Study guide pre-master Architecture & Technology

Amsterdam Academy of Architecture

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PRE-MASTER ARCHITECTURE & TECHNOLOGY

Students who have completed a higher professional training in architectural design or interior architecture can follow the pre-master Architecture & Technology. This pre-master is intended to bring technical knowledge to the required standard so that students with a different entry level in constructional and structural fields can begin the architecture study at the Academy. In one semester, architectural and structural knowledge is imparted both on a theoretical level and by means of exercises. The pre-master Architecture & Technology is successfully completed once all examinations about the theoretical components and the design components have been passed. Admission may be granted to the Architecture degree programme at the Academy of Architecture with a positive recommendation. Please note: passing the pre-master Architecture & Technology does not grant automatic admission to the Master in Architecture. Just as with other technical Bachelor's students, a portfolio and motivation letter will have to be submitted. On the basis of this, the definitive admission will be assessed and take place.

Course details

study load: 15 ECTS
period: End of August - January and January - June
language of instruction: English
coordination: Jos Rijs
registration: via the website

Learning objectives

During the pre-master Architecture & Technology, you will work on five learning objectives:

1. Increasing your general basic architectural knowledge, as a result of which more insight will arise into how buildings are made: from building systems in various materials down to the details.
2. Knowledge and insight into mechanics and construction; ability to understand internal and external forces in the interaction between structure and structural members.
3. Increasing your building physics/physical knowledge of buildings in relation to the design process.
4. Learning to make detailed architectural drawings of various components of buildings independently.
5. Developing various presentation techniques which you will use to communicate your design.

Prior education

In order to be able to start the pre-master, you will need the following prior education: Bachelor's degree in Architectural Design, Interior Architecture, Spatial Design, Urban Interior Architecture, Public Space (or similar). Other prior qualifications within the domain of Urbanism, Architecture or Constructional Engineering or the Visual Arts will be assessed on the basis of a CV, portfolio, motivation letter and, if necessary, an interview. In addition, you will have mathematics A *(wiskunde A)* at minimum senior general secondary education *(havo)* level or mathematics C *(wiskunde C)* at pre-university education *(vwo)* level.

Admission

For admission to the pre-master Architecture & Technology, you must send us your CV, your motivation letter and your portfolio. Based on this, we will assess whether you are suitable for the pre-master.

Registration

Registration is possible via the online application form at www.academyofarchitecture.nl. You have until autumn 2024 to register for the second semester 2024-2025. You have until spring 2025 to register for the first semester 2025-2026. For the precise deadline, please visit www.bouwkunst.ahk.nl.

Non-EEA/EU students may only participate in the pre-master in the second semester from January to June due to visa regulations. The pre-master will go ahead in the event of a minimum number of eight participants. You will know whether the pre-master will definitely be going ahead no later than six weeks before the start of the pre-master.

Timetable

The pre-master Architecture & Technology has three fixed lesson times per week:

Monday from 19:30 - 22:30
Wednesday from 19:30 - 22:30
Friday from 09:30 - 16:30

In addition, we occasionally organise activities during the day on Tuesday and on Wednesday.

PASSION

If you would like to become an architect and are interested in architecture, but have not completed the right technical preparatory course at Bachelor's level, then the pre-master Architecture & Technology is something for you. During the pre-master, you will be familiarised with basic knowledge about building and construction technology, structures and building physics. You will be introduced to the professional practice through excursions to architectural firms and buildings (under construction) The pre-master is taught by lecturers from the professional practice, in the same academy atmosphere as the Master's programme; an inspiring environment for a training as an architect.

Programma

Technology - Tools 0

Learning objective: Expand your general architectural knowledge and become familiar with the technical language (the architectural vocabulary). Develop spatial insight into the interplay of forces of buildings. Learn to read and translate into a spatial image of 2D detail drawings and detail photos (develop an analytical eye). Develop an architectural detail independently. Define the architectural significance of the structure and an architectural detail.

