



Forests, wood, and carbon

CLOSING 13.10.2023

Thank you!



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Wood material science
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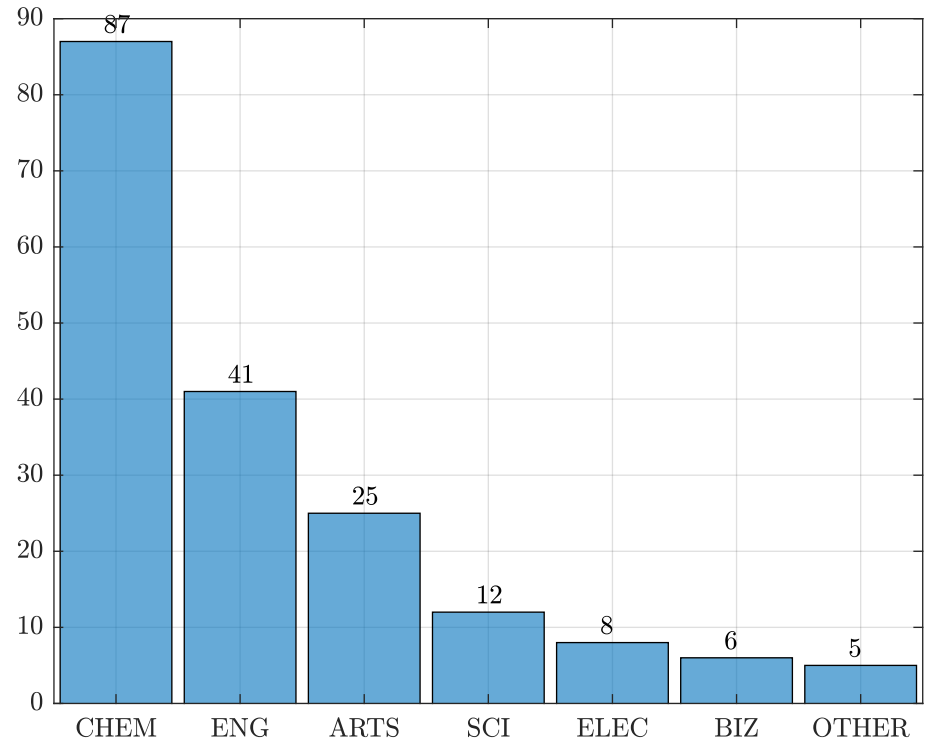
wood-teaching@aalto.fi

Finished students by department

13.10.2023

184 finished the course

- 233 registered
- 97% passed (of those who attempted all exams)
- 77% passed (of those who registered)



LEARNING MATERIAL

EXAMS

Interactive Books: ✓
Learning material with some exercises. Mark as **completed** by yourself.

Quizzes: ✓
Exercise questions related to the topic. To **complete** the quiz you need to answer *everything correctly* before submitting.

Unlimited attempts
No time limitation
Not graded

Exam:
The exam are available once you have completed the interactive books and the quizzes of the section.

