

Master program information

**Master program
Architecture, Building and Planning
2010-2011**

Contents

1. Program of the ABP Master's Course	5
1.1 General	5
1.2 Key characteristics of the course	5
1.3 Design oriented and research-driven	5
1.4 Elective course elements in the Master's program	5
1.5 Practical experience	5
1.6 Final Attainment Level of the Master of Science	6
1.7 Free or flexible degree Master's program	6
1.8 The graduation process for combined ABP Master's specializations	7
1.9 The ABP Master's Portfolio	8
2. ABP Master's Program Regulations	9
2.1 Master's courses admission requirements	9
2.2 Compensation regulation relating to the Master's program	9
2.3 Master's Cum Laude regulation	9
2.4 ABP Master's Study Sequence	10
2.5 Graduation regulations	10
2.6 Fraud	13
3. Program of the ABP Master's course	15
3.1 Architecture Course program year 1, generation 2010	15
3.2 Building Technology	16
3.3 Construction Technology	17
3.4 Design and Decision Support Systems	18
3.5 Physics of the Built Environment	19
3.6 Real Estate Management and Development	20
3.7 Structural Design	21
3.8 Urban Design & Planning	22
4. Transfer programme for Dutch HBO graduates	23

1. Program of the ABP Master's Course

1.1 General

In accordance with article 1.5 of the Education and Examination Regulations, the course, the examinations, and the Final Examination are held in English.

For detailed information on the Master's specialisations and the Master's project work, see the Department internet site where much of this information is to be found:

<http://w3.bwk.tue.nl/nl/organization/>

1.2 Key characteristics of the course

Education in the Architecture, Building, and Planning (ABP) Department is research-driven and design-oriented. Research and design activities are interwoven in the program of education. The student is taught to approach relevant architectural problems in a constant interaction between analysis and synthesis. This means that the education is not, a priori, aimed at training the student for a specific profession. In the context of a specific provision of architectural disciplines, the student is taught to be able to take a radical approach to problems and innovations (research) and to be able to develop integral solutions (design).

The ABP courses at the TU/e are characterised by their interdisciplinary nature. In the various specializations of the Master's courses, the student is given the opportunity to follow subjects in other Groups within and outside the Department. In this way, the student is able to learn from within his own discipline to understand the problems of other disciplines.

During the study, each student is given the responsibility for his own learning process. For this purpose, the use of a 'student portfolio' is introduced. In the Master's course of the ABP Department, every student is allocated a mentor for the development of his portfolio. Each Master's specialisation offers a certain amount of room for elective course elements. This space can be used for taking subject courses, and can also be used, for example, for setting up a work placement project.

1.3 Design oriented and research-driven

In the project driven education in the Master's courses, the emphasis is placed on developing a design orientation in the student. In this context, Designing is an activity aimed at generating solutions to problems of a complex nature. In this learning process, analysis and synthesis are indivisibly linked. Analysis is associated with scientific method and techniques; synthesis is based on the scientific approach to design processes and modelling in general.

Inherent in the research-driven education that is fundamental to the 'Master of Science' degree is that:

- students gather knowledge independently, and develop insight and skills in order to apply this knowledge in the project education of the Master's phase
- the final project has a direct relationship with research projects and research activities.

Students who want to make an informed choice for their final project work are therefore well advised to acquaint themselves with the research activities of the various groups in good time.

1.4 Elective course elements in the Master's program

The course elements of the Master's program are divided into compulsory and elective elements. The elective elements are available only in the Master's level part of the TU/e curriculum. Furthermore, the elective elements must be selected with the approval of the Examination Committee. The elective elements form part of the student portfolio.

1.5 Practical experience

It is desirable that, during the Master's courses, students have the opportunity to gain workplace experience, and that this should form part of the study. The student has various possibilities for achieving this.

- Master's project in a working environment
- Project on-the-job[BAB1]

Master's Project in a Working Environment

A student can undertake one Master's Project in a Working Environment. This means that, after consultation with and approval by a lecturer authorised to conduct the final examination of the Master's project, he carries out an assignment (that in terms of learning objectives, content, final result, and extent, is equivalent to the relevant Master's project) at a body outside the TU/e. This assignment is assessed by the lecturer of the Master's project. If the result is satisfactory, the assignment is recognized as a Master's project.

Project on-the-job

Alternatively, a student can obtain his elective ECTS credits by carrying out a project in a working environment. This means that he carries out a project at a body outside the TU/e. For this purpose the elective course element Project on-the-job has been developed. The course element Project on-the-job is a course element that is different for every student, depending on the competences that the student wants to develop in the flexible part of the curriculum. The portfolio tutor is the lecturer authorised to conduct the final examination for the subject. He must approve the preferred project on-the-job and also assess it (possibly together with a second lecturer).

A student who wishes to make use of a Project on-the-job course element, informs his portfolio tutor about this. The latter provides him with the Project on-the-job Regulations. The preferred Project on-the-job must be carried out in accordance with these regulations.

Abroad

Students who wish to undertake a project abroad must first contact Mevr. H.A.M. Houben-Verhees, coordinator of International Exchange. She can advise them on the procedure to be followed.