Assignment: A series of drawing assignments will be done during the lessons. Some drawing assignments will be technical and precise: the level of elaboration of a basic architectural detail. Others will be in outline: the quick 'doodle' that an architectural designer makes in order to note down and test his or her ideas.
During the drawing assignments, a lot of attention will be devoted to making architectural detail drawings (2D and 3D/ axonometric projection).

Method: In the first 7 lessons, an introductory lecture will be given about an architectural or structural subject. This will be followed by a drawing assignment that relates to the subject of the lecture. During the lesson, work will be carried out on the drawing assignment, drawn by hand. The results will be discussed at the end of the lesson and, if necessary, completed before the following lesson.

From lesson 8, the Tools building will be introduced: a schematic building that is elaborated on structurally and architecturally in ten details. In the Structural Design course, the elaboration of the structure of this Tools building will be supervised separately. Tools 0 will be closed with a final presentation of the structural and architectural elaboration of the Tools building. The week after the final presentation, there will be a feedback moment between students and lecturers, where the presented work will be discussed in terms of content.

Result: sketch book and scans A3 format with final discussion
Duration: 16 weeks / 1 half-day per week
Credits: 4 ECTS

Technology - Structural Design

Learning objective: Gain insight and knowledge about the relationship between the load-bearing structure (applied constructional engineering) and the design of the structure. Be able to transform architectural principles into a structural design. The focus in this block will be on gaining insight into how structures behave with various design principles.

Subjects to be addressed:

- The logic of building structures (analytical skills)
- Characteristics of building materials and load-bearing structures (materials science)

XL-XS

Designing buildings does not stop with a floor plan or a facade. Construction, material and detail are just as important in determining the architectural significance of a building. During this pre-master, you will become acquainted with building structures, building materials and making detailed plans. With more structural knowledge, you will be better able to make choices in order to arrive a considered design that reinforces the idea of the building on all scale levels. In the second part of the semester, there is a design assignment where a building will be designed on difference scale levels, from the whole to architectural detail.

- Designing with sufficient strength, stiffness and stability (technical insight)

The series of 9 lessons forms the introduction to the Structural Design course.

Format: The course material will be offered in seminars and during the visits to building structures.
To prepare, the student will carry out literature research prior to the lesson.

The relationship with the design assignment: the knowledge acquired will enable the student to determine and elaborate the structural design of his or her own design from Tools 0.

Method: During the lessons, the student will gain knowledge by trial and error through drawing work and model building with the help of the Mola Structural Kit. Students will work individually and as a group. Students must combine the theory learnt and practice in homework assignments.

Result: Assessment with final presentation
Duration: 10 weeks + presentation / 1 half-day per week
Credits: 3 ECTS

Technology - Building physics

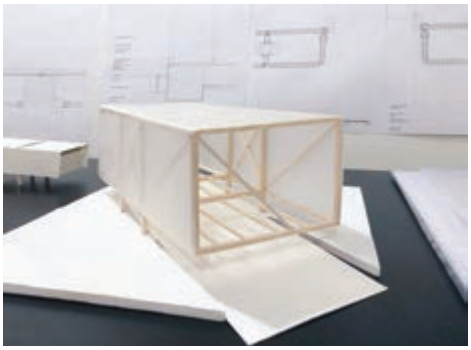
Learning objective: During the Building Physics course, you will learn to gain knowledge and insight into the building-related (building) physics aspects in relation to the design process, the building process and the use of buildings. The aim is to develop basic knowledge in terms of thermal, hygric/hygroscopic and acoustic characteristics of a building. In addition, natural light, energy consumption, electrical and mechanical engineering, and sustainability will be examined.

