AARHUS UNIVERSITET
AU ENGINEERING

# 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 produktionsteknologi | Betonkonstruktioner | Byggeriets processer | Boligbyggeri |
| 4. semester | Mekanik, termodynamik og partielle differentialligninger 2 | Strømningslære for bygningsingeniører | Digitale værktøjer i byggeriet | Valgfagspakker (Læs mere om valgfagspakkerne via QR-koden nedenfor) | |
| 5. semester | Statistik og maskinlæring | Valgfagspakker | | | |
| 6. semester | Ingeniørvidenskabernes videnskabsteori og etik | Valgfagspakker | | Bachelorprojekt i Byggeri | |

## Valgfagspakker på bachelordelen:

Læs mere om indholdet af valgfagspakkerne på din studieportal:
- Bygningskonstruktion
- Infrastruktur og geoteknik
- Innovativt konstruktionsdesign
- Indeklima og bygningsfysik

Scan QR koden og læs mere om **valgfagspakkerne**

## Studielinjer på kandidatdelen

Ved studiestart vælger du at specialisere dig inden for en studielinje:
- Infrastructures and Geotechnical Engineering
- Structrural Engineering
- Innovative Structural Design
- Building Science and Technology
- Construction Management and Engineering

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

Scan QR koden og læs mere om **studielinjerne**

INFORMATION OG VEJLEDNING
bachelor.au.dk/byggeri
E-mail: counsellor.architectural@au.dk

ANSØGNINGSFRIST
Kvote 2: den 15. marts kl. 12
Kvote 1: den 5. juli kl. 12

STUDIESTART
August

STUDIESTED
AU Engineering, Aarhus Universitet
Institut for Byggeri og bygningsdesign

AARHUS UNIVERSITET
AU ENGINEERING

# 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 and Preparation 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 | |
| 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 and Preparation 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 and Preparation 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 and Preparation 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 and Preparation 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 | |

Scan QR koden og læs mere om uddannelsen

INFORMATION OG VEJLEDNING
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Kvote 2: den 15. marts kl. 12
Kvote 1: den 5. juli kl. 12

STUDIESTART
August

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