

# The uantwerpendocs classes\*

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## 1 Introduction

This package implements the house style of Universiteit Antwerpen (version 2021) for letters, course texts, master/PhD theses, reports and slides (beamer). It also implements a class to format exams. Using these class files will make it easy for you to make and keep your course texts and theses compliant to this version and future versions of the UAntwerpen house style.

If you think (1) there's an error in compliancy w.r.t. the house style, (2) there's a feature missing in this class or theme file, or (3) there's a bug in this package, please, contact me through e-mail (`walter.daems@uantwerpen.be`) about the issue. I'll provide you with an answer and if (and as soon as) possible with a solution to the problem you spotted.

Do you like these class files? You're welcome to send us beer, wine, or just kind words.

## 2 Synopsis

The `coursetext`, `bamathesis` and `phdthesis` classes<sup>1</sup> are an extension of the standard  $\text{\LaTeX}$  book class. They are intended to be used for writing course texts and master's or PhD theses. They provides a title page that is compliant to the UAntwerpen house style, and they also typeset the rest of your document appropriately.

The `report` class is derived from the standard  $\text{\LaTeX}$  `report` class. It is intended for writing generic (e.g. research or educational) reports. The `letter` class is derived from the standard  $\text{\LaTeX}$  `letter` class. It is intended to be used for writing business letters. It is compliant to the house style and allows for using windowed envelopes of the DL format, with right-aligned window.

The `exam` class is derived from the standard  $\text{\LaTeX}$  `article` class.

The slides come under the form of a custom beamer theme.

The documentation of the class files for letters, course texts theses, and exams can be found in this document.

The documentation for the beamer theme is embedded in the demo/user-guide presentation `beamerthemeuantwerpenuserguide.pdf`.

Template files for all of the formats can be found below in section 6.1.

Using this package, requires the following packages:

- the `adjustbox` package
- the `babel` package
- the `background` package

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\*Thanks to Paul Levrie for testing and proofreading.

<sup>1</sup>For readability the class names have been abbreviated by omitting the `uantwerpen` prefix

- the `color` package
- the `environ` package
- the `eso-pic` package
- the `etooblox` package
- the `expl3` package
- the `fancyhdr` package
- the `geometry` package
- the `graphicx` package
- the `graphbox` package
- the `iftex` package
- the `ifthen` package
- the `tikz` package
- the `ulem` package
- the `xparse` package

So make sure these packages are available to your  $\text{\LaTeX}$  compiler.

You will notice that as of version 4.0 `expl3` and `xparse` are part of the game. Indeed, the `uantwerpendocs` package will be slowly refactored to  $\text{\LaTeX}$ 3 to prepare for a package that is easier to maintain. However, the  $\text{\LaTeX}$ 3 constructs are never exposed to the user of the classes. So: don't worry about it!

### 3 A note on fonts

The house style of the University of Antwerp recommends using

- Prenton RP Pro for the logos and sublogos; all the logoware is included in this package, so nothing to worry about.
- ITC Officina Sans for posters, titlepages, cards a.s.o.  
This font is not a part of the  $\text{\LaTeX}$  standard fonts. It is also not provided with this package. I cannot do this without incurring legal problems (the font is not free). However, if you have a valid license, for this font, I can help you to set it up, such that you can typeset proper title pages for course texts, PhD theses and the like. Just send me an e-mail.
- Calibri for office-like documents. Just load the `\fontspec` package and issue a `\setmainfont{Calibri}` and you're all set.

Adhering to these fonts is recommended, but not enforced. Personally, I always use a Palatine serif font for my courses. I did not find any better (free) font yet. My second favorite is still the original computer modern font by Donald E. Knuth. You are reading it right now.

### 4 Portability

These class files should be ready to use with all common modern  $\text{\LaTeX}$  compilers (Xe $\text{\LaTeX}$ , Lua $\text{\LaTeX}$ , ...) from the major  $\text{\TeX}$ -distributions (TeX $\text{\TeX}$ , TexLive, MikTeX). However, using an old  $\text{\LaTeX}$  + dvips setup or PDF $\text{\LaTeX}$ , is likely to get you into font problems. Advice: ditch the route via dvi and abandon the old PDF $\text{\LaTeX}$  compiler. If you experience other problems, please inform the author.

## 5 Thanks

Thanks to the many users of this class who provide me with bug reports and feedback. Special thanks to Paul Levrie, my standard reviewer. Also special thanks to Lukas Leitner who provided the idea, the secret sauce and some example code for the PhD bookcover add on.

In the first part, we will describe the classes intended to produce paper documents:

- coursetext class
- bachelor and master thesis classes
- phd thesis class
- letter class
- report class
- exam class

In the second part, we will describe the uantwerpen beamer theme that can be used to make PDF slides.

# Part I. The paper classes

## 6 Usage

### 6.1 Basic Usage

As of v4.06 of this document, this section has been stripped from contents, as it turns out that documentation in a working example is more appreciated by the users of this package. Therefore, check out the examples in section ??.

A good modus operandi is to start from one of the examples and to adapt them gradually for your needs.

### 6.2 The class options explained

The classes have several options. They are listed below. After every option, it has been indicated to which class the option applies (between square brackets, without prefix `uantwerpen`).

`xx(x)` [letter / coursetext / bamathesis / phdthesis / report / beamertheme]

Option	Faculty
<code>be</code>	Faculty of Business and Economics Faculteit Bedrijfswetenschappen en Economie
<code>fbd</code>	Faculty of Pharmaceutical, Biomedical and Veterinary Sciences Faculteit Farmaceutische, Biomedische en Diergeneeskundige Wetenschappen
<code>ggw</code>	Faculty of Medicine and Health Sciences Faculteit Geneeskunde en Gezondheidswetenschappen
<code>lw</code>	Faculty of Arts Faculteit Letteren en Wijsbegeerte
<code>ow</code>	Faculty of Design Sciences Faculteit Ontwerpwetenschappen
<code>re</code>	Faculty of Law Faculteit Rechten
<code>sw</code>	Faculty of Social Sciences Faculteit Sociale Wetenschappen
<code>ti</code>	Faculty of Applied Engineering Faculteit Toegepaste Ingenieurswetenschappen
<code>we</code>	Faculty of Science Faculteit Wetenschappen
<code>iob</code>	Institute of Development Policy Instituut voor Ontwikkelingsbeleid- en beheer

`cameraready` [phdthesis/coursetext]

For the `phdthesis` class, this option forces the book format to be printed on A4 with bleed space. This accomodates what your printshop requires you to provide as a camera-ready copy.

For the `coursetext` class, this options removes the colored areas and the logo from the titlepage (and removes the finalpage altogether) to allow for universitas to print the text of your titlepage on a standard sheet that contains these colored areas and the logo (pre-printed).

`bare` [phdthesis]

For the `phdthesis` class, this option removes the title page and the back page from the file, such that you can give a 'bare' version to your printshop.

`copyright` [coursetext]

This option forces printing a watermark on every page. For the paper version of your document, this is inappropriate, but for any e-copy you make available, this may be appropriate;

`examiner` [exam]

This option allows to set the exam class in examiner mode, mentioning the examiner mode on every page (as regular text in the header and also in a watermark) to make sure you never hand out that copy to students and suppressing the fillout pages.

`filled` [letter / coursetext / bamathesis / phdthesis / report]

This option causes the text to be filled (simultaneous left and right alignment). Though this setting is not recommended, it is provided because the default `\raggedright` cannot be undone. The `filled` option prevents the `\raggedright` from being issued. However, if you care about the typographic readability of your text, you shouldn't use this option.

`nofoldline` [letter]

This option suppresses the fold line on a letter.

Common sets of options depend on the purpose:

- to make a text ready for electronic distribution: `a4paper`, `copyright`.
- to make a camera-ready text (for printing): `a4paper`
- to make a camera-ready coursetext (for printing at universitas): `a4paper`, `cameraready`
- to make a letter: no options (filling a letter is discouraged)
- to make an exam: no options (filling an exam is discouraged)
- to make a PhD text: `twoside`, `openright` and (optionally) `filled`
- to make a camera-ready PhD text: `twoside`, `openright`, `cameraready` and (optionally) `filled`
- to make a bare version of your PhD text for the Nieuwe Mediadienst: `twoside`, `openright`, `bare` and (optionally) `filled`
- to make a report: `twoside`, `openright` and (optionally) `filled`

## 6.3 The macros explained

### 6.3.1 Macros for the coursetext, bamathesis, phdthesis classes

`\academicyear` [coursetext / bamathesis] (mandatory)

Use this macro to specify the academic year in full, i.e. in the form XXXX-YYYY.

`\author` [coursetext / bamathesis / phdthesis / report] (mandatory)

This macro sets the author of the document. It also sets the `pdfauthor` tag of the `hyperref` package (if it is loaded), so that the PDF-document meta-information is correct.

`\copyrightnotices` [coursetext / report] (optional)

Use this macro to specify additional copyright notice messages to appear in the copyright notice on the bottom of page 2 of your course text.