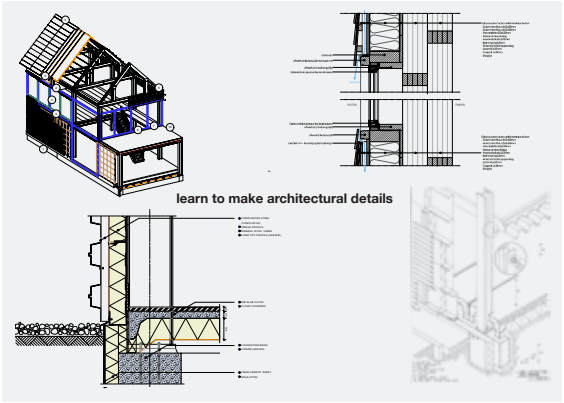
Subjects to be addressed included:

- Heat
- Moisture
- Lighting
- Acoustics
- Ventilation and Fire Safety
- Systems
- Comfort
- Sustainability

Method: Nine lectures will be given. Exercises will also be done during the lectures and homework given. You will also give a presentation regarding architecture, building physics and sustainability

Assessment: by means of one written examination afterwards
Duration: 9 weeks + examination / 1 half-day per week
Credits: 3 ECTS




learn to make architectural details

COMMUNICATION

In order to design buildings, you need spatial insight. This applies to a building as a collection of spaces, but also to a structure or to architectural details. How do all these different materials come together structurally and how are they linked to an architectural detail?
At the beginning of the pre-master, you will be trained in spatial thinking through drawing exercises based on the architectural translation from 2D to 3D. You will learn to analyse and communicate a spatial structure in a simple and clear manner. This will be followed by various assignments where you will work with freehand drawings, (scale) drawings, scale models etc. By communicating, discussing and presenting your work, you will reflect on your work and you will learn to continue honing this further.

Design - Design Assignment

The design assignment will take place in the city of Amsterdam. A design for a live/work home for a specific client. To what extent do the materials in the immediate surroundings and the profession of the client influence the design of the live/work home. Work will be carried out on the design on different scale levels, including structural and principal details, and scale models will be used to communicate. The design assignment in the first semester is together with the students from the minor in Architecture.

Result: design in scale models, drawings and photography
Duration: 7 weeks + final presentation / 1 half-day per week
Credits: 3 ECTS

Inspiration - Excursion

Together with the lecturers of the pre-master Architecture & Technology, you will visit a building under construction in Amsterdam together with an architect, a user, a resident and someone else who is closely connected with the project and can talk about it enthusiastically. Excursions in the first semester are together with the students from the minor in Architecture.

Result: drawings, notes and photos
Duration: 2 weeks / 1 half-day per week
Credits: 1 ECTS

Inspiration - The architect and the building

Over the course of 4 afternoons, the way in which an architect works from idea to building will be explained and examined. It will begin on the architect's table where a project will be explained on the basis of drawings, scale models and stories. The project will subsequently be visited together with the architect. It will sometimes be a completed project, while other times it will still be under construction. The learning objective is to gain knowledge with regard to the translation of an idea or a fascination into the creation of a design and the development of a method where the emphasis lies on the integration between the concept and thinking in terms of solutions. The architect and the building in the first semester is together with the students from the minor in Architecture.

Result: notes and annotations
Duration: 3 weeks / 1 half-day per week
Credits: 1 ECTS

Assessment

You will complete the pre-master with a pass if you have passed all examinations, both about the theoretical and the design components. Compulsory attendance applies to all programme components. If you are not able to attend, please report this beforehand to the coordinator and lecturer concerned or, if this is not possible, to the study secretariat of the Academy of Architecture: avb-premasters-minors@ahk.nl

A Master's degree after your pre-master?

Have you successfully completed the pre-master Architecture & Technology and received a positive recommendation from the lecturers? In that case, you will have a very good chance of being directly admitted to the Master in Architecture at the Academy of Architecture.

