



# Kandidat- og sidefagsdag

Biologi, bioteknologi og kemi

Vi begynder klokken 14.00





# Kandidat- og sidefagsdag Biologi, bioteknologi og kemi

Anne Sonne og Mads Hyldgaard Henningsen



# Who are we?

- ▶ Anne – 3. semester, biology
- ▶ Mads – 7. semester, chemical engineering
- ▶ Student guidance counsellor



# Which educations do we offer?

## Secondary Subjects and Master's

### Biology (master's and secondary subject)

- Cand.scient.
- Both Danish

### Chemistry (master's and secondary subject)

- Cand.scient.
- Both Danish
- "Kemi"

## Master's only

### Biotechnology (master's)

- Cand.polyp.
- English

### Chemical engineering (master's)

- Cand.polyp
- English
- "Chemistry" (On the webside and curriculum)

### (Water and Environmental Engineering) (master's)

- BUILD

# How to study at AAU

- ▶ Full time education
- ▶ Projects og courses – the course of the semester
  - ▶ 15 ECTS courses
  - ▶ 15 ECTS project
- ▶ Group work
- ▶ Project Based Learning (PBL) – research-oriented
  - ▶ More lab hours = more practical education



# What is PBL?

- Problem based learning – "The AAU way"
- The students work on a project in groups
- The project is driven by a problem from an existing working group at the university – real life problems
- Lots of projects to choose from
  - Evolutionary significance of behavioral instability (biology)
  - Porosity and Surface Functional Group Regulation of MOF Glass for Lithium Metal Battery Solid-State Electrolyte (chemical engineering)
- External collaboration – e.g. Rockwool and Grundfos





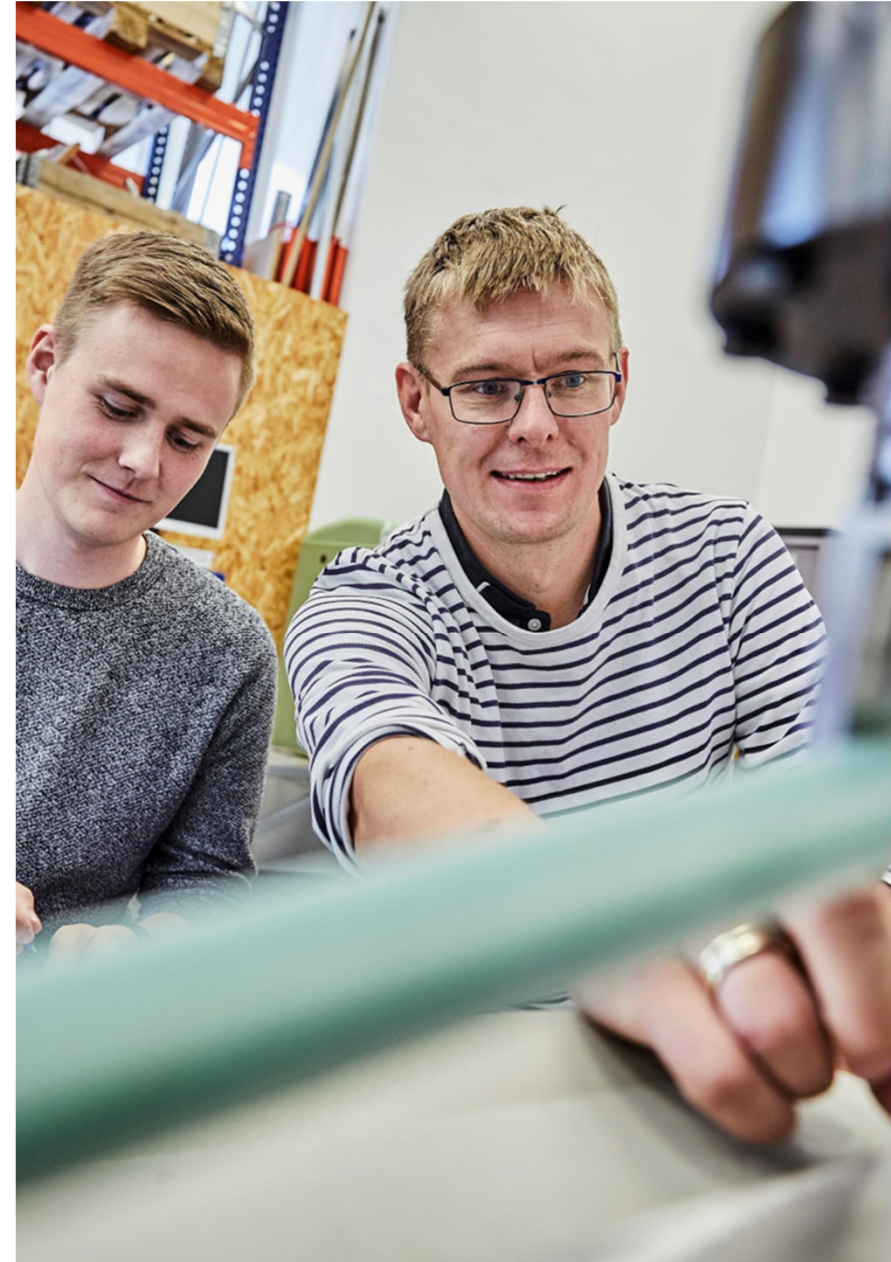
An overhead photograph of a library lounge area. On the left, a red modular sofa has two students: one with dark hair reading a book and another in a grey hoodie using a laptop. On the right, a purple modular sofa has two students: one in a grey t-shirt using a laptop and another in a blue hoodie using a laptop. A black backpack sits on the floor between the sofas. The floor is made of light-colored square tiles. In the bottom right corner, blue chairs and a white table are partially visible. A white text box with the words 'Secondary Subject' is centered over the image.