`\course` [coursetext] (mandatory)

Code (first argument) and name (second argument) of the curriculum course this coursematerial or exam belongs to. The code should be of the form:

TNNFFFAAA, with:

Code	Explanation
T	a number indicating the type of programme (1 for Bachelor courses, 2 for Master courses, 5 for specific courses of preparatory programmes)
NNN	a number assigned by the Faculty's administration
FFF	the acronym of your Faculty, e.g., FTI
AAA	an alphanumeric code assigned by the Faculty's administration

An example of such a code: 1001FTIWIS, for the first-semester mathematics course of the Faculty of Applied Engineering.

<code>\courseversion</code>	[coursetext] (optional) This macro indicates which version of the course this is.
<code>\defensedate</code>	[phdthesis] (mandatory) Mention the full date, i.e. day month and year of your public defense
<code>\defenselocation</code>	[phdthesis] (optional) Location of the defense. Defaults to “Antwerpen”.
<code>\diploma</code>	[bamathesis] (discontinued) This macro is no longer used. Use <code>\degree{}</code> instead.
<code>\doi</code>	[phdthesis] (optional) Specify the correct doi URL you obtained for your document. It will be typeset in your colofon.
<code>\embargofull</code>	[phdthesis] (optional) Generates the correct embargo message in your colofon. Adds the word ‘CONFIDENTIAL’ to your title page.
<code>\embargotemp</code>	[phdthesis] (optional) This macro takes two arguments, an embargo starting date and an embargo ending date. Generates the correct temporary embargo message in your colofon. Adds the word ‘CONFIDENTIAL’ to your title page.
<code>\lecturer</code>	[coursetext] (mandatory) You can add one or more lecturers to the course notes (in Dutch: titularis). If there are multiple persons, please, use the macro multiple times.
<code>\phddegree</code>	[phdthesis] (discontinued) This macro is no longer used. Use <code>\degree{}</code> instead.
<code>\degree</code>	[bamathesis,phdthesis,coursetext] (mandatory) This is the official degree name (in the appropriate language, possibly mixed “dutch (english)”). Specify the official title of your diploma. This must be the official title. For bachelor and master programmes in Dutch, it must be the Dutch title. For programmes in English it may be the English title. For PhD degrees, language constraints are less strict. Consult <a href="https://www.hogeronderwijsregister.be">https://www.hogeronderwijsregister.be</a> for correct bachelor and master degree titles. Consult the Doctoral bylaws of the university for correct PhD degree titles. Students of FTI and FWET, can use the <code>\bamadegree</code> command instead.
<code>\bamadoctype</code>	[bamadocument] (mandatory) This allows to set the nature of the thesis. The proper values of the argument are listed below. Don’t use this macro when you are using the <code>\bamadegree</code> macro (see below), unless you want to change the document type to ‘project’.

This data comes from `uantwerpendocs-doctype.data`

argument	
nl-ba	Bachelorproef
nl-ma	Masterproef
nl-pr	Projectverslag
en-ba	Bachelor’s thesis
en-ma	Master’s thesis
en-pr	Project report

\bamadegree [bamathesis] (mandatory)

This allows to specify the official degree through an abbreviation. Using this abbreviation

This data comes from uantwerpendocs-degree.data

argument	degree
ti-nl-ba-bk	Bachelor of Science in de industriële wetenschappen: bouwkunde
ti-nl-ba-ch	Bachelor of Science in de industriële wetenschappen: chemie
ti-nl-ba-em	Bachelor of Science in de industriële wetenschappen: elektromechanica
ti-nl-ba-ei	Bachelor of Science in de industriële wetenschappen: elektronica-ICT
ti-en-ba-bk	Bachelor of Science in de industriële wetenschappen: bouwkunde
ti-en-ba-ch	Bachelor of Science in de industriële wetenschappen: chemie
ti-en-ba-em	Bachelor of Science in de industriële wetenschappen: elektromechanica
ti-en-ba-ei	Bachelor of Science in de industriële wetenschappen: elektronica-ICT
ti-nl-ma-bk	Master of Science in de industriële wetenschappen: bouwkunde
ti-nl-ma-bch	Master of Science in de industriële wetenschappen: bio-chemie
ti-nl-ma-ch	Master of Science in de industriële wetenschappen: chemie
ti-nl-ma-em	Master of Science in de industriële wetenschappen: elektromechanica
ti-nl-ma-ei	Master of Science in de industriële wetenschappen: elektronica-ICT
ti-en-ma-ei	Master of Science in Electronics and ICT Engineering Technology
ti-nl-eduma-wtstem	Educatieve master of Science in de wetenschappen en technologie: STEM
we-nl-eduma-wtstem	Educatieve master of Science in de wetenschappen en technologie: STEM
we-nl-eduma-wtbchbt	Educatieve master of Science in de wetenschappen en technologie: biochemie en biotechnologie
we-nl-eduma-wtbio	Educatieve master of Science in de wetenschappen en technologie: biologie
we-nl-eduma-wtch	Educatieve master of Science in de wetenschappen en technologie: chemie
we-nl-eduma-wtfy	Educatieve master of Science in de wetenschappen en technologie: fysica
we-nl-eduma-wtinf	Educatieve master of Science in de wetenschappen en technologie: informatica
we-nl-eduma-wtwi	Educatieve master of Science in de wetenschappen en technologie: wiskunde

we-nl-ba-bircg	Bachelor of Science in de bio-ingenieurswetenschappen: cel- en genbiotechnologie
we-nl-ba-birvt	Bachelor of Science in de bio-ingenieurswetenschappen: chemie en voedingstechnologie
we-nl-ba-birlb	Bachelor of Science in de bio-ingenieurswetenschappen: land- en bosbeheer
we-nl-ba-birmt	Bachelor of Science in de bio-ingenieurswetenschappen: milieutechnologie
we-nl-ba-bio	Bachelor of Science in de biologie
we-nl-ma-bioeg	Master of Science in de biologie: evolutie en gedragsbiologie
we-en-ma-biocr	Master of Science in biology: biodiversity, conservation and restoration
we-en-ma-biogcb	Master of Science in biology: global change biology
we-en-ma-biomb	Master of Science in molecular biology
we-nl-ba-ch	Bachelor of Science in de chemie
we-en-ma-ch	Master of Science in chemistry
we-nl-ba-inf	Bachelor of Science in de informatica
we-en-ma-infcn	Master of Science in computer science: computer networks
we-en-ma-infdsai	Master of Science in computer science: data science and artificial intelligence
we-en-ma-infse	Master of Science in computer science: software engineering
we-nl-ma-infcn	Master of Science in de informatica: computer-netwerken
we-nl-ma-infdsai	Master of Science in de informatica: data science en artificiële intelligentie
we-nl-ma-infse	Master of Science in de informatica: software engineering
we-nl-ba-fy	Bachelor of Science in de fysica
we-nl-ma-fy	Master of Science in de fysica
we-en-ma-fy	Master of Science in physics
we-nl-ba-wi	Master of Science in wiskunde
we-nl-ma-wifw	Master of Science in wiskunde: fundamentele wiskunde
we-nl-ma-wiftw	Master of Science in wiskunde: financiële en toegepaste wiskunde

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`\programme` [coursetext] (discontinued)

`\publisher` This macro is no longer used. Use `\degree{}` instead. [coursetext] (mandatory)

This macro sets the publisher information of the document. It is printed on the front page. It defaults to the repographic service of campus Groenenborger, one of the standard printing services of Universiteit Antwerpen. Separate the different fields (name, address, a.s.o) using a pipe symbol.

`\publishercode` [coursetext] (mandatory)

This macro sets the publisher code of the document. It is printed on the front page. This is code that the publisher uses for its internal administration. It may be a proprietary code, or an ISBN number.

`\subtitle` [coursetext / phdthesis / report] (optional)

This macro sets the title of the document. You may use this



- to further clarify the title
- to indicate the nature of this document

The latter is to be considered when you want to provide multiple documents as parts of the full course text (e.g., Course Notes, Formula Collection, Exercise Book, Solution Book). This macro also sets the subject tag of the hyperref package (if it is loaded), so that the PDF-document meta-information is correct.

<code>\supervisor</code>	[bamathesis / phdthesis] (mandatory) Specifies the person(s) that promote(s)/supervise(s) the thesis. Please, use the macro multiple times if needed.
<code>\title</code>	[coursetext / bamathesis / phdthesis / report] (mandatory) This macro sets the title of the document. It also sets the <code>pdftitle</code> tag of the hyperref package (if it is loaded), so that the PDF-document meta-information is correct.
<code>\titlepageimage</code>	[phdthesis / report] (optional) This sets the filename of the central image on the title page to appear clipped within the curves. For PhD theses this is highly advised. For course texts, this is optional. If the image is not set, a flat colored area will appear. This is part of the house style.
<code>\versionyear</code>	[coursetext / report] (mandatory) This is to be the year in which you published the current version of the course in the form YYYY.