One attempt
Time limitation
Graded

SECTIONS

Forest



1) Global forests



2) Forests in Finland

• Forest Exam 20%

Wood



1) Structure & anatomy



2) Built environment



3) Products & applications

• Wood Exam 50%

Carbon



1) Carbon cycles



2) Wood products

• Carbon Exam 30%

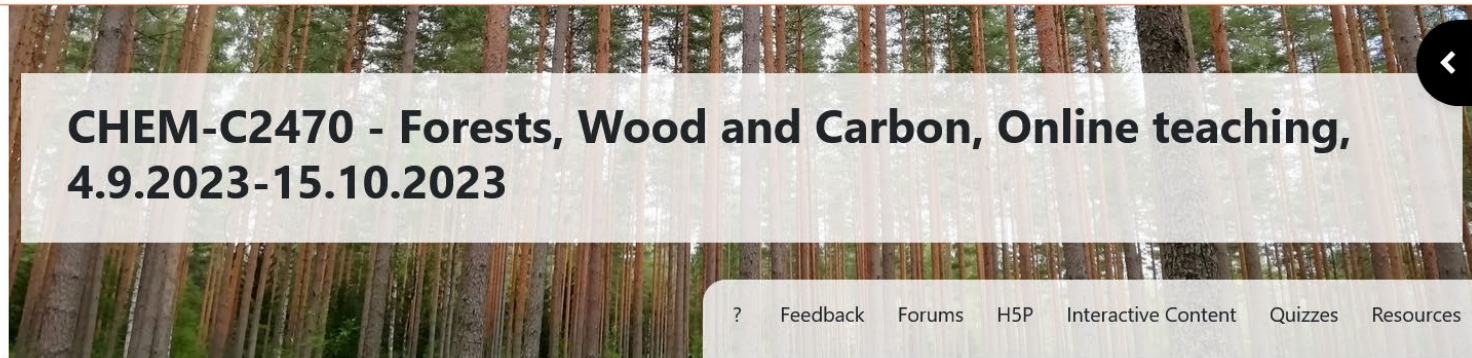
After the course, students are able...

- to describe the role of **forests in the carbon cycle**
- to calculate the **carbon storage potential of wood**
- are able to list the common work phases of **life-cycle analysis**
- to describe the basic macro-level **structure of wood** and the basics of wood grain orientation
- to describe how moisture influences **wood dimensional changes and strength** at the cell-level
- to link the influence of grain angle, knots and other natural features of wood on its **movement, appearance, and mechanical** properties
- to list the most common **wood products** and their typical applications



Exam points in MyCourses

- ×
- ▼ COURSE INFO
 - Introduction lecture 4.9.2023 slides
 - Feedback form
 - Announcements
- ▼ Forests
 - 1) Forests - Global forests
 - Quiz: Global forests
 - 2) Forests - Forests in Finland
 - Quiz: Forests in Finland
 - Forest bioeconomy in brief
 - Forest management