## Secondary Subject



# Secondary Subject

- › High School Teacher - other possibilities as well
- › Pick from interest and employment – combinations can be important
- › You have to pick a primary and secondary subject
- › Deadline every **1st of march**  
(latest **4. semester of the primary subject**)





# General overview of secondary subjects

- Typically 4 semesters with primary subject and then the secondary subject
- Only guide lines
  - Individual study plan
  - Find curriculums [here](#)

	Bacheloruddannelse	
	Centralt fag	Sidefag
1. semester	30 ECTS	
2. semester	30 ECTS	
3. semester	30 ECTS	
4. semester	30 ECTS	
5. semester	15 ECTS	15 ECTS
6. semester		30 ECTS
	Kandidatuddannelse	
	Centralt fag	Sidefag
1. semester		30 ECTS
2. semester	15 ECTS	15 ECTS
3. semester	30 ECTS	
4. semester	30 ECTS	

# Study extension

- Mix of the main areas (humanities, natural science and social science) = ½ year of extension

	Bacheloruddannelse	
	Centralt fag	Sidefag
1. semester	30 ECTS	
2. semester	30 ECTS	
3. semester	30 ECTS	
4. semester	30 ECTS	
5. semester	15 ECTS	15 ECTS
6. semester		30 ECTS
	Kandidatuddannelse	
	Centralt fag	Sidefag
1. semester		30 ECTS
2. semester		30 ECTS
3. semester	15 ECTS	15 ECTS
4. semester	30 ECTS	
6. semester	30 ECTS	