### 6.3.2 Macros for the letter class

<code>\address</code>	[letter] (mandatory) Address of the sending unit (or faculty). This can be different from the return address. Newlines are allowed and encouraged.
<code>\carboncopy</code>	[letter] (optional) List of persons receiving a copy of this letter. Format at will.
<code>\closeletter</code>	[letter] (optional) Close the letter (with the closing greetings and underwriting) such that the letter can be continued if desired with attachments. This macro generates a <code>\textbackslash{}clearpage</code> . The default is not to use this macro. It is automatically invoked at the end of the letter if you did not do so.
<code>\closing</code>	[letter] (mandatory) Closing clause of the letter. E.g. 'Best regards,'.
<code>\date</code>	[letter] (optional) Date of the letter. If not specified today's date (at the time of running $\LaTeX$ ) will be used.
<code>\email</code>	[letter] (optional) E-mail address of the sending person, or the administrative person tracking the letter. This must definitely be someone that can answer questions related to this letter.

- first argument: user name
- second argument: domain name

You can specify multiple email addresses by using the command multiple times.

<code>\enclosed</code>	[letter] (optional) List of enclosed documents. Format at will.
<code>\fax</code>	[letter] (optional) Probably facsimile is not used anymore, but anyway: fax number of the sending person. See also <code>\email</code> . You can specify multiple fax addresses by using the command multiple times.
<code>\logo</code>	[letter] (optional)

file name of an alternative logo to use. The file name must be the name of a file in the search path of type PDF. If this macro is not used, The default logo of the university or your faculty/institute will be used.

`\mobile` [letter] (optional)

Mobile phone number of the sending person. See also `\email`. You can specify multiple mobile phone numbers by using the command multiple times.

`\opening` [letter] (mandatory)

Opening address of the letter. E.g. 'Dear X,'.

`\phone` [letter] (optional)

Phone number of the sending person. See also `\email`. You can specify multiple phone numbers by using the command multiple times.

`\returnaddress` [letter] (mandatory)

This is a short return address (listed in small font on top of the destination address (such that it is visible in a windowed envelope (European format))). It should fit on a single line. Typically we list an acronym for the unit, a room number, a campus name and address. The goal is to get the undelivered letter back to the person that can take action accordingly.

`\sender` [letter] (mandatory)

Description of the person writing the letter.

- first argument: name of the person writing the letter
- second argument: title / role of the person

Newlines are not allowed in the arguments.

`\signature` [letter] (optional)

Add a signature (in between the closing statement of the letter and the sender's name. This might be a text message or a picture of your signature.

`\subject` [letter] (mandatory)

Short descriptive subject that describes the contents of the letter.

`\to` [letter] (mandatory)

Name of the addressee. Newlines are allowed. Preferably name and role are split over two lines.

`\toaddress` [letter] (optional)

Address of the addressee. Newlines are allowed. The address should fit on max. 3 lines.

`\toorganization` [letter] (optional)

Name of the organization that employs the addressee.

`\unit` [letter] (optional)

Name of the unit to which the person belongs. This can be a research group, a laboratory, an administrative division, etc. Newlines are allowed.

### 6.3.3 Macros for the exam class

`\author` [exam] (mandatory)

The author of the exam (may be multiple authors, separated by commas). On the title page, these will be labeled as 'Professor(s) - Titularis(sen)'.

`\academicyear` [exam] (mandatory)

Use this macro to specify the academic year in full, i.e. in the form XXXX-YYYY.

`\course` [exam] (mandatory)

see description of `\course` macro on page 5.

`\degree` [exam] (mandatory)

This is the official degree name (in the appropriate language, possibly mixed "dutch (english)"). Specify the official title of your diploma. This must be the official title. For bachelor

and master programmes in Dutch, it must be the Dutch title. For programmes in English it may be the English title. For PhD degrees, language constraints are less strict.

Consult <https://www.hogeronderwijsregister.be> for correct bachelor and master degree titles. Consult the Doctoral bylaws of the university for correct PhD degree titles.

`\examdate` specifies the date of the exam. We recommend the YYYY-MM-DD format, but you are free to choose your own coding scheme for dates. We advise against using UNIX epoch time, to avoid problems in the first semester exams in 2038.

`\examgroupnumber` [exam]  
mentions the group number (may be empty)

`\examlength` specifies the length of the exam in a unit of time, e.g. '4h'

`\exampart` [exam] (mandatory)  
Description of the part of the course the exam covers. Often the evaluation of a course consists of multiple evaluation elements (e.g. a written exam, a portfolio defense and lab reports). Using this macro you can indicate the part this exam covers. E.g. it could be 'Written Exam' (to distinguish from the other parts 'portfolio defense' and 'lab reports').

`\extrainfo` specifies the extra information that appears on the back of the title page, regarding the materials that can be used during the examination and cautioning the students not to commit fraude. You can specify an optional first argument 'firstpage', such that your extra info starts on the first page, below the title block. In that case the extra info will also not be terminated with a clearpage (as we assume you want to conserve space).

`\lecturer` [exam] (mandatory)  
You can add one or more lecturers to the course notes (in Dutch: titularis). If there are multiple persons, please, use the macro multiple times.

`\programme` [exam] (discontinued)  
This macro is no longer used. Use `\degree{}` instead.

`\room` specifies the rooms in which the exam will take place. This is useless info for the student, but may be of convenience for you as author or supervisor of the exam. Use UAntwerpen standard room designators, e.g. 'G.U.025' for room number 025, on the Groenenborgercampus in the U-building. If your exam is taken in multiple rooms, just specify multiple `\room{}` commands.

`\studentnr` specifies the exam copy number. This will appear on every page of the exam, easing the reassembly of pages that do not contain any name. Moreover, it allows for blind correction as the student only writes his name on the front page.

`\tend` specifies the end time of the exam in a format identical to the one chosen for `\tstart`.

`\tstart` specifies the start time of the exam, preferable in the format 'HHhMM', e.g. '08h30'.

## 6.4 Examples

Below you can find an example for every class. They also serve as their quickstart documentation.

Remember to

- use modern compiler: no pdf $\LaTeX$ , use Lua $\LaTeX$  instead!
- compile your source file twice.

Especially in the beamer theme some features require to run  $\LaTeX$  twice in order to get the position of some elements correct.

In many of the classes, you need to specify a faculty option. The available faculty options are listed in a table on page 4.

### 6.4.1 uantwerpencoursetext

```
<*ct-example>
\documentclass[ti,a4paper,11pt,oneside,openright,cameraready,filled]
{uantwerpencoursetext}

% ti           specifies the department, change to the letter combination of
%             your department
% a4paper      specifies the paper format
% 11pt         sets the font size to 11pt, i.e. a good average
% oneside     if you want a one-sided document, change to twoside if you
%             want a recto verso document
% openright    causes you chapters to start on a right-hand page when
%             your document is twosided
% cameraready  removes the graphical elements from the title and final
%             page, as they will be typeset by universitas (in color)
% filled      causes left and right filling (which - by the way - is
%             not helpful for easy reading; remove for a left-filled
%             document)w

% make paragraphs indent
\setlength\parindent{1in}
% provide a space of 1ex between paragraphs
\setlength\parskip{0ex}

% load the proper language(s) (last language will trigger the language
% of the logo a.o.)
\usepackage[english,dutch]{babel}
% You can then use \selectlanguage{english} to start a piece of text
% in english, and \selectlanguage{dutch} to start a piece of text in
% dutch. This will cause the correct hyphenation patterns to be
% loaded.
% To keep a consistent naming of the chapters (a.o.) make sure you
% switch back to the document's overall language!

% this is just for some dummy text, please remove in your copy
\usepackage{kantlipsum}

% set title, subtitle and author
\title{Z\'agen, zoeken en zuchten}
\subtitle{Cursusnota's}
\author{Walter Daems en Paul Levrie}

% better keep track of the different versions (and the corresponding
% publication year) of your course
\courseversion{1.3}
\versionyear{2023}
```

```

% mention who lectures the course (can be different from the author)
\lecturer{Zoltan Zo\"ekers}
\lecturer{Siana Sigh}
\lecturer{Zeger de Z\'ager}

% you can use two ways to specify a degree:
% (1) explicitly with text
%   e.g. \degree{Master of Science in de industri\"ele wetenschappen:
%   elektronica-ICT}
% (2) by specifying the correct code, to fetch the text from a table
%   with correct degree mentions
\bamadegree{ti-en-ma-ei}
% you can even add multiple degrees and mix the two ways!

% you can specify multiple courses:
% - first argument is the course number
% - second argument is the course name
\course{2023FTIZZZ}{5-Zoekmachines in een zaagperspectief}
\course{2045FTIIII}{6-Zaagmachines in \'e\'en zuchtperspectief}

% for which academic year the course is intended
\academicyear{2023-2024}

% leave this as is if you use Universitas as print shop
\publisher{Universitas Cursusdienst |
  Prinsesstraat 16 |
  2000 Antwerpen |
  T +32 3 233 23 73 |
  E info@cursusdienst.be}

% universitas will provide you with a code, that you can provide on
% your PDF copy (if you distribute any to your students. If not, just omit.
\publishercode{C11111102}

% you can specify additional copyright notices on the copyright page
% (i.e. the back of the title page)
\copyrightnotices{
  The graphics in this document have been typeset using \texttt{TikZ}.\.
  This document has been \TeX-ed on a GNU/Linux workstation.
}

\begin{document}

% creates the title page, remove if you don't want any
\maketitle

% causes the first pages to be roman numbered
\frontmatter

% sets the table of contents (automatically for you)
\tableofcontents

% changes the numbering system to arabic and restart from 1
\mainmatter

% a non-numbered chapter
\chapter*{Inleiding}
% some automatically generated bogus text: remove in your copy
\kant[1]

% a first numbered chapter
\chapter{Onzin voor dummies}

% a first numbered section
\section{Het gebeuren}