CHEM-C2470 - Forests, Wood and Carbon, Online teaching, 4.9.2023-15.10.2023

? Feedback Forums H5P Interactive Content Quizzes Resources

Syllabus

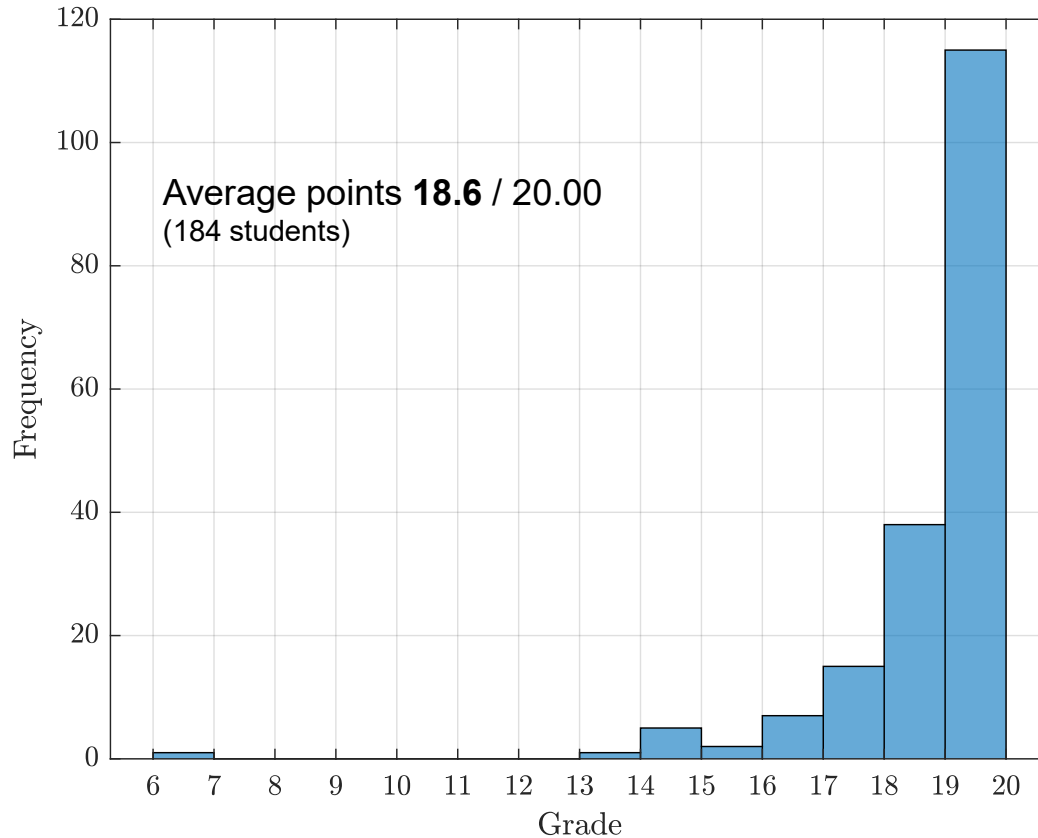
Course **Grades** ←

COURSE INFO

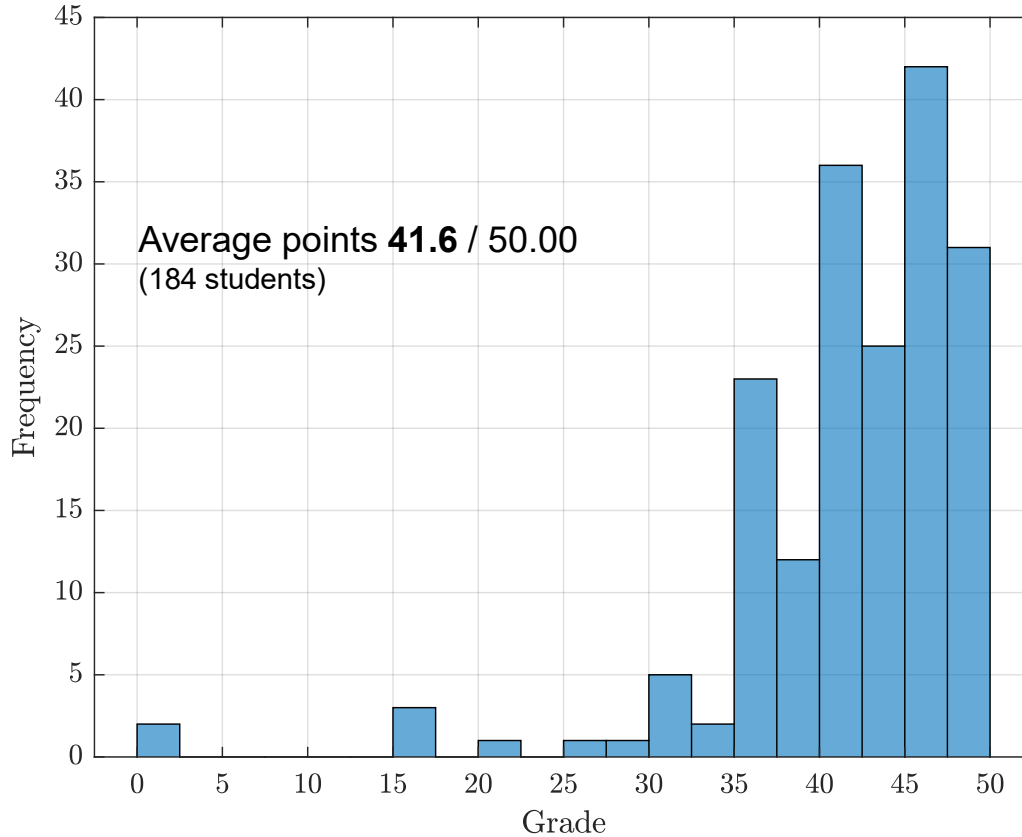
The course is organized as **online course**. You may follow the course **independently** whenever it is suitable for you during the I period / fall 2023. The course includes many short videos, texts, exercises and several multiple choice exams. Teaching language is English.