1.6 Final Attainment Level of the Master of Science

To achieve the final attainment level the master of science in Architecture, Building and Planning:

- is University educated within the domain of 'science, engineering & technology',
- is competent in the relevant domain-specific discipline(s), that is, possesses sufficient knowledge and skills and the right attitude for embarking on a career at academic level in the (international) architectural profession or for entering into a(n international) research or design school,
- can undertake independent research and design,
- is able, when necessary, to involve other disciplines in his own research, and has the appropriate attitude for this,
- has a scientific approach to problems and ideas of a complex nature,
- has intellectual skills and is capable of critical thought, logical reasoning, and judgement,
- can communicate at international level about the results of his own learning, thinking, and decisions,
- is aware of the temporal and social context of science and technology (understanding and analysis) and takes these fully into account in his scientific work,
- has, in addition to a recognisable domain-specific profile, a sufficiently broad basis to be able to undertake interdisciplinary and multidisciplinary work. Here, multidisciplinary means: involving other relevant disciplines that are necessary for solving the (design or research) problem,
- actively seeks new application possibilities, and in the process takes account of the social context.

1.7 Free or flexible degree Master's program

It is also possible for the student to plan a two year 'personal' graduation program (the 'free' or 'flexible degree' Master's program) in consultation with the Examination Committee and the graduation supervisor. A free programme must ultimately be approved by the Examination Committee. See also article 4.3 section 1 and annex 5 of the Education and Examination Regulations for the ABP master courses and article 2.1 of the Examination Rules and Procedures 2010-2011.

The request can be dealt with only if a form, specially designed for this purpose, is obtained from the Educational Office and is returned, completed in full, and signed, before the closing date specified in the Education and Examination Regulations (see article 4.3, section 1 of the Education and Examination Regulations for Master's courses, ABP);

In all cases, the preferred graduation Professor or associate Professor of the ABP Department of the TU/e must support the request. There must also be substantive support from the other University;

The individual program must contain elements of a University Master's course external to the ABP Department of the TU/e, that represent a minimum of 20 and a maximum of 40 ECTS credits;

Graduation takes place under the full responsibility of the ABP Department of the TU/e, which also issues the diploma. This means that the student must conform to the graduation regulations of the TU/e ABP Department.

1.8 The graduation process for combined ABP Master's specializations

(See also: annex 6 of the Education and Examination Regulations for the ABP master courses 2010-2011)

These regulations on combined study / graduation relate to all possible combinations of Master's specializations in the Architecture, Building, and Planning courses. The basis of these regulations is that a student registers for a main specialization but also takes all compulsory elements of a second specialization (where, in principle, the room for elective course elements is used to complete part of the obligations of the other specialization). In this case it is unavoidable that extra ECTS credits must be earned for the combined study.

Extra ECTS credits

Students undertaking a combined study must earn a minimum of 16 ECTS credits more than the 120 ECTS credits required for the normal Master's specializations (so that the combined program comes out at a minimum of 136 ECTS credits).

Subjects

The student must satisfy all subject requirements of both specializations.

Projects

Master's projects in the first academic year:

Both Master's projects are organized in such a way that components of both specializations are clearly included. Assessments are carried out by lecturers from both specializations, and both specializations have equal weight.

If it is not possible to arrange for combined projects (for example, for organizational reasons), the student can also choose his Master's Project 1 and Master's Project 2 from the normal selection of the main specialization, and then follow the procedure described below before starting projects in the second year.

Master's projects in the second academic year:

The second year Master's project and the Graduation project are always combined projects with supervision from both specializations (and with a Graduation Supervision Committee that meets the requirements of both specializations and in which both specializations have equal weight).

Students who have not undertaken combined Master's projects in the first year must agree the combined study with the Graduation Supervision Committee before starting. By evaluating the results of both first year Master's projects, the Committee assesses whether there is a realistic chance of the combined study being completed successfully. If, on the basis of the project results shown, the Graduation Supervision Committee is not convinced that a combined graduation project is likely to be successful, in consultation with the student this committee can:

- base their decision on an extra project with recognisable components from both specializations. As a guideline, this extra project will have a value of 8 ECTS credits, and will be supervised by lecturers of both specializations and can count towards the elective ECTS credits.
- alternatively decide that the student can begin with the graduation project, and that approval of a combined study be postponed to the initial colloquium. After this initial colloquium the committee will take a decision on the basis of the demonstrated approach and results achieved up until the initial colloquium.

Detailed programs

For a number of combinations of Master's specializations, program outlines are available that have been worked out on the basis of these regulations and can be requested from the secretariats of the units, the education coordinators of the Master's specializations, and the study advisor.

1.9 The ABP Master's Portfolio

Introduction

In the Architecture Building and Planning Master's courses an allowance of three ECTS credits is included for portfolio education. The subject is called 7PFO3 Master's Portfolio. The effort that the student must expend for this is spread over the first three semesters. The ECTS credits are actually awarded in the third semester. The graduation professor issues the ECTS credits after consultation with the portfolio tutor.

