

CIVILINGENIØR I BYGGERI

BYGGERI - BACHELOR					
1. semester	Lineær algebra og calculus		Materialelære og statik 1	Sundhed, komfort og produktivitet i bebygget miljø	Bygværkers form og funktion
2. semester	Videregående calculus for ingeniører		Materialelære og statik 2	Grundlæggende geoteknik	Husbygning
3. semester	Mekanik, termodynamik og partielle differentialligninger 1	Materiale- og produktions-teknologi	Beton-konstruktioner	Byggeriets processer	Boligbyggeri
4. semester	Mekanik, termodynamik og partielle differentialligninger 2	Strømningslære for bygningsingeniører	Digitale værktøjer i byggeriet	Valgfagspakker (Læs mere om pakkerne på studerende.au.dk/cae)	
5. semester	Statistik og maskinlæring	Valgfagspakker			
6. semester	Ingeniørvidenskabernes videnskabsteori og etik	Valgfagspakker	Valgfri kurser (Se kursuskatolog)	Bachelorprojekt i Byggeri	

Valgfagspakker på bachelordelen:

Læs mere om indholdet af valgfagspakkerne på din studieportal studerende.au.dk/cae

- Bygningskonstruktion
- Infrastruktur og geoteknik
- Innovativt konstruktionsdesign
- Indeklima og bygningsfysik

Studielinjer på kandidatdelen

Ved studiestart vælger du at specialisere dig inden for en af nedenstående studielinjer. Læs mere om linjerne på kandidat.au.dk/byggeri:

- Infrastructures and Geotechnical Engineering
- Structural Engineering
- Innovative Structural Design
- Building Science and Technology
- Construction Management and Engineering

Til hver studielinje hører et bestemt antal kurser, som du kan se her på bagsiden

CIVILINGENIØR I BYGGERI - KANDIDAT

Infrastructures and Geotechnical Engineering

	Semester 1 (fall)	Semester 2 (spring)	Semester 3 (fall)	Semester 4 (spring)
5	Machine Learning in Civil & Architectural Engineering	Research Methods in Civil and Architectural Engineering	Research & Development Project	Master Thesis Project
10	Sustainable Structural Design	Advanced Material Technology		
15	Linear Finite Element Analysis of Solids and Structures	Advanced Material and Structural Mechanics		
20	Advanced Geotechnical Engineering	Advanced Soil Mechanics	Elective courses	
25		Elective courses	Elective courses	
30	Elective courses	Elective courses	Elective courses	

Structural Engineering

	Semester 1 (fall)	Semester 2 (spring)	Semester 3 (fall)	Semester 4 (spring)
5	Machine Learning in Civil & Architectural Engineering	Research Methods in Civil and Architectural Engineering	Research & Development Project	Master Thesis Project
10	Sustainable Structural Design	Finite Element Analysis of Spatial Lightweight Structures		
15	Linear Finite Element Analysis of Solids and Structures	Experimental Mechanics and Dynamics		
20	Advanced Structural Dynamics	Structures II - Systems	Elective courses	
25	Structures I - Elements and Joints	Elective courses	Elective courses	
30	Elective courses	Elective courses	Elective courses	

Innovative Structural Design

	Semester 1 (fall)	Semester 2 (spring)	Semester 3 (fall)	Semester 4 (spring)
5	Machine Learning in Civil & Architectural Engineering	Research Methods in Civil and Architectural Engineering	Research & Development Project	Master Thesis Project
10	Sustainable Structural Design	Finite Element Analysis of Spatial Lightweight Structures		
15	Linear Finite Element Analysis of Solids and Structures	Structures II - Systems		
20	Structures I - Elements and Joints	Form Finding in Building Design	Elective courses	
25	Computational Design and Constructability	Elective courses	Elective courses	
30	Elective courses	Elective courses	Elective courses	

Building Science and Technology

	Semester 1 (fall)	Semester 2 (spring)	Semester 3 (fall)	Semester 4 (spring)
5	Machine Learning in Civil & Architectural Engineering	Research Methods in Civil and Architectural Engineering	Research & Development Project	Master Thesis Project
10	Air Physics and Building Ventilation	Digital Buildings		
15	Simulation of Building Energy Systems	Resilient Buildings and Cities		
20		Elective courses		
25	Occupant-centric building design and operation	Advanced Building Control and Automation	Elective courses	
30	Design-integrated Life-cycle Assessments	Data-driven Building Energy Modelling	Elective courses	

Construction Management and Engineering

	Semester 1 (fall)	Semester 2 (spring)	Semester 3 (fall)	Semester 4 (spring)
5	Machine Learning in Civil & Architectural Engineering	Research Methods in Civil and Architectural Engineering	Research & Development Project	Master Thesis Project
10	Air Physics and Building Ventilation or Sustainable Structural Design	Construction 4.0		
15	Lean Construction			
20	Advanced Planning and Scheduling of Projects	Elective courses	Elective courses	
25	Clients, Users and Innovation	Elective courses	Elective courses	
30	Design-integrated Life-cycle Assessments	Elective courses	Elective courses	