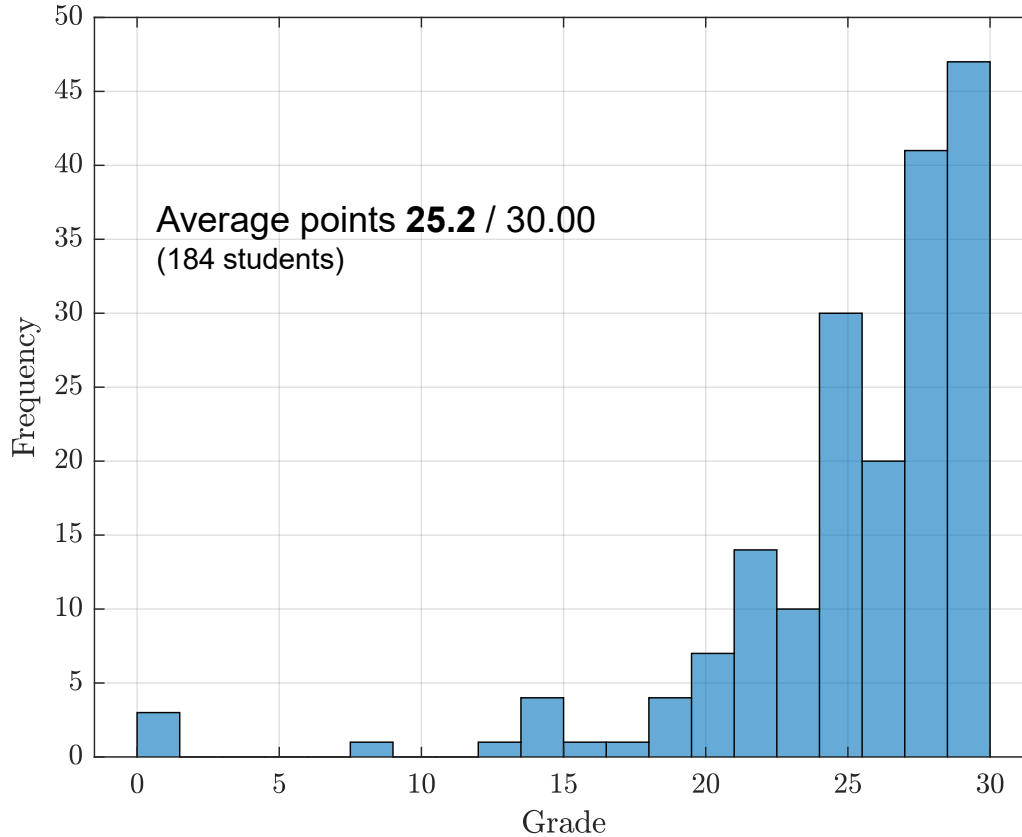
FOREST EXAM



WOOD EXAM



CARBON EXAM

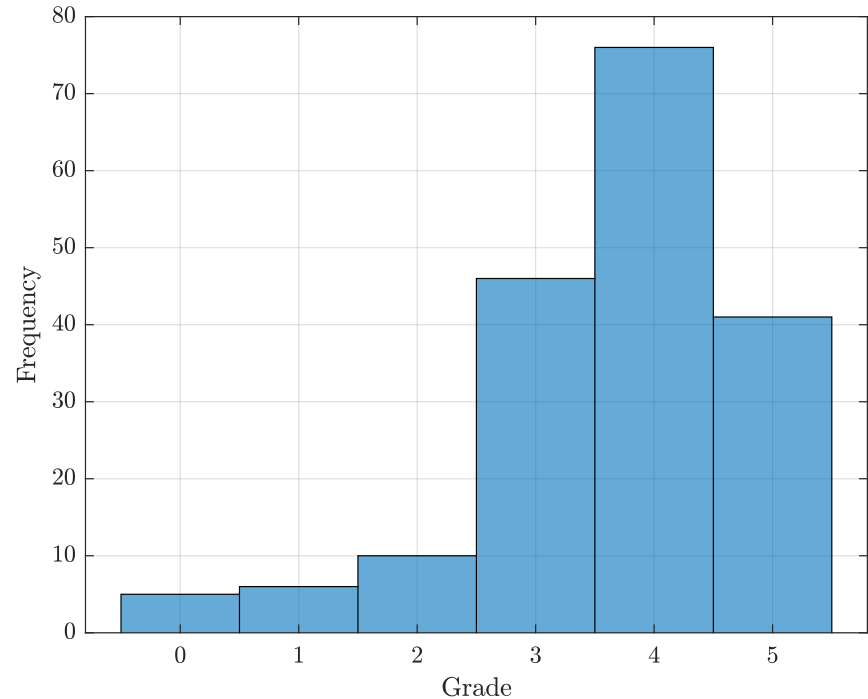


Grading

- Max points 100
- Grading 0-5

grade	min. points	amount	%
0	0	5	3 %
1	55	6	4 %
2	65	10	5 %
3	75	46	25 %
4	85	76	41 %
5	95	41	22 %

Data from 184 students who finished the course



Course Feedback

- **95 % (221) have to answer**
 - So far 102 / 233 answered
- **Open in MyCourses until**
Wed 18th Oct!!
- **Also another Aalto-level webropol form**