Themes

The portfolio education in the Master's course has two themes: Competence development and Presentation. In the first year a start is made with competence development. At the end of the first year or the beginning of the second, the student presents himself to the group where he wishes to graduate. The student's competence development continues through the second year.

Competence development for the 2010-2011 intake incl. HBO intake

The goal is to choose competences the student wants to develop and to carry out activities to actually develop those competences. An introductory lecture will be given at the beginning of the semester. See the timetable. Students must register at Studyweb at the start of the semester. Coaching is carried out by the portfolio tutor at the request of the student.

Presentation, 2009-2010 intake

Before starting the graduation phase the student holds a presentation for the group of his preferred graduation professor. In this he describes his Bachelors history, the competences that he has developed in (the space for elective course elements) the first year of the Master's phase, and which specific competences he still wishes to develop in the graduation project. It is to be regarded as an introduction and interview. He also makes a website where he discusses the competences he has developed. The Presentation course element is, in principle, a self study element. In the period leading up to this, the student can get instruction and guidance from the specialist on presentations. The student can work out the content with his portfolio tutor.

Portfolio Introduction workshop

At the beginning of the Master's phase, in addition to the 7PFO3 Master's Portfolio course element, students can follow a Portfolio Introduction workshop. This workshop is voluntary. During this workshop, the subject Competence is looked at more closely, and a start is made with writing a portfolio plan. In order to participate, students must register via the e-mail address given below under Information stating the preferred graduation direction. Further information will be made available as soon as possible.

Information

Further information can be obtained from the Portfolio coordinator, ir. M.P.G. Heijman, tel. 2293, e-mail portfolio.bouwkunde@bwk.tue.nl

2. ABP Master's Program Regulations

2.1 Master's courses admission requirements

The following Bachelors certificates from the indicated institutions for higher education give direct admission to the Master's course.

- ABP (TUD- Technical University of Delft, TU/e)

The following Bachelors certificates from the indicated institutions for higher education give admission to the Master's courses with a maximum deficit of 30 ECTS credits:

- Civiele Techniek (TUD, UT- University of Twente)
- Industrieel Ontwerpen (TUD)
- Industrial Design (TU/e)
- Installatietechnologie (TU/e)
- Technische Innovatiewetenschappen (TU/e)

HBO graduates of the courses Bouwkunde/ABP, Civiele Techniek, and Bouwtechnische Bedrijfskunde are admitted to the Master's course after completing a transition programme. (See Appendix 3 to the Education and Examination Regulations for ABP Bachelors courses 2010-2011. And the appendix under chapter 4 in this brochure)

Students from all other courses at home or abroad must submit an admission application to the Departmental Admissions Committee: secretary drs J. Blankestijn (J.Blankestijn@bwk.tue.nl)

2.2 Compensation regulation relating to the Master's program

According to article 4.2 of the Examination Rules and Procedures 2010-2011, all course elements that form part of the Final Examination of the Master's course must be completed with a pass grade. This means that that no single grade 'five' is acceptable in the course elements and projects.

HBO graduates who follow the transition program prior to the ABP Master's courses are allowed to have a single grade '5' in the transition program for a subject with a maximum value of 3 ECTS credits.

2.3 Master's Cum Laude regulation

According to article 7.2 of the Education and Examination Regulations for the Master course 2010-2011, a Master's cum laude graduation must satisfy the following conditions (also referred to as the special qualifications).

The Examination Committee awards a diploma "cum laude" when the arithmetic average grade achieved by the student for those course elements taken by the student as part of the course is '8' or higher, with the exception of the graduation project, which must be graded as a '9' or higher. Furthermore, none of the completed course elements may be graded lower than a '6'.

2.4 ABP Master's Study Sequence

Introduction

The Education and Examination Regulations 2010-2011 contains various rules that specify that you must work through the course in a certain sequence. There are a number of reasons for this.

- There can be content dependencies between course elements.
- The entry to a following phase can be subject to rules.
- Some rules are intended to prevent delaying tactics.

For a complete overview of the rules see annex 3 of the Education and Examination Regulations for the ABP course 2010-2011 .

Without repeating all the rules once again, there follows an explanation of the consequences that these have for the sequence in which you work through the course.

Admission to the ABP Master's Phase

'Own' Bachelors

Many students who undertake the ABP Bachelors course continue on to the ABP Master's course. You are allowed to start this if you have a (provisional) registration for the ABP Master's. You must apply for the provisional registration yourself, and you are accepted if you have obtained 160 ECTS credits in the Bachelors phase, including all the projects and Portfolio 3. You are fully registered when you have been awarded the Bachelors diploma.

HBO intake

Students who are following the transition program are allowed to participate in ABP Master's examinations if they are registered as probationary Master's students. You must apply for this registration yourself, and are accepted if you have gained 15 ECTS credits of the transition program. You are also allowed to participate in Master's project work if you have also completed your transition project.

You can be registered as a probationary Master's student for a maximum of 12 months. You are given full Master's registration when you have completed the transition program.

Admission to the second year of the ABP Master's Phase

'Own' Bachelors

You are allowed to start the second year of the ABP Master's Phase if you have obtained the ABP Bachelors diploma.