Facilities

Academy premises

During term time, the opening hours of the premises are:

- Monday to Thursday: 09:00 - 23:30
- Friday: 09:00 - 19:30

Everyone must have left the premises no later than fifteen minutes before closing time. The premises are closed during the Christmas holiday and for three weeks during the summer holiday.

Canteen

The canteen is open on:

- Monday to Thursday: 17:30 - 23:00
- Friday: 09:00 - 19:00

Library

The library has a specialised collection in the fields of architecture, urbanism and landscape architecture. The material consists of books, maps, DVDs and magazines.
The opening times of the library are:

- Monday to Thursday: 16:00 – 21:00
- Friday: 09:00 – 18:00

Workshops

The model workshop is fitted with basic equipment and is in the first instance intended for students who want to get to work, but do not have the space or the equipment to do so at home. It is therefore not only a classroom but above all a workshop for the individual student. Students can also work on individual projects here. Students are only allowed to make use of the facilities of the workshop after they have received training. This training is scheduled in the curriculum. Certain machines can only be used under the supervision of the coordinator of the workshop. Please note the official opening times. This also applies to working with plaster.

Model workshop

The model workshop of the Academy is open on:

- Monday to Thursday: 09:00 - 22:30
- Friday: 09:00 - 19:00

On Fridays, an employee is present in the workshop for supervision and instruction, and work can be carried out with the heavier machines and in the plaster room. An appointment can be made to work in the plaster room with practice instructor Martijn Troost
via 06 51298911.

Working with new technologies

There is another workshop located at the Marineterrein in Amsterdam: the AHK MakerSpace. This workshop offers students the possibility to experiment with the newest technologies and machines, such as 3D-printers and laser cutters, in order to build, among other things, scale models, models and installations. Students gain access to the workshop with their student ID card after they have received training about the use of machinery and equipment, as well as about company emergency response (BHV). An instructor is present during the day.

AHK MakerSpace

The opening times of the MakerSpace are:

- Monday to Friday: 8:00 – 00:00
- Saturday: 9:00 – 18:00

Instructors are present:

- Monday and Tuesday: 09:00 – 21:00
- Wednesday and Thursday: 09:00 – 19:00
- Friday and Saturday: 9:00 – 17:00

Room schedule

The Academy works with the Iris application for scheduling lessons and rooms. The schedule can be viewed by all lecturers and students via the Iris app and by asking at reception. It is possible to reserve a particular room in advance. This can be done via reception during the day or via the caretaker's department in the evening. Study components may take place at other locations than on the Academy premises.

AHK account and email

The information for activating the AHK account will be sent to the email address that the student submitted at the registration for the minor. The student will receive this email no later than two weeks before the academic year begins, probably around mid-August. If the AHK account is not activated via this email, the account will not work. For questions about the AHK account or to report a problem, please send an email to helpdesk@ahk.nl or call +31 (0)20-5277752. All communication from the AHK and the Academy is via the AHK account. Please ensure, therefore, the account is activated before the study begins.

MyAHK

MyAHK (www.myahk.nl) is the primary means of communication to keep students informed about the day-to-day affairs at the Academy and the AHK.

Educator student information system

The student monitoring system Educator is available via MyAHK. Students can view their study progress and results in this system. The assessment forms can be seen at the end of each quarter in Educator.

Stages

The digital learning environment Stages is the online support for education at the Academy. Staff, students and lecturers are in contact with each other through this study platform in which all information regarding education is organised. Within Stages, students can build and design their own portfolio site in the form of a fully-fledged autonomous (WordPress) website.

AHK card

The AHK card is used as an access pass to the premises and as a library card. It is possible to pay for the coffee machine with a bank debit card.

Contact

Are you doubting whether you meet the admission requirements for the pre-master? Have you got questions about registering? Do you have any other questions? Please look on our website www.academyofarchitecture.nl or contact avb-studiesecretariaat@ahk.nl

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Do you more questions about the organisation and/ or the Master's programmes? Please see the online study guide via: www.academyofarchitecture.nl

Colophon

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