```

```

\kant[2]
\begin{equation}
e^{-j\pi} + 1 = 0
\end{equation}

\kant[3]
\section{En waartoe het geleid heeft}

\kant[4]

\subsection{Herhaling}
\kant[5]

\subsection{Begint vervelend te worden}
\kant[6]

\clearpage

\subsection{Begint echt vervelend te worden}
\kant[7-10]

\chapter{Besluit}

% changes the chapter numbering to letters and uses 'Appendix' or
% 'Bijlage' (in dutch) as chapter name.
% !! do not use \backmatter before \appendix: it is broken!
\appendix

\chapter{Symbolen}
\chapter{Romeinse sprekers}
\chapter{Referentielijst}

% typeset the final page with some graphic material on it
\makefinalpage

\end{document}
</ct-example>

```

### 6.4.2 uantwerpenbamathesis

```

<*bmt-example>
\documentclass[ti,a4paper,11pt,twoside,openright]{uantwerpenbamathesis}

% ti            specifies the department, change to the letter combination of
%              your department - currently only ti (for FTI) and we
%              for (FWET) are supported
% a4paper       specifies the paper format
% 11pt          sets the font size to 11pt, i.e. a good average
% twoside       if you want a two-sided document, change to oneside if you
%              want a recto only document
% openright     causes you chapters to start on a right-hand page when
%              your document is twosided
% for two-sided theses, specify 'twoside' and 'openright' as options
% for one-sided theses, specify 'oneside' and 'openany' as options

% load the proper language(s) (last language will trigger the language
% of the logo a.o.)
\usepackage[english]{babel}

% this is just for some dummy text, please remove in your copy
\usepackage{kantlipsum}

% this package allows to generate a PDF with clickable links

```

```

\usepackage[backref,hyperindex=true,pagebackref=true]{hyperref}
% you must load the hyperref package yourself, to allow putting it
% in the correct order with the other packages you load!

% as an example - loading some fonts, feel free to change
\usepackage{mathptmx}
\iftutex
% Just an example of font-scheme: this is in no way a recommended font
% scheme!
\usepackage{fontspec}
\setmainfont
[UprightFont = *,
BoldFont = *b,
ItalicFont = *i,
BoldItalicFont = *z,
]
{calibri}
\usepackage{sansmathaccent}
\fi

% Use this package if you need to provide a twocolumn summary at the
% start of your document.
\usepackage{multicol}

% specify your degree
\bamadeegree{ti-en-ba-em}
% You can specify your degree manually here, using \degree{}
% if you don't trust 'the system'

% set title, subtitle and author
\title{Minimax optimisatie voor performantie-
ruimtemodellering} %% either don't split titles, or do so with hyphen
%% and a newline
\subtitle{Deze subtitel mag je weglaten}
\author{Bert Bibber}

% you can specify multiple supervisors, cosupervisors and external supervisors
% in Dutch: promotoren, copromotoren (dagelijkse begeleiders) en
% bedrijfspromotoren
\supervisor{prof.~dr.~ir.~P.~Kumulus}{UAntwerpen}
\supervisor{prof.~dr.~ir.~E.~Snuffel}{UAntwerpen}
\cosupervisor{ing.~P.~Pienter}{Cosys, UAntwerpen}
\extsupervisor{prof.~dr.~H.~Warwinkel}{TNT-Bang, N.V.}

% set the academic year: keep the spaces around the dash!
\academicyear{2023 - 2024}

% you can specify a company logo
% \companylogo{\includegraphics[width=4.5cm,height=2.5cm,keepaspectratio]
% {companylogo.jpg}}

\begin{document}

% creates the title page, remove if you don't want any
\maketitle

% causes the first pages to be roman numbered
\frontmatter

% sets the table of contents (automatically for you)
\tableofcontents

% changes the numbering system to arabic and restart from 1
\mainmatter

```

```

% Use this template if you need to provide a twocolumn summary at the
% start of your document. Remove it if you don't need it.
\pagestyle{empty}
\thispagestyle{empty}
\begin{multicols}{2}
[
  \begin{center}
    \textbf{
      \Large Samenvatting\\[1ex]
      \@title~\\[1ex]
      \large \@subtitle\\[0.5ex]}
    \@author
  \end{center}
]

\kant[11]

\kant[12]

\kant [13]

\kant [14]

\kant [15]

\end{multicols}
\pagestyle{fancy}

% An even better suggestion is to create your twocolumns summary as a
% separate document (using a dedicated paper-writing class e.g. the
% IEEEtran class) and load the individual pdf pages using the pdfpages
% package (https://ctan.org/pkg/pdfpages).

% a first numbered chapter
\chapter{Inleiding}

% some fancy typeset text (see the PDF yourself)
\insettext{Bene vixit qui bene latuit!}

% some dummy text: remove in your copy
\kant[1]

% a second numbered chapter
\chapter{Onderzoeksvraag}

\insetquote{As any dedicated reader can clearly see, the Ideal of
  practical reason is a representation of
  as far as I know, the things themselves, a vast overexaggeration.}

% a first numbered section
\section{Het gebeuren}
\kant[2]

\begin{equation}
  e^{-j\pi} + 1 = 0
\end{equation}

\foreach \i in {3,4,...,10} {
  \kant[\i]
}

\chapter{Literatuurstudie}

\chapter{Theoretische achtergrond}

```



```

\chapter{Eigen realisatie}

\chapter{Besluit}

% changes the chapter numbering to letters and uses 'Appendix' or
% 'Bijlage' (in dutch) as chapter name.
% !! do not use \backmatter before \appendix: it is broken!
\appendix

\chapter{Symbolen}
\chapter{Referentielijst}

\end{document}
</bmt-example>

```

### 6.4.3 uantwerpenphdthesis

#### Dutch

```

<*pt-example1>
\documentclass[ti,10pt,twoside,openright,filled]{uantwerpenphdthesis}

% ti            specifies the department, change to the letter combination of
%              your department
% 10pt          sets the font size, 10pt is ok for a phd manuscript
% twoside       if you want a two-sided document, change to oneside if you
%              want a recto only document
% openright     causes you chapters to start on a right-hand page when
%              your document is twosided
% for two-sided theses, specify 'twoside' and 'openright' as options
% for one-sided theses, specify 'oneside' and 'openany' as options
% filled        causes left and right filling (which - by the way - is
%              not helpful for easy reading; remove for a left-filled
%              document)
% cameraready   this option will change the paper format from the official
%              $\qty{26}{\centi\meter}\times\qty{18}{\centi\meter}$
%              to A4 and trigger alignment marks and cut-lines (embedding
%              the official $\qty{26}{\centi\meter}\times\qty{18}{\centi\meter}$
%              into an A4-page) for your
%              printing service - check with them whether they want
%              this.
% bare          this option removes title page and final page. Many
%              print services required this format and they will
%              typeset the title page and final page for you.

%
% Some blunt advertizing: do you want to check out some of the common mistakes
% authors make when using LaTeX? Check out: https://www.digmanwaves.net/TeX-Therapy
%

% You may want to use common fonts
\usepackage{mathptmx}
\iftutex
% Just an example of font-scheme: this is in no way a recommended font
% scheme!
\usepackage{cmbright}
\usepackage{fontspec}
\setmainfont
[UprightFont = *,
BoldFont = *b,
ItalicFont = *i,

```

```

    BoldItalicFont = *z,
]
{calibri}
\usepackage{sansmathaccent}
\fi

% load the proper language(s) (last language will trigger the language
% of the logo a.o.)
\usepackage[dutch]{babel} %% or english if your text is in English

% this is just for some dummy text, please remove in your copy
\usepackage{kantlipsum}

% this package allows to generate a PDF with clickable links
\usepackage[backref,hyperindex=true,pagebackref=true]{hyperref}
% you must load the hyperref package yourself, to allow putting it
% in the correct order with the other packages you load!

% set title, subtitle and author and his/her/their affiliation and
% address
\title{Harmonische Signaalanalyse\met Lineaire
  Operatoren}
\subtitle{Waarom moeten titels van doctoraatsthesisen toch altijd
  lang en onverstaaenbaar zijn?}
\author{Theofiel Hoekaff}
\affiliation{Universiteit Antwerpen\
  Faculteit Toegepaste Ingenieurswetenschappen\
  Co-design of Cyber-Physical Systems (Cosys-Lab)}
\address{Groenenborgerlaan 171, 2020 Antwerpen, Belgi\`e\
  M: theofiel.hoekaff@uantwerpen.be\
  T: +32 265 00 00
}

% specify your supervisors and their affiliation
\supervisor{prof.~dr.~W.~Vlaams}{Universiteit Antwerpen, Belgi\`e}
\supervisor{prof.~dr.~J.~Stekker}{Universiteit Antwerpen, Belgi\`e}

% specify the chairman of the jury and his/her/their affiliation
\jurychair{prof.~dr.~P.~Dalinckx}{Universiteit Antwerpen, Belgi\`e}

% specify the memers of the jury and their affiliations
\jurymember{prof.~dr.~J.~Dezerooder}{Universiteit Antwerpen, Belgi\`e}
\jurymember{prof.~dr.~P.~De Tollenaere}{Flanders Make, Belgi\`e}
\jurymember{prof.~dr.~M.~Byr}{IMEC, Nederland}

% specify your degree (manually) and where and when you obtain your degree
\degree{doctor in de Toegepaste Ingenieurswetenschappen}
\defenselocation{Antwerpen}
\defensedate{21 mei 2024}

% specify a fancy photo for your titlepage (if you don't want a dull one)
\titlepageimage{Images/uantwerpen-keyboard.jpg}

% if your manuscript is under full embargo, give the following command
% \embargofull

% if your manuscript is under a temporary embargo (1, 2 or 5 years),
% please, specify begin and end date of the embargo period as first
% and second argument to the \tempembargo command:
\embargotemp{21 mei 2024}{20 mei 2029}

% some data about your manuscript
% \doi{https://dio.org/10.1000/182} %% only specify one if you obtained one!

\begin{document}