HBO intake

Students in this category are allowed to start the second year of the ABP Master's Phase if they have completed the transition program.

Graduation project

You are allowed to start the graduation project if you have successfully completed the other Master's projects, Learning Portfolio 4 and the Master's Portfolio.

Enforcement

The policy is aimed at ensuring that students comply with this sequence. This means that there will be increasing checks on whether you are allowed to participate in project work or take examinations. It is therefore possible that you might be notified that you are not allowed to start a project or take an examination. If you are of the opinion that this is unjustified, you should consult the study advisor. You can explain your situation to him/her. The Director of Education will then decide whether there is good reason to admit you to the project or examination after all.

2.5 Graduation regulations

(Annex 3 to article 4.4 of the Examination Rules and Procedures 2010-2011)

Prior to the graduation project, a graduation plan must be written.

The purpose of the graduation phase is to achieve the final attainment level of the Master's course. The student must be registered as a graduation student by means of the appropriate forms that can be obtained from the Educational Office (VRT 2.11).

Before starting on the graduation phase, the student must have completed the following elements of the Master's course with a pass grade:

- the two projects from the first year of the Master's course, as well as the project from the first semester of the second year of the Master's course,
- all the compulsory course elements of the Master's program.

During the graduation project the student holds public colloquia. Note the following points.

- It is conceivable that there are several evaluation points during the graduation process. These are recorded in the graduation plan.
- In any case the student holds the final colloquium. Here, to round off the graduation project, the results achieved are presented.

Final colloquia must be announced in advance

The Graduation Supervision Committee

On commencement of the graduation project, the student must establish a Graduation Supervision Committee consisting of at least three members authorized to conduct the Final Examination, of whom at least two are members of the academic staff of the ABP Department of the TU/e. At least one member of the Graduation Supervision Committee must be a Professor or Associate Professor and occupy a Chair or Associate Professorship in the competence area of the graduation project. The Professor or Associate Professor is chairman of the Graduation Supervision Committee. The chairman oversees the composition of the Graduation Supervision Committee. The Examination Committee is responsible for the final approval of the Supervision Committee.

One member of the Graduation Supervision Committee can be an external expert. The external expert must be a subject specialist who does not work in the ABP Department of the TU/e. Normally the external expert must be a University graduate. However, in special cases a HBO diploma is acceptable if the external expert possesses a demonstrable, high level of expertise. The chairman of the Graduation Supervision Committee makes sure that the external expert meets these requirements. He will submit a request to the Examination Committee using an appropriate form.

The members of the Graduation Supervision Committee evaluate the graduation project. Any persons who have been involved in the graduation process may act only as advisors. They have no formal influence on the assessment.

In the case of graduation projects of the Master's course in Building Services and in Construction Management and Engineering, one of the members of the academic staff of the ABP Department can be substituted by a member of the academic staff of one of the other relevant Departments of the TU/e. Requests to deviate from the above must be submitted to the Examination Committee of the ABP Department of the TU/e, with argumentation and with the approval of the chairman of the Graduation Supervision Committee.

In the evaluation of the graduation project the following aspects are taken into consideration:

- the product: the quality of the content of the project,
- the process: the organization and implementation of the project, and their planning,
- the presentation: the manner of presentation and reporting.

If weighting factors relating to these aspects must be taken into account, they must be made known in advance and be recorded in the graduation plan. If that has not been done, there is no question of weighting factors being applied in the evaluation of the aspects mentioned.

Each member of the Graduation Supervision Committee carries the same weight in the assessment. The student who is graduating is informed of the arguments that have formed the basis of the assessment.

The following requirements must be met before a student's graduation is considered in the meeting of the Examination Committee.

- The student must register at least four weeks before the meeting of the Examination Committee via internet at <http://owinfo.tue.nl/>. See the closing dates that are listed there for registering for the Final Examination.
- All the assessments of course elements, project work (including the graduation project), and portfolio elements must be submitted to the Educational Office at the latest two weeks before the meeting of the Examination Committee.
- All requirements of the graduation project must have been met, that is, there must be an assessed thesis and a final colloquium must have been held,
- The approved thesis with signature, as well as the article, must be submitted to the Educational Office at least two weeks before the meeting of the Examination Committee.

According to the Education and Examination Regulations, there are at least three opportunities per year for taking the Final Examination. In principle, the Examination Committee convenes a meeting on one of the last five working days of every month, excluding the academic holidays, at which it determines the result of the Final Examinations of the students who have registered for it in accordance with the rules. The dates of these meetings are announced centrally on behalf of the Examination Committee before the beginning of the academic year.

The student receives the final diploma (in Dutch and English) only if the student has registered, and the Examination Committee has declared that the student has passed.

Guidelines for the thesis

A report of the graduation project is made in the form of a written thesis, possibly supplemented by

illustrations or other media.

The thesis can be submitted not only as 'hard copy' (on paper) but also digitally via an appropriate software environment. *The student must produce a summary in English.*

The thesis must meet the following requirements.

