Urho
Eerika	Maritta	Taire	Urmass
Emmanuel Ovie	Maxim	Tauri	Urmo
Ene	Muhammad Qais	Terje	Ursula
Eric	Nikolay	Terttu	Urvika
Eva	Oluwadare Isaac	Test	Uzochukwu Eddi

Continue

If you cannot find your first name from the list, please contact the teaching staff.

The name spellings are taken from university database. In case of errors, please contact the teaching staff.

<-Back

ISC

Competence-based Learning Environment

Please add the additional information:

51107121760 *

martin38@mail.ee *

5122336

Register

<-Back

If you haven't registered before:

- You will get a password ! **Remember it !**
- The password can't be changed.
- If you forget the password, ask us !

ISC

Competence-based Learning Environment

Registration done!

From now on, you can log into system using following passwords:

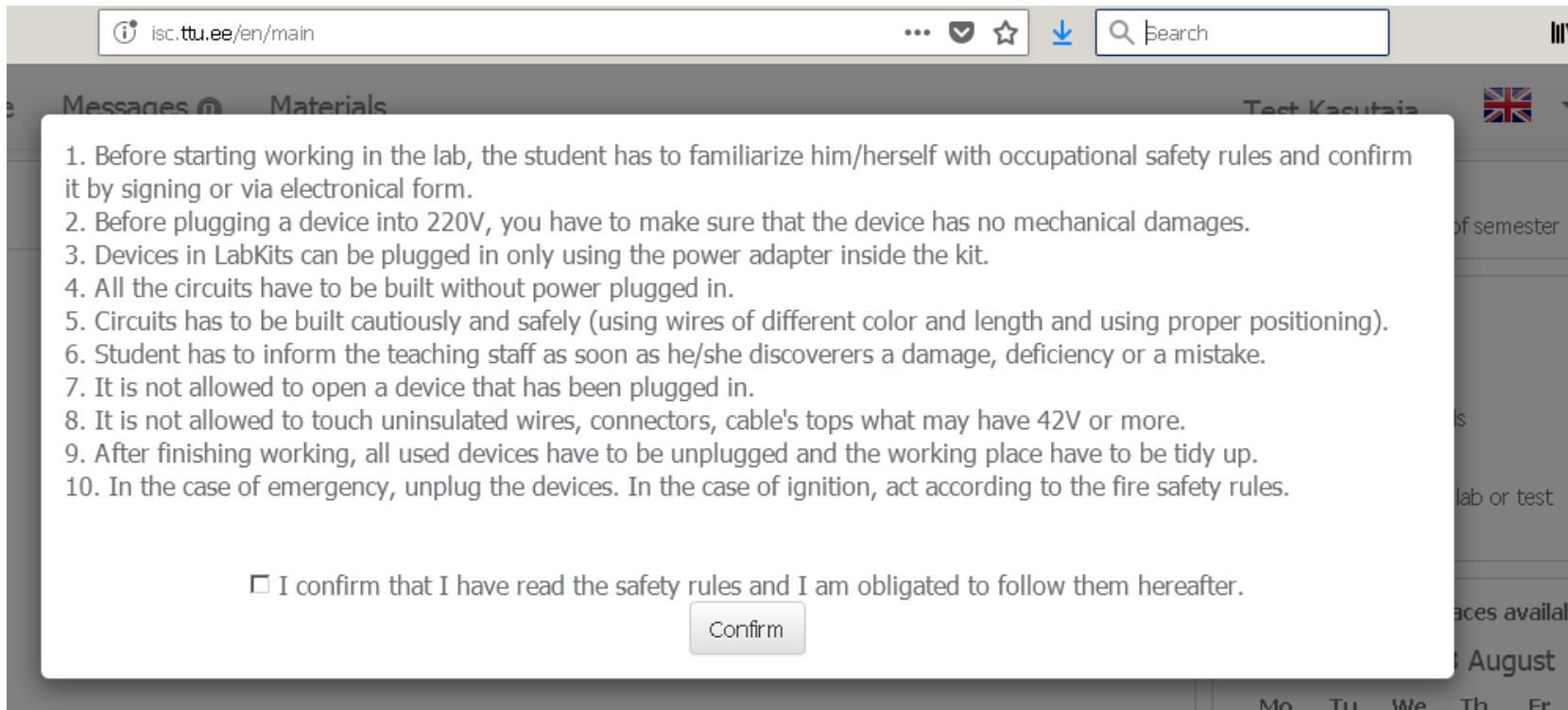
123456789 or 123456789

Those have also been sent to your email.


Continue

If you haven't registered before:

- You must agree..



The screenshot shows a web browser window with the URL `isc.ttu.ee/en/main`. A modal dialog box is displayed in the center, containing a list of 10 safety rules for working in a lab. At the bottom of the dialog, there is a checkbox for confirmation and a 'Confirm' button.

Messages @ Materials Test Kacutain 

1. Before starting working in the lab, the student has to familiarize him/herself with occupational safety rules and confirm it by signing or via electronical form.
2. Before plugging a device into 220V, you have to make sure that the device has no mechanical damages.
3. Devices in LabKits can be plugged in only using the power adapter inside the kit.
4. All the circuits have to be built without power plugged in.
5. Circuits has to be built cautiously and safely (using wires of different color and length and using proper positioning).
6. Student has to inform the teaching staff as soon as he/she discoverers a damage, deficiency or a mistake.
7. It is not allowed to open a device that has been plugged in.
8. It is not allowed to touch uninsulated wires, connectors, cable's tops what may have 42V or more.
9. After finishing working, all used devices have to be unplugged and the working place have to be tidy up.
10. In the case of emergency, unplug the devices. In the case of ignition, act according to the fire safety rules.

