

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	2 September 2019
Type	full-time
Credits	120 ECTS, 24 months
Language	English
Admission and application	admissions.tudelft.nl
More information	aubs.msc.tudelft.nl

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		SECOND YEAR	
1ST SEMESTER	2ND SEMESTER	3RD SEMESTER	4TH SEMESTER
BUCKY LAB SEMINARS : <ul style="list-style-type: none"> • RESEARCH METHODOLOGY • BUILDING PHYSICS • STRUCTURAL MECHANICS • MATERIAL SCIENCE 	CHOOSE TWO ELECTIVES: <ul style="list-style-type: none"> • TECHNOEDGE STRUCTURAL DESIGN • TECHNOEDGE FACADE DESIGN • TECHNOEDGE CLIMATE DESIGN • TECHNOEDGE DESIGN INFORMATICS • ZERO ENERGY DESIGN • BRIDGE DESIGN • 1:1 INTERACTIVE ARCHITECTURE PROTOTYPE WORKSHOP 	DESIGN PROJECT, CHOOSE FROM: <ul style="list-style-type: none"> • SWAT STUDIO • EARTHY 	SUSTAINABLE DESIGN GRADUATION STUDIO
BUCKY LAB DESIGN <ul style="list-style-type: none"> • DESIGN • CAD • PRODUCTION TECHNIQUE 	DESIGN PROJECT, CHOOSE FROM: <ul style="list-style-type: none"> • MEGA • EXTREME TECHNOLOGY • SOLAR DECATHLON • 1:1 INTERACTIVE ARCHITECTURE PROTOTYPES 	SUSTAINABLE DESIGN GRADUATION STUDIO	
INNOVATION & SUSTAINABILITY	FREE ELECTIVES		

Graduation specialisations

Within the track's graduation studio Sustainable Design, 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.

TIDO annotation

Students have the option to obtain their degree with a "Technology in Sustainable Develop-

ment" (TiSD) annotation. This university-wide annotation signifies the students acquired a broader and deeper knowledge regarding sustainable development and technology upon graduation than their peers.

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 structural 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.



3rd

Faculty ranking in the world



61%

International MSc students



96%

Job within 6 months



79%

Job on level of education