1. Title page

The thesis must be provided with:

- a title (the (sub)title must indicate accurately the subject of the thesis; the thesis becomes accessible for other interested parties via key words taken from the title),
- surname and initials of the student and his student number,
- graduation date,
- names of the members of the Graduation Supervision Committee,
- the name of the course and the University.

2. Summary

The Summary must summarize the main lines of the thesis. *The Summary must be readable independent of the thesis and be written in English.*

3. Contents List

The Contents List reflects the structure of the thesis, organized in chapters and sections. Appendices, figures, tables, etc. must be shown in the Contents List.

4. Introduction

The Introduction states:

- the problem definition / objective of the thesis,
- the practical / social and/or theoretical / scientific importance of the thesis,
- the organization of the thesis.

5. Approach

The thesis includes a description of the working method used. What theories / methods / techniques have been used to achieve the goal of the research and/or design, and how have these theories / methods / techniques been applied during the graduation project?

6. Activities

The activities that have led to the final results are discussed.

7. Results

The results obtained are presented in the thesis in a well organized manner.

8. Conclusions, recommendations, and/or discussion / reflection

If the graduation project lends itself to this, the most important conclusions resulting from the project should be stated, and recommendations for possible follow-up projects should be given. In any case, the project must be critically evaluated (has the objective been achieved, what could have been done better, etc.?)

9. Literature

The thesis includes a list of references to the literature used and other sources consulted. (See also the Rules for Citations and References, below).

Rules for Citations and References

The use of another person's work is permitted as long as the sources are reported clearly. If a student does not report sources consulted, he is guilty of plagiarism. The following rules apply for Citations and References.

1. Making use of a spoken text

The quoted text can be presented in italics between quotation marks, giving the name of the person cited and, if known, the year in which the statement concerned was made.

2. Making use of a written text

In this case the text is quoted (possibly in italics) with the following information (depending on the source):

- surname and initials of the author(s), title of the book, year of publication (in brackets), publisher (name and place), and the page numbers concerned (pp ...),
- surname and initials of the author(s), title of the article, name of the journal, volume and number, and the page numbers concerned (pp...),

- surname and initials of the author(s), title of the report, year (in brackets), publisher (name and place), and the page numbers concerned (pp ...),
- surname and initials of the author(s), title of the article, name of the newspaper, date, and page number,
- title of the brochure / document, year of publication, name of publisher (manufacturer, supplier, organization etc.),
- internet website: http address and date, author(s), initial(s), name of the site, name of the company or institution (if known).

The following two methods are the most common for referring to sources in the body of the thesis.

Numbers between square brackets that refer to the literature list at the end of the thesis.

Name(s) of author (s) and year between curved brackets (name, year) that refer to the literature list at the end of the thesis.

3. Making use of drawings and photographs

In this case the name of the artist or photographer must be stated immediately below the drawing or photograph being reproduced. On publication of the thesis, royalties must be paid to these third parties. This also applies for images copied from internet if they are copyrighted.

These rules are taken from: Herwijnen, F. van, (2003) Plagiaat= fraude, Bouwpers, number 10, volume 19, pp 9-10

Submitting the thesis

Every thesis must bear the signature of the chairman of the Graduation Supervision Committee.

Every thesis must be accompanied by a summary article in the form of a separate Appendix (two A4 pages), containing a brief overview of:

- the objective of the graduation assignment,
- the methods and means used to achieve this objective,
- the results and conclusions set against the goals originally defined.

The graduation plan (7..41)

Before starting on the graduation phase, the student (in consultation with the preferred graduation Professor / Associate Professor) must prepare a graduation plan. This graduation plan must cover the following points.

- Possible weighting factors
- The subject and motivation for choosing this subject
- An outline of the objective and problem definition of the graduation project
- The social and/or scientific importance of the graduation project
- An outline plan of the activities to be carried out in the graduation project
- An overall time plan
- A proposal for the composition of the Graduation Supervision Committee
- Agreements on evaluation points during the graduation phase

The graduation plan must be approved by the graduation Professor / Associate Professor.

2.6 Fraud

If fraud (such as cribbing, plagiarism, etc.) is established or suspected in relation to the taking of an examination, under article 3.2 of the Examination Rules and Procedures 2010-2011 this must be recorded as quickly as possible. The Examination Committee can exclude the student from further participation in the relevant examination for a period of a maximum of one year. By examination is understood not only a written or oral examination, but also every assessment of the knowledge, insight, and skills of a student, thus including that of a work piece, project work, and completed practical exercise.

Before the Examination Committee takes any decision the student is given the opportunity to be heard.

Plagiarism is also seen as fraud. Quoting from someone's work, words, or ideas is citation. This is permitted, as long as the source is reported. However, if texts, ideas, argumentation, or images are taken over from third parties (for example taken over from available digital information sources, derived from internet websites, or scanned from books and journals), and these are passed off as own original work, this is seen as plagiarism.

The plagiariser commits a deception and is therefore committing fraud.

The graduation regulations contain a number of rules for citing other people's work without committing plagiarism (see item 9, Literature, of section 2.5).