Feedback form



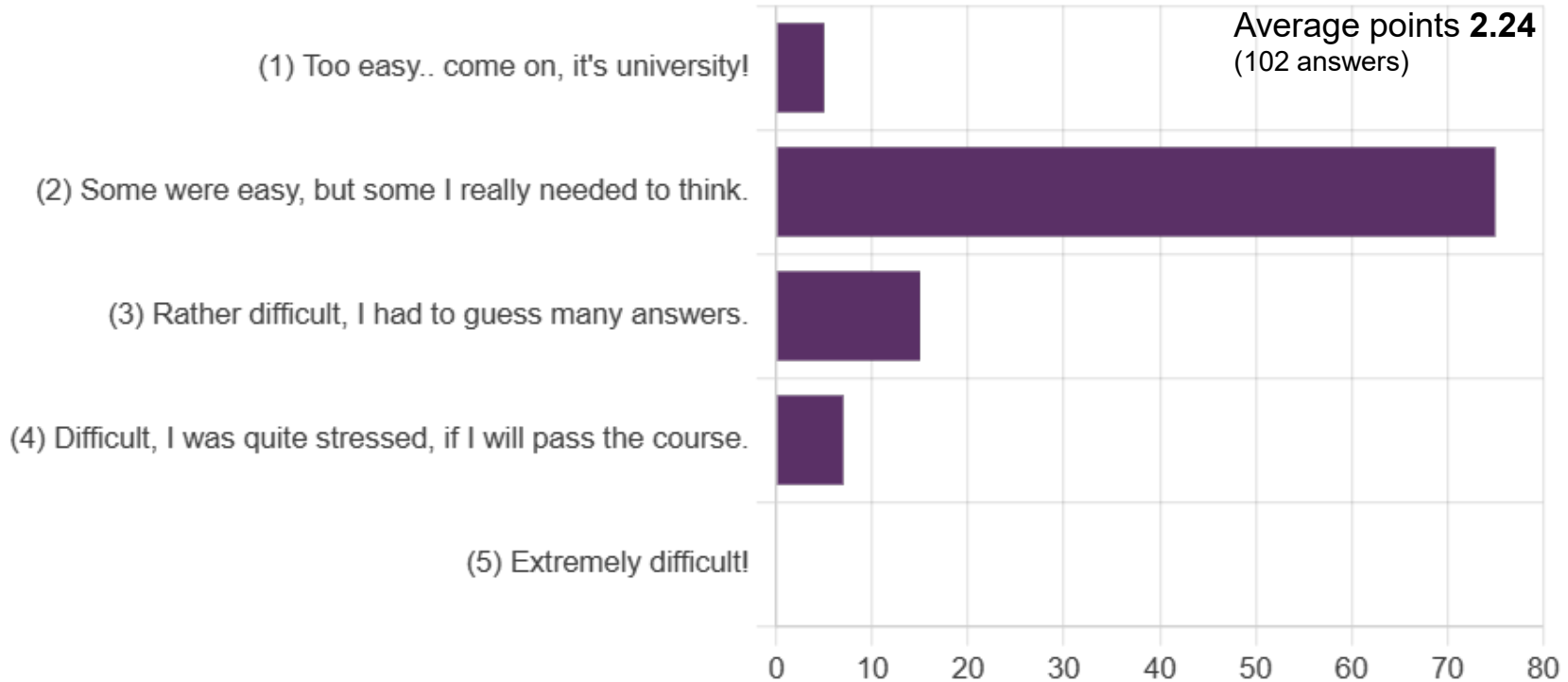
To do: Submit feedback

After completing all the exams, you need to give comprehensive feedback to pass the course. This