**Master's**

## Master's topics

Semester	Kemi	Chemical Engineering	Biotechnology	Biology
7	Syntese og karakterisering af materialer	Materials Technology	Experimental Molecular Cell Biology	<ul style="list-style-type: none"> <li>• Populationsbiologi</li> <li>• Eksperimentel molekylær cellebiologi</li> </ul>
8	Makromolekylær kemi	Industrial application of macromolecules	<ul style="list-style-type: none"> <li>• Protein Science</li> <li>• Bioresources</li> <li>• Medical protein science</li> </ul>	<ul style="list-style-type: none"> <li>• Naturforvaltning</li> <li>• Klimaforandringer og bæredygtighed</li> </ul>
9	<ul style="list-style-type: none"> <li>○ Project collaboration in an external organization / Studying abroad</li> <li>▪ Long master's thesis</li> </ul>		<ul style="list-style-type: none"> <li>○ Project collaboration in an external organization / Studying abroad</li> </ul> <p>Long master's thesis</p> <ul style="list-style-type: none"> <li>• Biotechnology</li> <li>• Medical Biotechnology</li> </ul>	<ul style="list-style-type: none"> <li>○ Eksternt projektarbejde / Udlandsophold</li> <li>▪ Langt speciale</li> </ul>
10	<ul style="list-style-type: none"> <li>○ Short master's thesis</li> <li>▪ Long master's thesis</li> </ul>		<p>Short / long master's thesis</p> <ul style="list-style-type: none"> <li>• Biotechnology</li> <li>• Medical Biotechnology</li> </ul>	<ul style="list-style-type: none"> <li>○ Kort kandidatspeciale</li> <li>• Langt speciale</li> </ul>



# Admission requirements

- Admission requirements: Relevant bachelors degree (see curriculum: §7: Admission requirements)



# Job opportunities

## Biotechnology:

- Management and production in biotechnological and medical industries
- The food industry
- Research (public and private)
- Teaching and education

## Biology:

- Environmental administration and management
- Consulting
- Research and development
- Teaching and education





# Job opportunities

## Chemical engineering (Cand.polyt.):

- Chemical and pharmaceutical industry
- Development og improvement in an engineering company
- Research (public and private)
- Teaching and education

## Chemistry (Cand.scient.):

- Development, analysis and control of chemical products and materials
- Operation, control and development in chemical production
- Research (private and public)
- Teaching and education



A photograph of three people working together outdoors at a wooden table. A woman with long brown hair, wearing a black and orange striped sweater, is looking at a laptop. A man in a grey sweater is also looking at the laptop. Another person, wearing a dark blue and white striped shirt, is pointing at the laptop screen. The background shows green trees and a bright sky. A white rectangular box is overlaid on the image, containing the text "Other information".

## **Other information**



# After hours

- › Study groups
- › Studentersamfundet (The student community)
- › MOS – student union
- › Friday bar



# Further information

- Find and read about our educations: <https://www.aau.dk/uddannelser>
- Curriculums (§18/19: Overview of the programme) and "Offered as: 1-professional"
  - For all master's: <https://studieordninger.aau.dk/2023/41>
  - Biology (Cand.scient.): <https://studieordninger.aau.dk/2023/41/4185>
  - Biotechnology (Cand. Polyt.): <https://studieordninger.aau.dk/2023/41/4187>
  - Chemistry (cand.scient.): <https://studieordninger.aau.dk/2023/41/4189>
  - Chemical engineering (cand. Polyt.): <https://studieordninger.aau.dk/2023/41/4188>
  - Secondary subjects: For all bachelors: <https://studieordninger.aau.dk/2023/38>
- Secondary subjects: find curriculum under §18/19: Uddannelsesoversigt and "Udbydes som: 2-faglig"
- Read more about secondary subjects: <https://www.aau.dk/uddannelser/bliv-gymnasielaerer>

§ 18: OVERVIEW OF THE PROGRAMME

OFFERED AS: 1-PROFESSIONAL

UDBYDES SOM: 2-FAGLIG



# Contact information

- Specific questions? Feel free to contact us!
- Write us an e-mail: [bio.sg@bio.aau.dk](mailto:bio.sg@bio.aau.dk)
- Or find us at Fredrik Bajers vej 7H in meeting room 1.501 every wednesday from 15-17, or call us during these hours:
  - Anne (Odd weeks): +45 99 40 84 72
  - Mads (Even weeks): +45 99 40 84 98

[www.bio.aau.dk/uddannelse/kontakt/studievejledere](http://www.bio.aau.dk/uddannelse/kontakt/studievejledere)







Questions?