Important internet links:

Department of Architecture, Building and Planning (ABP):

<http://w3.bwk.tue.nl/nl>

Library of the Department of ABP:

<http://w3.tue.nl/nl/diensten/bib/>

Study Association of CHEOPS and other master study associations:

<http://www.cheops.cc/>

<http://www.bwk.tue.nl/flux/>

<http://www.support.tue.nl/>

<http://www.koerstue.nl/>

<http://www.anarchi.bwk.tue.nl/>

<http://www.bwk.tue.nl/cheops/via/>

Timetables, subject information, examinations, agendas and calendars etc:

<http://owinfo.tue.nl/>

Certificate programs:

- Technology Entrepreneurship,
- Technology, Development and Globalization,
- Philosophical Reflection
- Technology and Sustainability

<http://onderwijs.ieis.tue.nl/nl/certificaten/te>

Study abroad, participating in exchange programs:

http://w3.bwk.tue.nl/nl/onderwijs/foreign_students/exchange_students/

Academic development:

http://w3.tm.tue.nl/uploads/media/AC_NL_web.pdf

Information for master students:

http://w3.tue.nl/en/services/cec/study_information/information/

3 Program of the ABP Master's course

3.1 Architecture Course

Academic year 2010 - 2011, for the ABP 2010 intake

Architecture		ects	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Year 1, semester A						
7PF03	Masterportfolio (completion in 2a)		████████████████████			
7X600	Strategies & places	6	████████████████			
7X865	Seminar	6	████████████████			
7XS15	Masterproject 1	14	████████████████████			
Year 1, semester B						
7PF03	Masterportfolio		████████████████████			
7X865	Seminar				████████████████	
7X500	Architectural Engineering	6			████████████████	
7X700	Philosophy and Architecture	3			██████████	
7XS25	Masterproject 2	14			████████████████	
Year 2, semester A						
7X545	Masterproject 2e Year	9	████████████████			
7X811	Methodology in Architectural history and theory	3	██████████			
7PF03	Masterportfolio	3	██████████			
7XX41	Learning portfolio	4	██████████			
Year 2, semester B						
7XX37	Final project (start in quarter 2)	37		████████████████████		
	Compulsory course elements	105	████████████████████			
	Optional course elements	15	████████████████			
Optional course elements						
7X655	Morphology stereotomic	3	██████████			
7X886	Theory of architecture 1	3		██████████		
7X900	Architectural analysis	6			████████████████	
7XX07	Handdrawing: Panamarenko (in dutch)	3	████████████████			
7X660	Product presentation	2	██████████			
7X840	Theory of architecture 2	2				██████████
7X651	Vormstudie B (in dutch)	3			██████████	

3.2 Building Technology

Academic year 2010 - 2011, for the ABP 2010 intake

Building Technology

Year 1, semester A		ects	Quarter 1	Quarter 2	Quarter 3	Quarter 4
7PF03	Masterportfolio (completion in 2a)		████████████████████			
7T612	Presentation in English	3	████████████████████			
7T645	Research methodology for building technology	2		██████████		
7TS15	Master project 1	14	████████████████████			
Optional courses per profile: see below						
Year 1, semester B						
7M842	Free form design	3				██████████
7PF03	Master portfolio				████████████████████	
7T750	Product development (industry and the building market)	3				██████████
7T552	Industrial design	2		██████████		
7T810	Integrated building technology	3		██████████		
7TS25	Master project 2	14			████████████████████	
Optional courses per profile: see below						
Year 2, semester A						
7PF03	Master portfolio	3	████████████████████			
7T545	Masterproject	9	████████████████████			
7TT41	Learning portfolio	4	████████████████████			
Year 2, semester B						
7TT37	Final project (start in quarter 2)	37		████████████████████		
	Compulsory course elements	97				
	Optional course elements	23				
Optional courses per profile						
7T655	Technology transfer (Productdevelopment)	3		██████████		
7T850	Building and information systems in developing countries (Lifespan)	3	██████████			
7P672	Lightweight structures (Productdevelopment)	3		██████████		
7T910	Structural design and engineering for tropical countries (Lifespan)	3	██████████			
7T777	Workshop manufacturing (Productdevelopment)	2	████████████████████			
7S620	Sustainable building 2 (Lifespan)	3			██████████	

3.3 Construction Technology

Academic year 2010 - 2011, for the ABP 2010 intake

Construction technology (lectured in dutch)		sp	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Year 1, semester A						
7PF03	Masterportfolio (afroding in 2.A)		█	█		
7R900	Tijd en kosten	6	█	█		
7R800	Materiaal en materieel	6	█	█		
7RS15	Masterproject onderzoek in uitvoering	14	█	█		
Year 1, semester B						
7PF03	Masterportfolio (afroding in 2.A)				█	█
7R730	Maatbeheersing	6			█	█
7R750	Organisatie en cultuur	3			█	█
7RS25	Masterproject uitvoeringsplan	14			█	█
Year 2, semester A						
7R545	Masterproject participierend observeren	9	█	█		
7PF03	Masterportfolio	3	█	█		
7RR41	Learning portfolio	4	█	█		
Year 2, semester B						
7RR37	Afstudeerproject (start in semester A)	37		█	█	█
	totaal verplichte vakken en projecten	102				
	Keuzevakken (te kiezen uit ALLE masteronderwijs)	18				