I confirm that I have read the safety rules and I am obligated to follow them hereafter.

Confirm

of semester
lab or test
aces availat
August
Mo Tu We Th Fr

Adding new course

The screenshot shows a web browser window with the URL `isc.ttu.ee/en/main`. The page has a navigation bar with 'MyField', 'Profile', 'Messages', and 'Materials'. The user is logged in as 'Test Kasutaja' with a UK flag and a language dropdown. A large red arrow points to a '+' icon on the left side of the main content area. The right sidebar contains several informational cards:

- Summary:** 144 days till the end of semester
- Book a kit** (with a blue bag icon)
- Time proposals** (with a calendar icon showing '13')
- Register for a lab or test** (with a computer monitor icon)
- Free lab and test places available:** A calendar for August 2018 with the 28th highlighted in green.

2018 August						
Mo	Tu	We	Th	Fr	Sa	Su
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

Adding new course

MyField

Profile

Messages 0

Materials



Here you can add courses to your fields.

Adding a course here does not replace official declaration. You add and study whichever courses you want - you do not have to have official declaration to go with it.

If you have declared the course before and taken a grade, all the confirmations of the competences will be removed and you have to prove those skills again in class test.

Courses	
IAS0430	Add
ISC0100	Add



Done !

The screenshot shows a user interface for a course. At the top, there are navigation tabs: "MyField", "Profile", "Messages", and "Materials". The user is logged in as "Test Kasutaja" with a UK flag, a help icon, and a close icon. The course code is "IAS0430" and "ISC0100". The user's points are "0(0)". There is a "Homework" button. The main area contains a grid of 100 red squares arranged in a pattern, with 5 blue squares at the bottom. The sidebar on the right contains a "Summary" section with "144 days till the end of semester", a "Book a kit" button, a "Time proposals" button, and a "Register for a lab or test" button. Below that is a "Free lab and test places available:" section with a calendar for "2018 August".

My points: 0(0) Homework

Summary:
144 days till the end of semester

Book a kit
Time proposals
Register for a lab or test

Free lab and test places available:

2018 August						
Mo	Tu	We	Th	Fr	Sa	Su
30	31	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2
3	4	5	6	7	8	9

How to learn using this environment can be found here:
<http://isc.ttu.ee/en/userGuide>

Learning environment

- Tasks

scope_1

Given

Oscilloscope measures harmonic signal.
X-axis scale is 150 ms/div
Y-axis scale is 250 mV/div
Input voltage divider 1:10 is used

Problem
Find signal amplitude V

Result OK

scope_1

Three blue squares

Grid of colored squares (blue, brown, red)

Result NOT OK

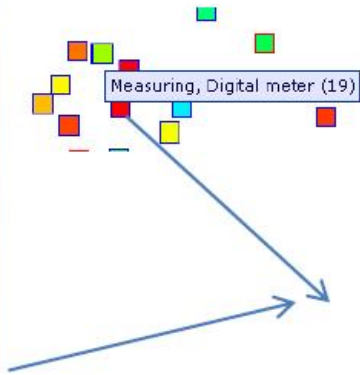
scope_1

Three red squares

Grid of colored squares (blue, red, brown)

Question to teacher about task.

Learning Environment (labs)



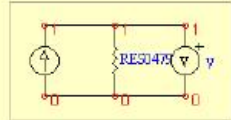
Katse CS145

Pinge mõõtmine ja mõõteviga

Seadmed: vooluallikas, resistor RES0479, multimeter DMM M830 ning multimeetri kasutusjuhend.

	Tulemus	Ühik
Mõõtepiirkond	20	✓
Mõõta pinget V	4.2	✓
Arnutada mõõteviga	± 48	mV

Pinget mõõdetakse vultmeetriga. Selleks ühendatakse voltmeter ahelasse rööbiti. Valida tuleb optimaalne mõõtepiirkond ehk see, kus mõõtemista näit on suurim, kuid ei ületa skaala maksimumväärtust. Tester näitab V klemmi pinget COM klemmi suhtes.



Result by components:



Lab tasks are included in Class Test !

Lab times

- On-site labs will consist of you working with a labkit on laboratory. There is someone there to help you with all the questions you have



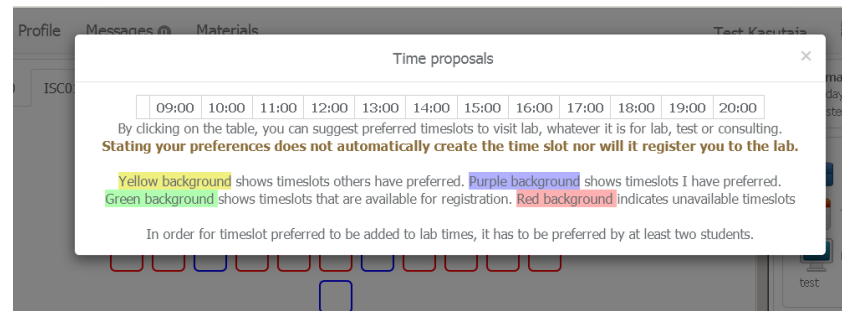
- You can start with few sessions on the lab and then do experiments home with borrowed HomeLabKit

Before you can borrow HomeLabKit, you have to go for a lab once

Labs



You can use time proposal.



Class tests

- You work on your own and on lab until you have got the competences high (level over 77 of 127).
- If you have more than 1000 mCu, you can register for class test and come to lab to to class test.
- Same kind of exercises than before – you just have to do it in „controlled“ environment to prove you did it yourself
- All points have to be confirmed this way.
- Those points count towards your grade
- Class tests include lab tasks (not programming tasks) !

Grade taking

- You can take your grade whenever you want – when you have the points, take the grade and you are done. You do not have to wait till the end of semester

