

## MSc1



### MADD

Materialisation and Design Development

Art depository, with the emphasis on the architectural design of the façade.

“The design ultimately finds its place through the material. It becomes irreversible and definitive. Architectural design is no graphic activity, but rather it is thinking in material and space. In what is, what can be and what must be made in between and around.” (Prof. Kees Kaan).

In this MSc-1 studio of the Chair of ‘Materialisation and Design Development’, students will have the chance to design the new building for the collection of the Museum Boijmans van Beuningen in Rotterdam: spaces for storing, restoration, studios for artists, exposition, offices, restaurant and facilities. The building site lies on the southern wharf of the Maashaven, between the water and the Brielselaan. The total program is approx. 11.000m<sup>2</sup>, but rather simple, which ensures that excessive time is not spent on organizing the program. Here, students can come reasonably quickly to a well-functioning architectonic design. The main focus, then, will be the Materialisation And Design Development of the building at a rather advanced stage of the design process; that is, at a point where the findings are integrated back into the architectural concept. Students will acquire advanced design-experience at all different levels and scales. The point is not to invent new concepts, but to learn to make architectural ideas evolve into an architectural building.

The materialization process typically takes as long as the whole architectural design-development phase, and is one of the most important tools for making architecture. Ultimately, the shape of the building, the chosen materials and their assembly determine the appearance of the building.

#### COURSES MSc 1

MADD Design Project	12 ects
Models and Facades	3 ects
Making Architecture	3 ects
Delft lectures on Architecture	3 ects
Delft lectures on History	3 ects
Delft lectures and seminars	6 ects

## MSc2



### BADD / GLADD

Building, Globalisation and Design Development

Sustainable office building within a ‘generic’ framework.

The design assignment is an office building, a semi public carpark and a bus terminal at the Piet Heinkade in Amsterdam. Your client wants, of course, a beautiful, efficient and easily rentable building, but the user is yet unknown.

The commission portfolio in commercial and industrial building (and thus for architects) consists largely of office buildings, where the volume and the program are often, for the most part, determined. In this MSc2 free-elective design project the student will learn how to develop such a generic building, where sustainable issues are an implicit part of the design. It will satisfy the need for a studio that can provide the necessary knowledge and opportunities to practice generic sustainable design. The aim is to achieve an inspiring interplay among architectural design, the materialization of buildings and the public’s mandate for a sustainable world! By means of this design project you will become acquainted with a design process that is directed towards the architect’s practice – your future! In practice, aspects such as “generic building,” “efficient building methods,” “market conformity gross/net relations,” “cost per square meter” are important key concepts, as well as efficient energy use and durability. Also the directly involved parties (contractors, project developers, advisors, government) might have yet their own set of rules, restricting the design space. The challenge lies then naturally in making an interesting architectural design within this real “generic” framework. All architects are confronted with this reality in their individual careers. This design assignment tries to prepare you for such challenges as much as possible; in other words, a supple, anticipative design process as opposed to one where problems are solved after the fact.

#### COURSES MSc 2

BADD/GLADD Design project	12 ects
Smart & Bioclimate Design	3 ects

## MSc3/4



### TALL

Tall building design

A 1km x 1km territory in Beijing metropolitan area for 100.000 inhabitants.

Vertical City Asia, Multidisciplinary Master Studio – design competition with the theme: ‘Everyone breathes fresh air’

In an age of ever increasing urbanization with massive migrations from the countryside to the city, Asia is at a cross roads. Either existing urban architectural models will continue to be recycled to accommodate increased populations with devastating effects on land, infrastructure, and the environment or new models of urban architecture will be formed to take on the specifics of Asian urban development. A 1km x 1km territory in the Beijing region filled with 100,000 people living and working sets the stage for tremendous research and investigation into urban density, verticality, domesticity, work, food, infrastructure, nature, ecology, structure, and program -- the very tenants of urban architecture compressed into a crucible of urban and architectural invention.