3.4 Design and Decision Support Systems

Academic year 2010 - 2011, for the ABP 2010 intake

Design & Decision Support Systems

Year 1, semester A	ects	Quarter 1	Quarter 2	Quarter 3	Quarter 4
7MS15 Masterproject 1	14	████████████████████			
7PF03 Masterportfolio (completion in 2a)		████████████████████			
Optional course elements, see below	16				
Year 1, semester B					
7MS25 Masterproject 2	14			████████████████████	
7PF03 Masterportfolio (completion in 2a)		████████████████████			
Optional course elements, see below	16				
Year 2, semester A					
7M545 Masterproject 2e Year	9	████████████████████			
7MM41 Learning portfolio	4	████████████████████			
7PF03 Masterportfolio	3	████████████████████			
Optional course elements, see below	7				
Year 2, semester B					
7MM37 Final project (start in quarter 2)	37		████████████████████		
Totaal	120				
A minimum of 20 ects credits chosen from:					
7M820 SAR design with CAD	3		████████████████████		
7M822 Information technology in design and construction	4	████████████████████			
7M830 Basic techniques for urban modeling and planning	3	████████████████████			
7M834 Advanced techniques for urban modeling and planning	3		████████████████████		
7U855 Research methods for the built environment	3	████████████████████			
7W580 Urban theory and design of urban space	5		████████████████████		
7M880 Collaborative design and engineering	7				████████████████████
7M836 Animation and Rendering	3				████████████████████
7M840 Decision support† for planning and design	3			████████████████████	
7M842 Freeform Design	3				████████████████████

3.5 Physics of the Built Environment

Academic year 2010 - 2011, for the ABP 2010 intake

Physics of the Built Environment		ects	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Year 1, semester A						
7PF03	Masterportfolio (completion in 2a)		████████████████████			
7S532	Heat and moisture transfer in building envelopes & exercise	5	████████████████████			
7S650	Structure-borne sound in buildings	2		██████████		
7S750	State of the art in building performance simulation for integrated solutions	3	██████████			
7S801	Computational building physics and systems using matlab	1	██████████			
7S815	Design of sustainable energy systems for the built environment	3	██████████			
7S892	CFD for building engineering	3		██████████		
7SS15	Masterproject 1 PBE (research, design, consultancy)	14	████████████████████			
Year 1, semester B						
7PF03	Masterportfolio (completion in 2a)				████████████████████	
7S612	Roomacoustics	3			████████████████████	
7S620	Durability aspects of building materials	3			████████████████████	
7S630	Lighting technology	2			████████████████████	
7S632	Lighting technology , exercises	1			████████████████████	
7SS25	Masterproject 2 PBE (research, design, consultancy)	14			████████████████████	
Year 2, semester A						
7PF03	Masterportfolio	3	████████████████████			
7S545	MasterprojectPBE (preparation final graduation project)	9	████████████████████			
7SS41	Learning portfolio	4	████████████████████			
Year 2 semester B						
7SS37	Final project (start in quarter 2)	37		████████████████████		
	Compulsory course elements	107				
	Optional course elements	13				
Optional course elements						
0T400	Academic skills in English 1	3				
0T500	Academic skills in English 2	3				
7N500	Practicum bouwkundewinkel	3	self study			
7Y900	Health and comfort	4				
7Y910	Robotics and home automation	3	████████████████████			
7S812	Meetexcursie	3			████████████████████	
7S820	Basic building performance simulation	2	self study			
3B470	Fysische Transportverschijnselen	3				
4P510	Renewable Energy Sources	3				
4A320	System analyses	3				
4A250	Signal analyses	3				
0P421	Perception	3				
7Y700	Sustainable building systems modeling	3				
7S810	Computational modeling for building physics and systems	3	self study		████████████████████	
7S910	C.S. Building Materials	3			████████████████████	

3.7 Structural Design

Academic year 2010 - 2011, for the ABP 2010 intake

Structural Design			Quarter 1	Quarter 2	Quarter 3	Quarter 4
Year 1, semester A		ects				
7P500	Stability of structures	2		█		
7P642	Steel structures 3	3		█		
7P865	Energy principles of structures	2	█			
7P900	Structural design 8, capita selecta	2		█		
7PF03	Masterportfolio (completion in 2a)		█	█		
7PS15	Masterproject 1	14	█	█		
Year 1, semester B						
7P240	Geotechnics: strength, building design applications	2				█
7P575	Timber structures 3	3			█	
7P632	Concrete structures 3 + exercise	3			█	
7P770	Material aspects of structural stability (mech. 7b)	1				█
7PF03	Masterportfolio (afroding in 2.A)			█	█	
7PS25	Masterproject	14			█	█
Year 2, semester A						
7P545	Master project	9	█	█		
7P540	Geotechnics: deformations, civil engineering applications, numerical methods	3		█		
7PF03	Master portfolio	3	█	█		
7PP41	Learning portfolio	4	█	█		
Year 2 semester B						
7PP37	Final project (start in quarter 2)	37		█	█	█
	Compulsory course elements	102				
	Optional course elements	18				
Optional course elements						
7P882	Aluminium structures	3	█			
7P725	Masonry structures	3		█		
7P890	Structural design of high-rise structures	2		█		
7P672	Lightweight structures	3		█		
7P690	Prestressed concrete structures	2	█			
7P660	Experimental modeling of structures	3		█		
7P870	Nonlinear Finite Element Method	3	self study			
7P603	Dynamics of structures	2	self study			
7P830	Structural design: safety, reliability, loadings	2				█
7P680	Prefabricated concrete structures	1				█

