

# Architecture, Urbanism and Building Sciences

## Building Technology

MSc Track



**Innovation and sustainability for the built environment. The Building Technology track at TU Delft's Faculty of Architecture and the Built Environment focusses on developing new ways to build by designing innovative, future-orientated and sustainable building components that can be integrated into the built environment. Combining applied research and the design of buildings and building elements, the master track stands out internationally for its integration of architectural design and technical disciplines using advanced digital design tools.**

Degree	Master of Science
Starts	September
Type	full-time
Credits	120 ECTS, 24 months
Language	English
Admission and application	<a href="https://admissions.tudelft.nl">admissions.tudelft.nl</a>
More information	<a href="https://aubs.msc.tudelft.nl">aubs.msc.tudelft.nl</a>

Dealing with the newest technology and interacting with the current market, students learn how to contribute to smart buildings that are sustainable, comfortable and environmentally intelligent.

### Programme

The programme cultivates a broad set of engineering, research and design skills and is well suited to designers looking to strengthen their technical qualifications as well as those with a technical background wanting to acquire design skills. As well as integrating social and cultural

aspects the track leads to designers that know how engineers work.

In the **first year**, students deepen their technical knowledge through core building technology subjects, seminars and design studios, and are given the opportunity to specialise with different building technology electives to broaden their academic perspective, knowledge, and skills.

In the **second year**, students work on a design project followed by their graduation project.

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### FIRST YEAR

1ST SEMESTER		2ND SEMESTER	
BUCKY LAB DESIGN		CHOOSE TWO ELECTIVES FROM: TECHNOEDGE STRUCTURAL DESIGN TECHNOEDGE FAÇADE DESIGN TECHNOEDGE HEALTH AND COMFORT TECHNOEDGE DESIGN INFORMATICS ZERO ENERGY DESIGN BRIDGE DESIGN CIRCULAR PRODUCT DESIGN CSI – HERITAGE COMPUTATIONAL INTELLIGENCE FOR INTEGRATED DESIGN ECO-FRIENDLY MATERIAL CHOICES	CHOOSE ONE DESIGN PROJECT FROM: EXTREME TECHNOLOGY MEGA
CLIMATE DESIGN	RESEARCH AND METHODOLOGY		
SUSTAINABLE ARCHITECTURAL MATERIALS AND STRUCTURES	INTRODUCTION TO COMPUTATIONAL DESIGN	FREE ELECTIVES	

### SECOND YEAR

3RD SEMESTER	4TH SEMESTER
CHOOSE ONE FROM: SWAT STUDIO CORE	BUILDING TECHNOLOGY GRADUATION STUDIO

### Graduation specialisations

Within the track's graduation studio, students can specialise in different areas related to sustainability that are not strictly separated from each other:

**Structural Design** deals with innovation in building structures and materials, employing tools as prototyping and computational design of bearing structures.

**Climate Design** investigates smart and bioclimatic design, with a focus on closing material cycles, novel building services, energy performance, and user comfort and health.

**Façade & Product Design** concerns innovation in building envelopes and products, investigating different typologies, climate and user-responsive façades, materialisation and the fabrication and assembly of façade systems and products.

**Design Informatics** focuses on computational methods, techniques and applications for design, construction, and planning, for modelling, analysing, evaluating, and optimising the human and physical performance of buildings and built environments.

### Career prospects

Building technology graduates are in high demand for their proficiency in bridging the gap between the architectural and engineering disciplines. Graduates are sought after by architecture offices, engineering offices, and specialised façade manufacturers. Combining their ability to make decisions based on calculations with their proficiency in integrating technical solutions into architectural design, graduates can direct both engineers and designers, as well as manage complex processes.

The Building Technology track is one of the specialisation tracks within the Architecture, Urbanism and Building Sciences master programme. On graduation, students receive a Master of Science degree in Architecture, Urbanism and Building Sciences.

This track does not allow graduates to apply for the protected title Architect, Landscape Architect or Urban Designer in the Netherlands.



## 2nd

Faculty ranking in the world



## 59%

International MSc students



## 96%

Job within 6 months



## 79%

Job on level of education