way you can **reflect** your learning and we can **develop** online courses in the future.

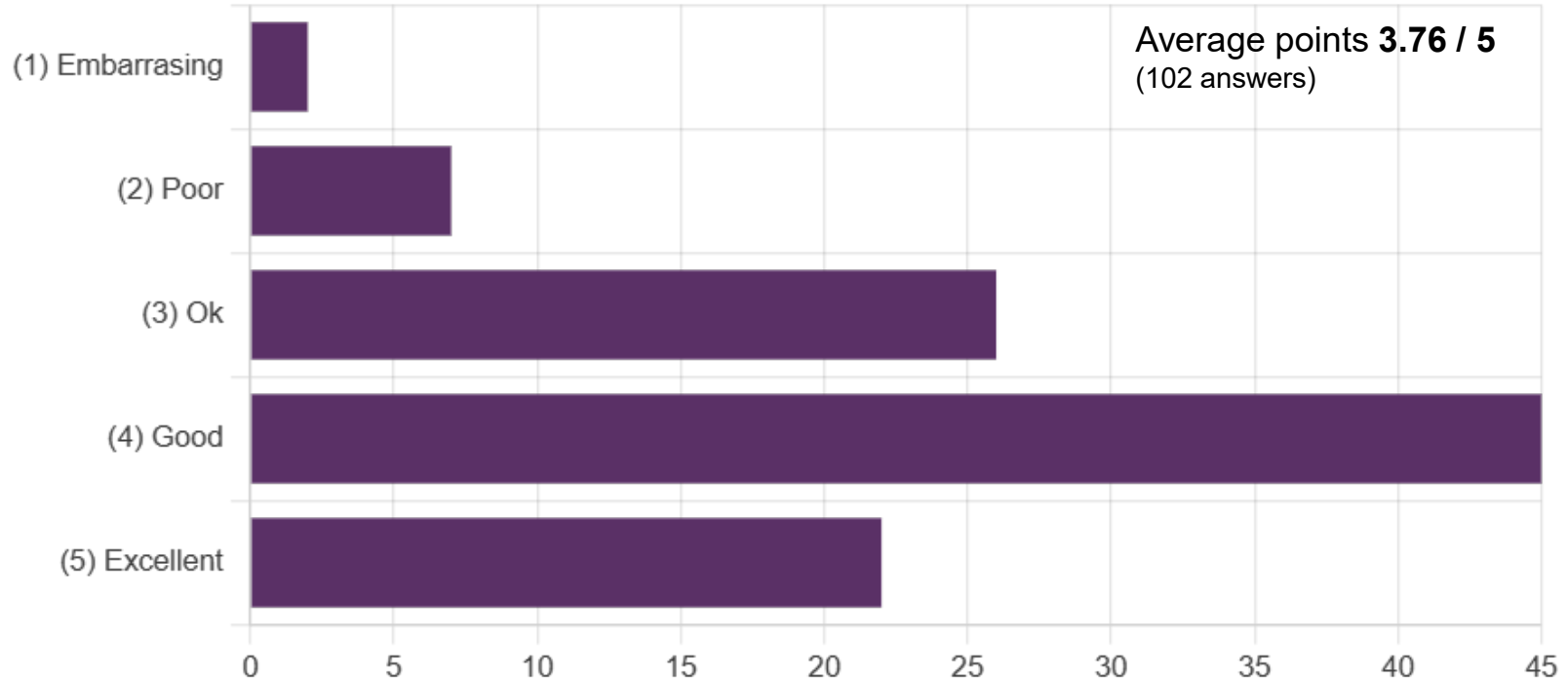
Fill in the feedback form by **Wed 18.10.2023!**