3.8 Urban Design & Planning

Academic year 2010 - 2011, for the ABP 2010 intake

Urban Design & Planning			Quarter 1	Quarter 2	Quarter 3	Quarter 4
Year 1, semester A		ects				
7PF03	Masterportfolio (completion in 2a)		████████████████████			
7W580	Urban theory and design of urban space	5	████████████████████			
7W565	Urban analysis	5	████████████████████			
7W640	Research methods in architecture and urbanism	5	████████████████████			
7WS15	Masterproject 1	14	████████████████████			
Year 1, semester B						
7PF03	Masterportfolio (completion in 2a)				████████████████████	
7W265	Urbanistic concepts	5			████████████████████	
7WS25	Masterproject 2	14			████████████████████	
7W600	Green strategies	5			████████████████████	
Year 2, semester A						
7PF03	Masterportfolio	3	████████████████████			
7W545	Masterproject	9	████████████████████			
7WW41	Learning portfolio	4	████████████████████			
Year 2, semester B						
7WW37	Final project (start in quarter 2)	37		████████████████████		
	Compulsory course elements	106				
	Optional course elements	14				
Optional course elements						
7M830	Basic techniques for urban modeling and planning	3	████████████████████			
7M834	Advanced techniques for urban modeling and planning	3		████████████████████		
7U972	Urban strategies	3			████████████████████	
7W700	History of housing	3			████████████████████	
7W750	Urban analysis and design techniques	6	self study			
7X600	Strategies and places	6	████████████████████			

4 Transfer programme for Dutch HBO graduates

Cursusjaar 2010 - 2011

De HBO afgestudeerden bouwkunde, civiele techniek en bouwtechnische bedrijfskunde hebben volgens artikel 21 van de Onderwijs- en Examenregeling (artikel 21 regelt de toelating tot de master opleiding Architecture, building and planning) toelating tot deze master opleiding via een schakelprogramma van 30 studiepunten. Dit ziet er als volgt uit:

Semester A		sp	Kwartiel 1	Kwartiel 2	
2DB05	Calculus 1	6	██████████		
2S410	Statistiek 1	2	██████		
7.513	Instaproject	7	██████████		
7W320	Onderzoekstechnieken	3		██████	
7X011	Inleiding architectuur	3		██████	
	Differentiatievakken van afstudeerrichting (zie schema)	9			
Totaal		30			
7X255	Typologische analyse van het wonen	3			A
7W220	Stedebouwkundig ontwerpen	3	██████		A/UDP
7T205	Bouwsystemen en productontwikkeling	3		██████	BT
7T644	Duurzaam bouwen (semester B) of keuzevak	3	██████		BT/A
7X560	Bestaande omgeving herontwerpen	3			BT
0E510	Publiekrechtelijk bouwrecht	3	██████		REMD
7R200	Uitvoeringstechniek 3	3	██████		CT
7R230	Uitvoeringstechniek 2	3		██████	CT
7M690	(Stede)Bouwk. ontwerpen met CAD	3	██████		DDSS
7W400	Geografische informatiesystemen	3	██████		DDSS/REMD
7W550	Verkeerstechnisch ontwerpen	3	██████		DDSS
7S280	Stedebouwfysica wind en zon	2		██████	PBE
7S292	Stedebouwfysica geluid	2		██████	PBE
7S310	Bouwfysisch ontwerpen 3, oefening	3	██████		PBE
7S410	Gebouwprestatie simulatie	2	██████		PBE
7U355	Management van commercieel vastgoed	3		██████	REMD
7P290	Mechanica 4	3		██████	SD
7P730	Betonconstructies 2	2	██████		SD
7P740	Staalconstructies 2 (semester B) of keuzevak	2		██████	SD
7P820	Constructief ontwerpen 5	2			SD
7W532	Landschap en groen in de stad	2		██████	UDP
.....	Vak naar keuze	3			UDP/CT/SD

Afstudeerrichtingen:

A	Architecture
BT	Building Technology
DDSS	Design & Decision Support Systems
PBE	Physics of the Built Environment
REMD	Real Estate Management & Development
SD	Structural Design
UDP	Urban Design & Planning
CT	Construction Technology

Anyone with questions about the course can contact the ABP Educational Office, e-mail: opleidingsinstituut@bwk.tue.nl. The counter in Vertigo 2.11 is open daily between 12:00 and 14:00. Postal address: TU/e, Faculteit Bouwkunde, Postbus 513, 5600 MB Eindhoven.