```

```

% creates the title page, remove if you don't want any
\maketitle

% creates a bookcover file \jobname-cover.tex
Note: this only works if you don't specify the options cameraready and bare
specify the weight of your paper in gram per square meter
probably this is 80 g/m2
It might be that the page calculation for the final pages is wrong (usually by 2 pages).
In that case, correct the final page manually in the \jobname-cover.tex file.
In case you want a special font on the bookcover spine, edit the \jobname-cover.tex file.
\makebookcover{80}

% causes the first pages to be roman numbered
\frontmatter

% sets the table of contents (automatically for you)
\tableofcontents

% changes the numbering system to arabic and restart from 1
\mainmatter

% a first unnumbered chapter
\chapter*{Inleiding}

% some dummy text, remove in your copy
\kant[1]

% a first numbered chapter
\chapter{Onderzoeksvraag}

% a first numbered section
\section{Het gegeven}

\kant[2]

\begin{equation}
e^{-j\pi} + 1 = 0
\end{equation}

\kant[3-17]

\chapter{Literatuurstudie}

\kant[18-19]

\chapter{Theoretische achtergrond}

\kant[20-21]

\foreach \i in {A,B,C} {
  \chapter{Dummy hoofdstuk \i}
  \foreach \j in {1,...,50} {
    \kant[22-24]
  }
}

\chapter{Eigen realisatie}

\chapter{Besluit}

\kant[25]

% change the chapter numbering to letters and uses 'Appendix' or

```

```
% 'Bijlage' (in dutch) as chapter name.
% !! do not use \backmatter before \appendix: it is broken!
\appendix

\chapter{Symbolen}

\chapter{Publicaties}
% Put your bibliography here using BibTeX

% typeset the final page with some graphic material on it
\makefinalpage

\end{document}
</pt-example1>
```

## English

```
<*pt-example2>
\documentclass[ti,10pt,twoside,openright,filled,cameraready]{uantwerpenphdthesis}

% ti            specifies the department, change to the letter combination of
%              your department
% 10pt          sets the font size, 10pt is ok for a phd manuscript
% twoside       if you want a two-sided document, change to oneside if you
%              want a recto only document
% openright     causes you chapters to start on a right-hand page when
%              your document is twosided
% for two-sided theses, specify 'twoside' and 'openright' as options
% for one-sided theses, specify 'oneside' and 'openany' as options
% filled        causes left and right filling (which - by the way - is
%              not helpful for easy reading; remove for a left-filled
%              document)
% cameraready   this option will change the paper format from the official
%              $\qty{26}{\centi\meter}\times\qty{18}{\centi\meter}$
%              to A4 and trigger alignment marks and cut-lines (embedding
%              the official $\qty{26}{\centi\meter}\times\qty{18}{\centi\meter}$
%              into an A4-page) for your
%              printing service - check with them whether they want
%              this.

%
% Some blunt advertizing: do you want to check out some of the common mistakes
% authors make when using LaTeX? Check out: https://www.digmanwaves.net/TeX-Therapy
%

% use some fancy fonts: just an example!
\usepackage{newpxtext}
\usepackage{newpxmath}
\linespread{1.05} % recommended line spreading for pallatino fonts

% load the proper language(s) (last language will trigger the language
% of the logo a.o.)
\usepackage[english]{babel} %% or dutch if your text is in Dutch

% this is just for some dummy text, please remove in your copy
\usepackage{kantlipsum} %% this is just for some dummy text, please remove

% this package allows to generate a PDF with clickable links
\usepackage[backref,hyperindex=true,pagebackref=true]{hyperref}
% you must load the hyperref package yourself, to allow putting it
% in the correct order with the other packages you load!

% set title, subtitle
```

```

\title{Harmonic Signal analysis\\based on Linear Operators}
\subtitle{How did Mindy linearly kill Mork's IC signal analyzer?}

% trigger the generation of a secondary title page in Dutch by
% specifying a \titel (and optionally a \subtitel).
\titel{Harmonische Signaalanalyse\\met behulp van Lineaire
  Operatoren}
\subtitel{Waarom moeten titels van doctoraatsthesisen toch altijd
  lang en onverstaanbaar zijn?}

% specify the author and his/her/their affiliation and address
\author{Theodore Edgeoff}
\affiliation{University of Antwerp\\
  Faculty of Applied Engineering\\
  Cosys-Lab}
\address{Groenenborgerlaan 171, 2020 Antwerpen, Belgi"e\\
  M: theofiel.hoekaff@uantwerpen.be\\
  T: +32 265 00 00
}

% specify your supervisors and their affiliation
\supervisor{prof.~dr.~W.~Vlaams}{University of Antwerp, Belgium}
\supervisor{prof.~dr.~J.~Stekker}{University of Antwerp, Belgium}

% specify the chairman of the jury and his/her/their affiliation
\jurychair{prof.~dr.~P.~Dalinckx}{University of Antwerp, Belgium}

% specify the memers of the jury and their affiliations
\jurymember{prof.~dr.~J.~Dezerooder}{University of Antwerp, Belgium}
\jurymember{prof.~dr.~P.~De Tollenaere}{Flanders Make, Belgium}
\jurymember{prof.~dr.~M.~Byr}{IMEC, The Netherlands}

% specify your degree (manually) and where and when you obtain your degree
\degree{doctor in Applied Engineering}
\defenselocation{Antwerp}
\defensedate{May 24, 2024}

% specify a fancy photo for your titlepage (if you don't want a dull one)
\titlepageimage{Images/uantwerpen-keyboard.jpg}

% if your manuscript is under full embargo, give the following command
\embargofull

% if your manuscript is under a temporary embargo (1, 2 or 5 years),
% please, specify begin and end date of the embargo period as first
% and second argument to the \tempembargo command:
% \embargotemp{May 24, 2024}{May 23, 2026}

% some data about your manuscript
% \doi{https://dio.org/10.1000/182} %% only specify one if you obtained one!

\begin{document}

% creates the title page, remove if you don't want any
\maketitle

% causes the first pages to be roman numbered
\frontmatter

% sets the table of contents (automatically for you)
\tableofcontents

% changes the numbering system to arabic and restart from 1
\mainmatter

```

```

% a first unnumbered chapter
\chapter*{Introduction}

% some dummy text, remove in your copy
\kant[1]

% a first numbered chapter
\chapter{Research question}

% a first numbered section
\section{The datum}
\kant[2]

\begin{equation}
e^{-j\pi} + 1 = 0
\end{equation}

\kant[3-17]

\chapter{Literature review}
\kant[18-19]

\chapter{Theoretical background}
\kant[20-21]

\chapter{Technical results}
\kant[22-24]

\chapter{Conclusion}
\kant[25]

% change the chapter numbering to letters and uses 'Appendix' or
% 'Bijlage' (in dutch) as chapter name.
% !! do not use \backmatter before \appendix: it is broken!
\appendix

\chapter{Symbols}

% Put your bibliography here using BibTeX

% typeset the final page with some graphic material on it
\makefinalpage

\end{document}
</pt-example2>

```

#### 6.4.4 uantwerpenreport

```

<*rp-example>
\documentclass[10pt,twoside,openright,filled]{uantwerpenreport}

% 10pt          sets the font size, 10pt is ok for a phd manuscript
% twoside       if you want a two-sided document, change to oneside if you
%              want a recto only document
% openright     causes you chapters to start on a right-hand page when
%              your document is twosided
% for two-sided theses, specify 'twoside' and 'openright' as options
% for one-sided theses, specify 'oneside' and 'openany' as options
% filled        causes left and right filling (which - by the way - is
%              not helpful for easy reading; remove for a left-filled
%              document)

% You may want to use common fonts