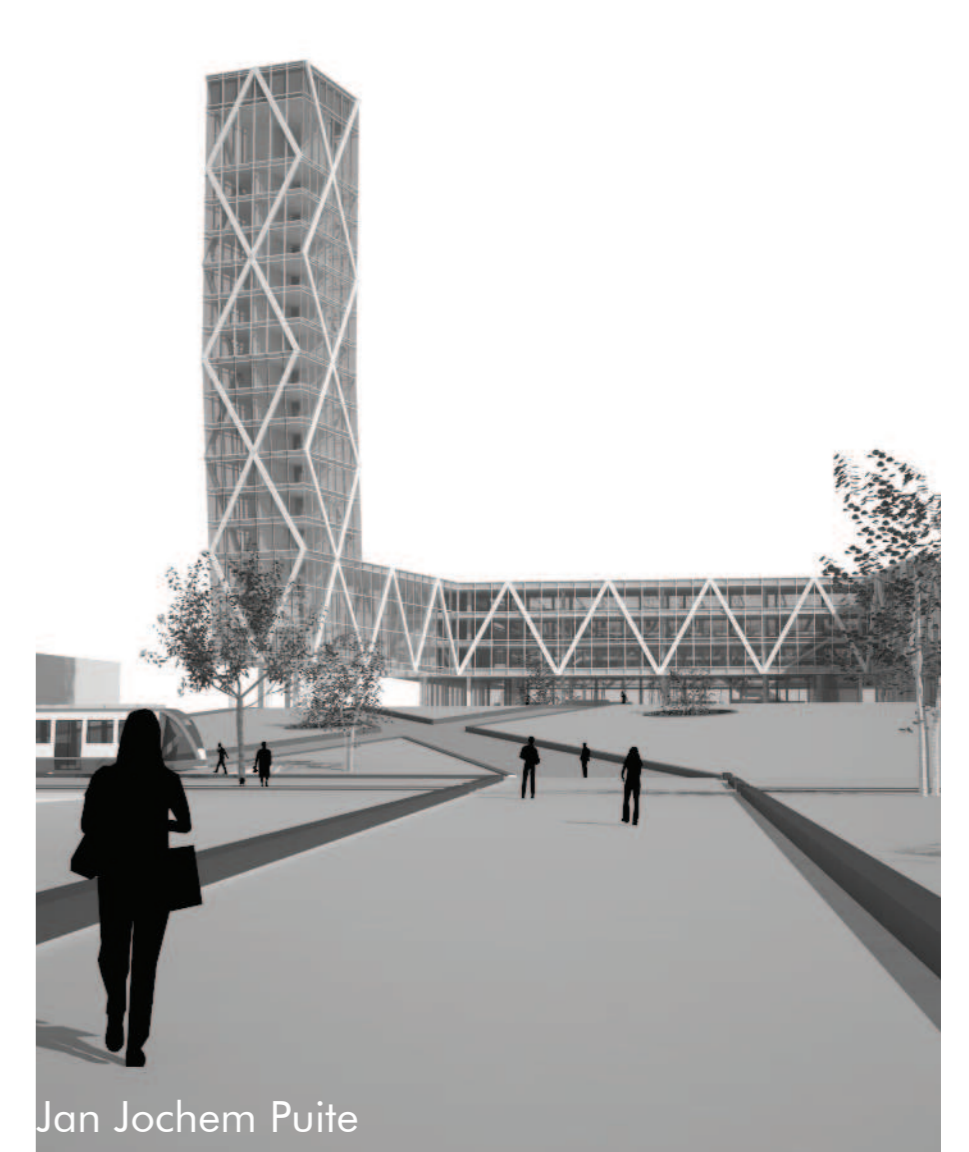
Competitors are design studios from 11 schools of architecture in both Asia, Europe and North-America. Each participating school can nominate two competition entries. One teacher and two students are invited to the award seminar in Singapore, with lectures by the five members of the international jury and the ten international teachers. Prices are € 8.500, € 5.700 and € 2.800.

The TU Delft multidisciplinary studio will involve students in the last year of their Master studies in Urbanism, Architecture and Real Estate & Housing. Aspects to be researched are future design, urban density, physical and social sustainability, feasibility and so on. The start in January 2011 will be an intensive design workshop; the competition entry has to be sent in by the end of June 2011. The emphasis during the first semester is on group work for the design and its argumentation; during the second semester students will finish their Master thesis in Architecture.

#### COURSES MSc 3

TALL Vertical City Asia	18 ects
Arch. and Urban Analysis	3 ects
Smart & Bioclimatic Design	3 ects
The future Envelope	3 ects
High Rise Models	3 ects

## MSc3/4



### SADD

Strategic Architectural Design Development

UN Headquarters for the committee of sustainability in New York City.

The graduation lab ‘Strategic Architectural Design Development’ teaches students to work not only on the development of their ideas and a conceptual design, but also to seek strategic design input for this design development.

In this graduation lab students will design either a Science Business Center within Technopolis (Delft) or the UN Headquarters for Sustainability in New York.

The studio will continue the urban design development of the Technopolis Masterplan resp. Manhattan Midtown, based on the results of former studios and on the actual needs. Prof. ir. K. Kaan is the supervisor of the Technopolis Masterplan development, and will thus be able to give first-hand input into the studio. In this way the design project has a strong relation to practice, and can thereby be an ideal bridge between your studies and the start of your architectural career.

For the combined graduation version A+BT (MSc3/4/5), students will conduct building technology research in their MSc4 while simultaneously continue working on the architectural design. This research will be an integrated part of the design project, intended to bring the architectural design to a higher level. The Architecture + Building Technology combined graduation lab is only offered by the Chair of ‘Materialisation and Design Development’.

#### COURSES MSc 3

SADD Design Project	15 ects
The Future Envelope	3 ects
Smart & Bioclimate Design	3 ects
Strategic Models	3 ects
Lecture Series Research Methods	6 ects

# MATERIALIZATION

## MATERIALIZATION AND DESIGN DEVELOPMENT

Architecture MSc 1, 2, 3 & 4

The making of any architectural work starts with an idea...

...however, between the first notions and the final work lies an ocean of possibilities and choices.

Design Development is about recognizing those possibilities and making the right choices, using the right tools and input at the right moment on a proper scale. As such, the design develops energetically and smoothly, and the work acquires a clear and mature coherence and expression.

The chair of Materialisation emphasizes the importance of the craft to develop ideas from paper to material reality.

Chair of Materialisation and Design Development [www.materialisation.nl](http://www.materialisation.nl)

Illustration : Ferdinand Freeke / David Struik

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