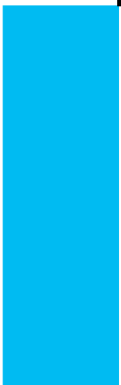


Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Nihat Mert Ogut
Student number	4514564
Telephone number	0621477544
Private e-mail address	nihatmertogut@gmail.com

Studio	
Name / Theme	Building Technology
Teachers / tutors	Ulrich Knaack and Michela Turrin
Argumentation of choice of the studio	Relevance to the MSc. Building Technology due to designing for an extreme environment

Graduation project	
Title of the graduation project	Building on Mars
Goal	
Location:	Mars (Exact location to be determined)
The posed problem,	Many space agencies are designing mission architecture for Mars and collaborating with firms in order to design a habitat. The mission has no tolerance to mistakes. Nevertheless, technical elaboration of these habitats are yet missing and needs further development.
research questions and	How to autonomously construct a radiation shielding habitat for a crew of 4/6 on Mars?
design assignment in which these result.	Designing and constructing of a segment of a Martian facade through deep analysis of technical requirements
Sub-research questions	
<p>What are the most suitable digital manufacturing techniques for the Martian habitat?</p> <p>What are the construction tools that can utilize in-situ resources in order to build the Martian habitat?</p> <p>What are the effects of the space radiation, GRE and SEPs, on human anatomy?</p> <p>What are materials that can mitigate the exposure to space radiation whilst the crew is in the Martian Habitat?</p> <p>What is the optimal architectural lay out to mitigate the psychological issues on an isolation mission of approximately 500 days?</p>	