```

```

\usepackage{mathptmx}
\iftutex
% Just an example of font-scheme: this is in no way a recommended font
% scheme!
\usepackage{cmbright}
\usepackage{fontspec}
\setmainfont
[UprightFont = *,
 BoldFont = *b,
 ItalicFont = *i,
 BoldItalicFont = *z,
]
{calibri}
\usepackage{sansmathaccent}
\fi

% load the proper language(s) (last language will trigger the language
% of the logo a.o.)
\usepackage[dutch]{babel} %% or english if your text is in Dutch

% this is just for some dummy text, please remove in your copy
\usepackage{kantlipsum}

% this package allows to generate a PDF with clickable links
\usepackage[backref,hyperindex=true,pagebackref=true]{hyperref}
% you must load the hyperref package yourself, to allow putting it
% in the correct order with the other packages you load!

% set title, subtitle and author and his/her/their affiliation and
% address
\title{De toepassing van roomijs-derivaten in beton}
\subtitle{Het belang van een smaakvolle architectuur}
\author{Jan Bouwblauw}
\affiliation{Universiteit Antwerpen | Building Research Group}
\address{Groenenborgerlaan 171, 2020 Antwerpen, Belgi\\"e\\
M: jan.bouwblauw@uantwerpen.be\\
T: +32 265 00 00
}

% provide some extra data (a mention on the title page on what type of
% report this is)
\extra{Onderzoeksrapport}

% year in which the report appears
\versionyear{2023}

% specify a fancy photo for your titlepage (if you don't want a dull one)
\titlepageimage{Images/uantwerpen-keyboard.jpg}

\begin{document}

% creates the title page, remove if you don't want any
\maketitle

% causes the first pages to be roman numbered
\frontmatter

% sets the table of contents (automatically for you)
\tableofcontents

% changes the numbering system to arabic and restart from 1
\mainmatter

% a first unnumbered chapter
\chapter*{Inleiding}

```

```

% some dummy text, remove in your copy
\kant[1]

% a first numbered chapter
\chapter{Smaken en smaakpapillen}

% a first numbered section
\section{Het gegeven}
\kant[2]

\begin{equation}
e^{-j\pi} + 1 = 0
\end{equation}

\kant[3-17]

\chapter{Experimentele setup}
\kant[18-19]

\chapter{Resulaten}
\kant[20-21]

\chapter{Conclusie}
\kant[22-24]

\chapter{Advies}
\kant[25]

% change the chapter numbering to letters and uses 'Appendix' or
% 'Bijlage' (in dutch) as chapter name.
% !! do not use \backmatter before \appendix: it is broken!
\appendix

\chapter{Symbolen}

\chapter{Publicaties}
% Put your bibliography here using BibTeX

% typeset the final page with some graphic material on it
\makefinalpage

\end{document}
</rp-example>

```

## 6.4.5 uantwerpenletter

### Plain example

```

<*le-example>
\documentclass[ti,a4paper]{uantwerpenletter}

% ti            specifies the department, change to the letter combination of
%              your department
% a4paper       specifies the paper format
% nofoldline    this suppresses the foldline
%
% As a good UAntwerpen citizen, you would use the calibri font.
% As this only works for XeLaTeX or LuaLaTeX, we chose to include
% cmbright in any other case.
\iftutex
\usepackage{cmbright}
\usepackage{fontspec}
\setmainfont

```



```

[UprightFont = *,
BoldFont = *b,
ItalicFont = *i,
BoldItalicFont = *z,
]
{calibri}
\usepackage{sansmathaccent}
\fi

% load the proper language(s) (last language will trigger the language
% of the logo a.o.)
\usepackage[english]{babel}

% this is just for some dummy text, please remove in your copy
\usepackage{kantlipsum}

% provide info on who send the letter, you can put this in a
% configuration file, see the documentation of the letter class!
\sender{prof.-Walter Daems}{Senior Lecturer}
\unit{Cosys-Lab}
\address{
  Campus Groenenborger\\
  Groenenborgerlaan 171\\
  B-2020 Antwerpen\\
  BELGIUM}
\email{walter.daems}@uantwerpen.be}
\phone{+32 3 265 98 43}
\mobile{+32 499 355 115}

% set a return address - if you want to avoid the infernal anger of
% the UAntwerp internal post service
\returnaddress{FTI - U.301 -- Groenenborgerlaan 171, 2020 Antwerpen, BELGIUM}

% provide some details on who you want to write to
\to{prof.-B.-Bonette}
\toorganization{Mumford University}
\toaddress{
  450 Morning Mall\\
  Mumford, DX 94305-2004\\
  USA}

% a proper letter mentions a date of writing and a subject
\date{January 3, 2016}
\subject{Congratulations for online video lectures}

\begin{document}
% This puts all logo's / address / subject where it needs to be
\maketitle

% be polite when starting a letter, and address your audience
\opening{Dear prof.-Bonette,}

I'd like to congratulate you and the other professors of your
university on the very instructive video lectures
provided by your University. They are valued very
highly.

You inspired many a professor at our university to provide more
technical content beyond classical paper courses.
Based on your inspiring lectures, some students desire to candidate
themselves for taking an internship at your university. You can find
their details enclosed.

% Below, you can find a few more dummy paragraphs to illustrate that
% this class can generate multipage letters.

```

```

\kant[1-3]

% time to say goodbye
\closing{Kind regards,}

% you might want to insert a signature picture or text:
% \signature{\includegraphics{signature.jpg}}

% mention who receives a copy of this letter if needed
\carboncopy{prof.~S.~Mariotte, Mumford University}

% specify what extras can be found in the envelope if needed
\enclosed{
  \begin{enumerate}
    \item list of course numbers that are most frequently viewed at
      our university (1pp)
    \item a list of students desiring to take an internship at
      Mumford University (2pp)
  \end{enumerate}
}
\closeletter
\end{document}
</le-example>

```

### Example with configuration file

Probably, one has to write many letters. The sender details will be most certainly valid for many an occasion. Therefore, you might want to consider putting this default setup in a configuration file, e.g. `uantwerpenletter.cfg`:

```

<*le-cfg>
% configuration file for uantwerpenletter class

% you can put your font setup in the configuration file!
\iftutex
\usepackage{cmbright}
\usepackage{fontspec}
\setmainfont
[UprightFont = *,
BoldFont = *b,
ItalicFont = *i,
BoldItalicFont = *z,
]
{calibri}
\usepackage{sansmathaccent}
\fi

% as you probably will always be the sender of your letters,
% put this info in the configuration file too.
\sender{prof.~Walter Daems}{Senior Lecturer}
\unit{Cosys-Lab}
\address{
  Campus Groenenborger\\
  Groenenborgerlaan 171\\
  B-2020 Antwerpen\\
  BELGIUM}
\email{walter.daems}{uantwerpen.be}
\phone{+32 3 265 98 43}
\mobile{+32 499 355 115}
\returnaddress{FTI - U.301 -- Groenenborgerlaan 171, 2020 Antwerpen, BELGIUM}
</le-cfg>

```

The file can then be loaded in the preamble of your letter as follows:

```
\input{uantwerpenletter.cfg}
```

After loading this configuration file, you may override some elements if this is appropriate.

You may also consider using multiple configuration files in case you have multiple roles in the university. Just make sure they are on your  $\text{\LaTeX}$  search path (most often this search path can be set with an environment variable `TEXINPUTS`).

#### 6.4.6 uantwerpenexam

Below you can find two examples:

- A single column layout (single language) exam
- A double column layout (English-Dutch) exam

If you require more language combinations, ask the author to implement this.

##### Single column

```
<*ex-example1>
\documentclass[ti,a4paper,10pt]{uantwerpenexam}

% ti          specifies the department, change to the letter combination of
%             your department
% a4paper     specifies the paper format
% 10pt        students have good eyes, they still can read 10pt fonts

% select a font you like
\usepackage{newpxtext}
\usepackage{newpxmath}

% this package eases numbering of subquestions
\usepackage{enumitem}

% load the proper language(s) (last language will trigger the language
% of the logo a.o.)
\usepackage[dutch]{babel}

% some data about your course and the authors/lecturers
\course{1876FTIDUM}{5-Bistrologie}
\author{Walter Daems}    %% can be omitted if 'lecturers' are sufficient
\lecturer{Walter Daems}

% specify the degree of the program the course fits in
\degree{Bachelor of Science in de industri\ele wetenschappen -
elektronica-ICT}

% specify the academic year
\academicyear{2017-2018}

% specify the particular examination form
\exampart{Schriftelijk Examen}

% specify the group
\examgroupnumber{1 (eerste examenkans-inhaal)}

% specify import time-related info about the exam - this will help
% supervisors to hand-out the correct exam copies!
```

```

\examdate{2018-01-29}
\examlength{4h}
\tstart{08h30}
\tend{12h30}

% same for the room(s), you may specify multiple!
\room{G.U.024}
\room{G.U.025}

% instruct your students about important details.
% 'firstpage' puts in on the first page, if omitted the extra info is
% printed on the back of the first page
\extrainfo[firstpage]{
  Belangrijke informatie:\\par
  Het volledige Onderwijs- en Examenreglement (OER) is van toepassing
  op dit examen.
  Toch wil ik vooraf nog een aantal regels duidelijk stellen:
  \begin{enumerate}
    \item Mogen op je tafeltje aanwezig zijn:
      (1) schrijfgerief, los d.w.z. \emph{niet} in een pennenzak (geen
      papier; er zit examenpapier bij de opgaven),
      (2) je rekenmachine (zonder alfanumerieke data en zonder
      geheugenkaarten),
      (3) het formularium.
    \item Volledig \emph{verboden te gebruiken}: alle apparatuur met
      geheugen- of communicatiefunctie zoals GSM, smartphone,
      smartwatch, muziekspeler, \ldots
      Je tas staat vooraan in het lokaal. Hang je jas aan de kapstok of
      leg hem bij je tas.
    \item Schrijf je naam op het titelblad van de opgave in het daartoe
      voorziene vak. Op de andere bladen schrijf je je naam
      \emph{niet}. Je examenopgave heeft een uniek nummer dat toelaat het
      te identificeren.
    \item Op het einde van het examen geef je \emph{alle} bladen weer af
      aan de aanwezige docent.
  \end{enumerate}
  Succes!
}

% if you make a copy per student, you can provide a number on the copy
\studentnr{127}

% set the multiple choice symbol you fancy
\setmcsymbol{\bigcirc}

\begin{document}

% set the title page of the exam
\maketitle

% a first question (with an identifier that can help you remember which
% question it is out of your huge database)
\question{[VLATOP-BISTRO]}
% give some idea to the student about the importance of the question
\questionweight{3}

Geef de eerste vijf laureaten van de VLATOP-bistro
competitie.

% a second question
\question{[BECHAMEL]}
\questionweight{7}

Welk van de onderstaande ingrediënten hoort niet thuis in