There are ~40 questions, so reserve enough time for this!

Were the final exams difficult or easy?



How well did YOU do? Were you able to keep your schedule and do your best?



Revision

- If you have any questions about the exam or other topics
- **Wed 25th Oct**, 10:00 – 12:00
- Vuorimiehentie 1 / room L1 (241)
- **Book a time to this event** by 18th Oct: wood-teaching@aalto.fi

- **Re-take the course / improve grade → Next year**
 - Instructions: <https://www.aalto.fi/en/applications-instructions-and-guidelines/detailed-instructions-on-registering-for-courses-on-sisu>



Next courses

- **Wood material science**
 - 5 cr, online
 - III-period
- **Wood products and processes**
 - 5 cr, online
 - IV-period

For students in all fields

Proceed at own pace!



**Online
courses**

Forests, Wood and Carbon / 5 cr

CHEM-C2470
I-period, 4.9.–15.10.2023
V-period, 22.4.–7.6.2023

Learn about the role of forests in the carbon cycle and carbon storage potential + basic material properties of wood.



Wood Material Science / 5 cr

CHEM-E2225
III-period, 8.1.–16.2.2024

Learn about how the structure of wood affects its physical and mechanical properties.



Wood Products and Processes / 5 cr

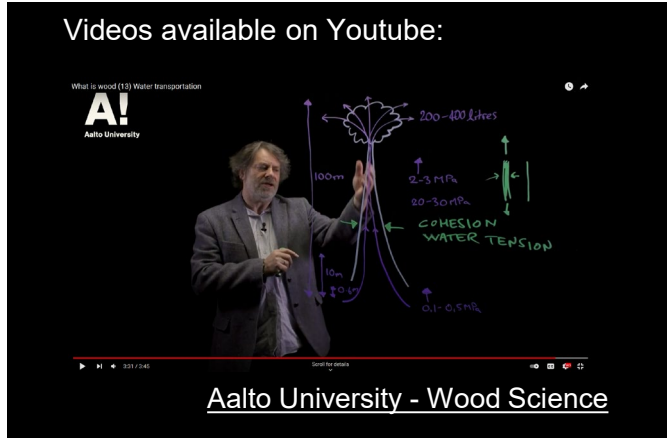
CHEM-E2235
IV-period, 26.2.–14.4.2024

Learn about the production processes, properties and applications of wood products, such as sawn timber, plywood, cross-laminated timber and modified wood.



See you again?

wood-teaching@aalto.fi



Aalto Wood –minor (MSc) 2022 - 2024

Pre-requisite

CHEM-C2470 Forests, Wood and Carbon **online** 5 op

- Next time in V-period (22.4. – 7.6.2024)

Mandatory courses (10 cr):

CHEM-E2225 Wood Material Science **online / III** 5 op

CHEM-E2235 Wood Products + Processes **online IV** 5 op

Elective courses (to fulfil 20-25 cr):

CHEM-E2170 Advanced Wood Science 5 op

CHEM-E1100 Plant Biomass 5 op

CIV-E4110 Timber Engineering 5 op

CIV-E4120 Timber Structures 5 op

ARK-E401201 Wood in Architecture Construction 5 op

ARK-E4008 Industrial Wood Construction 5 op

SARK-E5016 Woodstudio: Design Project 10 op