```

```

een b\'echamel saus:

% this is how you specify the multiple choice answering options
\mc{Melk}
\mc{Boter}
\mc{Bloem}
\mc{Eieren}
\mc{Suiker}

% you can insert some pages for the studen to write his/her answers
% on.
% a. below the question, in this case for the remaining 11.5cm on the page
\insertsolutionspagepartial{11.5}

% b. a full page
\insertsolutionspage{}
\clearpage

% a third questoin
\question{[BISTROCULTURE-1]}
\questionweight{10}

% the option of the enumerate environment is thanks to the enumitem package
\begin{enumerate}[label=\alph*]
\item Bespreek de evolutie van de Noord-Europese bistrocultuur
gedurende de laatste vijftig jaar.
\item Breng dit in relatie tot de
opkomst van de georganiseerde recensies zoals die van Michelin en
Gault-Millau.
\end{enumerate}

% you can insert some pages for the studen to write his/her answers
% on.
% a. below the question, in this case for the remaining 23cm on the page
\insertsolutionspagepartial{23}

% b. full pages: 3 in this case
\foreach \i in {1,2,3} {
  \insertsolutionspage{}
}

% c. special 'scrap' pages with a watermark on them: two in this case
\foreach \i in {1,2} {
  \insertsolutionspage{Kladpapier}
}
\end{document}
</ex-example1>

```

**Two columns** This might be of use to professors that teach courses in English in a Dutch program, you then can make a bilingual exam. This makes you 100% compliant to the very restrictive Flemish language legislation.

```

<*ex-example2>
\documentclass[ti,a4paper,10pt]{uantwerpenexam}

% ti          specifies the department, change to the letter combination of
%             your department
% a4paper      specifies the paper format
% 10pt         students have good eyes, they still can read 10pt fonts

% select a font you like
\usepackage{newpxtext}
\usepackage{newpxmath}

```

```

% this package eases numbering of subquestions
\usepackage{enumitem}

% load the proper language(s) (last language will trigger the language
% of the logo a.o.)
\usepackage[dutch,english]{babel}

% some data about your course and the authors/lecturers
\course{1876FTIDUM}{5-Bistrology}
\lecturer{Walter Daems}
\lecturer{Paul Levrie}

% specify the degree of the program the course fits in
\degree{Bachelor of Science in de industri}"ele wetenschappen - elektronica-ICT}

% specify the academic year
\academicyear{2017-2018}

% specify the particular examination form
\exampart{Written Exam}

% specify the group
\examgroupnumber{1 (eerste examenkans-inhaal)}

% specify import time-related info about the exam - this will help
% supervisors to hand-out the correct exam copies!
\examdate{2018-01-29}
\examlength{4h}
\tstart{08h30}
\tend{12h30}

% same for the room(s)
\room{G.U.025}
\room{G.U.026}

% instruct your students about important details.
% 'firstpage' puts in on the first page, if omitted the extra info is
% printed on the back of the first page
\extrainfo{
  %% the engdut command allows you to specify a left column in english
  %% and right column in dutch
  %% use multiple engdut-environments to keep the page flow synchronized
  \engdut{
    Important information:\\\par
    The Education and Examination Regulations (EER) hold for this
    examination in full.
    However, before starting, I'd like to set some rules straight:
  }
  {
    Belangrijke informatie:\\\par
    Het volledige Onderwijs- en Examenreglement (OER) is van toepassing
    op dit examen.
    Toch wil ik vooraf nog een aantal regels duidelijk stellen:
  }

  \engdut{
    \begin{itemize}
    \item \emph{Can be used:} (1) writing gear (\emph{not} in a pencil
      case); you don't need paper; there's plenty of paper in your exam
      copy;
      (2) your calculator (without alphanumerical data and without memory
      cards); (3) the formula collection.
    \end{itemize}
  }
}

```

```

{
  \begin{itemize}
  \item Mogen op je tafeltje aanwezig zijn:
    (1) schrijfgerief, los d.w.z. \emph{niet} in een pennenzak (geen
      papier; er zit examenpapier bij de opgaven),
    (2) je rekenmachine (zonder alfanumerieke data en zonder
      geheugenkaarten),
    (3) het formularium.
  \end{itemize}
}

\engdut{
  \begin{itemize}
  \item \emph{May not be used:} all equipment with memory or
    communications facilities, like cell phones, smart phones, smart
    watches, music players, \ldots
    Your bag must be put in the front of the room. Put your coat on the
    hallstand or next to your bag.
  \end{itemize}
}

{
  \begin{itemize}
  \item Volledig \emph{verboden te gebruiken}: alle apparatuur met
    geheugen- of communicatiefunctie zoals GSM, smartphone,
    smartwatch, muziekspeler, \ldots
    Je tas staat vooraan in het lokaal. Hang je jas aan de kapstok of
    leg hem bij je tas.
  \end{itemize}
}

\engdut{
  \begin{itemize}
  \item Write your name on the title page. Don't write your name on
    the subsequent pages. Your copy has a unique number to identify it
    as yours.
  \end{itemize}
}

{
  \begin{itemize}
  \item Schrijf je naam op het titelblad van de opgave in het daartoe
    voorziene vak. Op de andere bladen schrijf je je naam
    \emph{niet}. Je examenopgave heeft een uniek nummer dat toelaat het
    te identificeren.
  \end{itemize}
}

\engdut{
  \begin{itemize}
  \item Take your time to \emph{answer all questions in writing}. The
    point weights are listed above every question. Be complete in your
    answer, but stick to the point. Take into account the available time.
  \end{itemize}
}

{
  \begin{itemize}
  \item Neem je tijd om \emph{alle vragen schriftelijk te}
    beantwoorden}. Het puntengewicht van een vraag is bovenaan de vraag
    op de opgavebladen vermeld. Wees volledig in je antwoord, maar ter
    zake. Houd rekening met de beschikbare tijd.
  \end{itemize}
}

\engdut{
  \begin{itemize}
  \item Hand in \emph{all} papers to the staff member on duty, at the

```

```

        end of the examination.
    \end{itemize}
    Success!
}
{
    \begin{itemize}
    \item Op het einde van het examen geef je \emph{alle} bladen weer af
        aan de aanwezige docent.
    \end{itemize}
    Succes!
}
\clearpage
}

% if you make a copy per student, you can provide a number on the copy
\studentnr{29}

\begin{document}

% set the title page of the exam
\maketitle

% a first question (with an identifier that can help you remember which
% question it is out of your huge database)
\question{[VLATOP-BISTRO]}
% give some idea to the student about the importance of the question
\questionweight{3}

% typeset the question in two columns
\engdut{
    Write down the first five laureates of the VALTOP-bistro competition.
}
{
    Geef de eerste vijf laureaten van de VLATOP-bistro
    competitie.
}

% a second question
\question{[BECHAMEL]}
\questionweight{7}

\engdut{
    Which of the ingredients below does not belong in a b\'echamel
    sauce:
}
{
    Welk van de onderstaande ingrediënten hoort niet thuis in
    een b\'echamel saus:
}

% this is how you specify multiple choice answering options in two languages
\engdutm{Milk}{Melk}
\engdutm{Butter}{Boter}
\engdutm{Flower}{Bloem}
\engdutm{Eggs}{Eieren}
\engdutm{Sugar}{Suiker}

% you can insert some pages for the student to write his/her answers
% on.
% a. below the question, in this case for the remaining 19.5cm on the page
\insertsolutionspagepartial{19.5}

% b. a full page
\insertsolutionspage{}

```



```

\clearpage

% a third question
\question{[BISTROCULTURE-1]}
\questionweight{10}

\engdut{
% the option of the enumerate environment is thanks to the enumitem package
\begin{enumerate}[label=\alph*]
\item Discuss the evolution of the Northern European bistro culture during
the latest fifty years.
\item Relate this to the rise of organized reviews
like the ones of Michelin and Gault-Millau.
\end{enumerate}
}
{
\begin{enumerate}[label=\alph*]
\item Bespreek de evolutie van de Noord-Europese bistrocultuur
gedurende de laatste vijftig jaar.
\item Breng dit in relatie tot de
opkomst van de georganiseerde recensies zoals die van Michelin en
Gault-Millau.
\end{enumerate}
}

% you can insert some pages for the student to write his/her answers
% on.
% a. below the question, in this case for the remaining 22.5cm on the page
\insertsolutionspagepartial{22.5}

% b. full pages: 3 in this case
\foreach \i in {1,2,3} {
\insertsolutionspage{}
}

% c. special 'scrap' pages with a watermark on them: two in this case
\foreach \i in {1,2} {
\insertsolutionspage{Scrap/Klad}
}
\end{document}
</ex-example2>

```

## 7 Implementation of the classes

### 7.1 Common options

Colors appear in any document, so let's define them in common in a separate package

```
1 <*clo>
2 \newif\if@neutralcolors
3 \@neutralcolorsfalse
4 \DeclareOption{neutralcolors}{\@neutralcolorstrue}
5
6 \newcommand*\colormodel{rgb}
7 \newif\if@cmyk
8 \@cmykfalse
9 \DeclareOption{cmyk}{\renewcommand*\colormodel{cmyk}\@cmyktrue}
10 \DeclareOption{rgb}{\renewcommand*\colormodel{rgb}\@cmykfalse}
11
12 \newcommand*\facinenglish[1]{\renewcommand\@faculty{#1}}
13 \newcommand*\facindutch[1]{
14   \AtBeginDocument{
15     \makeatother
16     \@ifpackageloaded{babel}{
17       \addto\captionsdutch{\renewcommand*\@faculty{#1}}
18     }{}
19     \makeatletter
20   }
21 }
22 \newcommand*\fselector{ua}
23 \newcommand*\lselector{en}
24 \newlength\logounitheight
25 \setlength\logounitheight{0.8cm}
26
27 \newcommand*\@faculty{~}
28 \DeclareOption{be}{
29   \renewcommand*\fselector{be}
30   \setlength\logounitheight{1cm}
31   \facinenglish{Faculty of Business and Economics}
32   \facindutch{Faculteit Bedrijfswetenschappen en Economie}
33 }
34 \DeclareOption{fbd}{
35   \renewcommand*\fselector{fbd}
36   \setlength\logounitheight{1cm}
37   \facinenglish{Faculty of Pharmaceutical, Biomedical and Veterinary Sciences}
38   \facindutch{Faculteit Farmaceutische, Biomedische en Diergeneeskundige
39     Wetenschappen}
40 }
41 \DeclareOption{ggw}{
42   \renewcommand*\fselector{ggw}
43   \setlength\logounitheight{1cm}
44   \facinenglish{
45     Faculty of Medicine and Health Sciences}
46   \facindutch{Faculteit Geneeskunde en Gezondheidswetenschappen}
47 }
48 \DeclareOption{lw}{
49   \renewcommand*\fselector{lw}
50   \setlength\logounitheight{1cm}
51   \facinenglish{Faculty of Arts}
52   \facindutch{Faculteit Letteren en Wijsbegeerte}
53 }
54 \DeclareOption{ow}{
55   \renewcommand*\fselector{ow}
56   \setlength\logounitheight{1cm}
57   \facinenglish{Faculty of Design Sciences}
58   \facindutch{Faculteit Ontwerpwetenschappen}
```

```

59 }
60 \DeclareOption{re}{
61   \renewcommand*\fselector{re}
62   \setlength\logounitheight{1cm}
63   \facinenglish{Faculty of Law}
64   \facindutch{Faculteit Rechten}
65 }
66 \DeclareOption{sw}{
67   \renewcommand*\fselector{sw}
68   \setlength\logounitheight{1cm}
69   \facinenglish{Faculty of Social Sciences}
70   \facindutch{Faculteit Sociale Wetenschappen}
71 }
72 \DeclareOption{ti}{
73   \renewcommand*\fselector{ti}
74   \setlength\logounitheight{1cm}
75   \facinenglish{Faculty of Applied Engineering}
76   \facindutch{Faculteit Toegepaste Ingenieurswetenschappen}
77 }
78 \DeclareOption{we}{
79   \renewcommand*\fselector{we}
80   \setlength\logounitheight{1cm}
81   \facinenglish{Faculty of Science}
82   \facindutch{Faculteit Wetenschappen}
83 }
84 \DeclareOption{iob}{
85   \renewcommand*\fselector{iob}
86   \setlength\logounitheight{1cm}
87   \facinenglish{Institute of Development Policy}
88   \facindutch{Instituut voor Ontwikkelingsbeleid- en beheer}
89 }
90 \newcommand*{@facultyacronym}{\expandafter\uppercase\expandafter{\fselector}}
91
92 \AtBeginDocument{
93   \makeatother
94   \@ifpackageloaded{babel}{
95     \addto\captionsdutch{
96       \renewcommand*\lselector{nl}
97     }{}
98   }
99   \makeatletter
100
101   \newcommand*\logopos{Logos/logo-uantwerpen-\fselector-\lselector-\colormodel-pos}
102   \newcommand*\logoposua{Logos/logo-uantwerpen-ua-\lselector-\colormodel-pos}
103   \newcommand*\logoneg{Logos/logo-uantwerpen-\fselector-\lselector-\colormodel-neg}
104   \newcommand*\logonegua{Logos/logo-uantwerpen-ua-\lselector-\colormodel-neg}
105   \newcommand*\logomonowhite{Logos/logo-uantwerpen-\fselector-\lselector-\colormodel-mono-white}
106   \newcommand*\logomonowhiteua{Logos/logo-uantwerpen-ua-\lselector-\colormodel-mono-white}
107   \newcommand*\iconfile{Logos/icon-uantwerpen-\fselector-\colormodel}
108   \newcommand*\iconfileua{Logos/icon-uantwerpen-ua-\colormodel}
109 }
110 </clo>

```

## 7.2 Color scheme

```

111 <*cls>
112 \if@cmymk
113 %% UAntwerpen
114 \definecolor{uauamain}{cmyk}{0.00,0.96,0.82,0.01}
115 \definecolor{uauaside}{cmyk}{1.00,0.71,0.00,0.51}
116 %% Faculteit Bedrijfswetenschappen en Economie
117 \definecolor{uabemain}{cmyk}{0.58,0.00,1.00,0.04}
118 \definecolor{uabeside}{cmyk}{0.29,0.04,0.41,0.00}
119 %% Faculteit Farmaceutische, Biomedische en Diergeneeskundige Wetenschappen

```

```

120 \definecolor{uafbdmain}{cmyk}{0.65,0.03,0.00,0.00}
121 \definecolor{uafbdside}{cmyk}{0.33,0.03,0.00,0.00}
122 %% Faculteit Geneeskunde en Gezondheidswetenschappen
123 \definecolor{uaggwmain}{cmyk}{0.61,0.55,0.00,0.00}
124 \definecolor{uaggwside}{cmyk}{0.21,0.27,0.03,0.00}
125 %% Faculteit Letteren en Wijsbegeerte
126 \definecolor{ualwmain}{cmyk}{0.00,0.27,0.85,0.00}
127 \definecolor{ualwside}{cmyk}{0.00,0.16,0.51,0.00}
128 %% Faculteit Ontwerpwetenschappen
129 \definecolor{uaowmain}{cmyk}{0.53,0.25,0.26,0.05}
130 \definecolor{uaowside}{cmyk}{0.25,0.08,0.16,0.00}
131 %% Faculteit Rechten
132 \definecolor{uaremain}{cmyk}{0.10,1.00,0.90,0.05}
133 \definecolor{uareside}{cmyk}{0.04,0.45,0.36,0.00}
134 %% Faculteit Sociale Wetenschappen
135 \definecolor{uaswmain}{cmyk}{0.08,0.00,1.00,0.26}
136 \definecolor{uaswside}{cmyk}{0.20,0.11,0.50,0.00}
137 %% Faculteit Toegepaste Ingenieurswetenschappen
138 \definecolor{uatimain}{cmyk}{0.31,1.00,0.00,0.01}
139 \definecolor{uatiside}{cmyk}{0.11,0.30,0.02,0.00}
140 %% Faculteit Wetenschappen
141 \definecolor{uawemain}{cmyk}{1.00,0.20,0.00,0.25}
142 \definecolor{uaweside}{cmyk}{0.40,0.08,0.00,0.10}
143 %% IOB
144 \definecolor{uaiobmain}{cmyk}{0.05,0.75,1.00,0.00}
145 \definecolor{uaiobside}{cmyk}{0.40,0.08,0.00,0.10}
146 \else
147 %% UAntwerpen
148 \definecolor{uauamain}{RGB}{234,44,56}
149 \definecolor{uauaside}{RGB}{0,46,101}
150 %% Faculteit Bedrijfswetenschappen en Economie
151 \definecolor{uabemain}{RGB}{101,168,18}
152 \definecolor{uabeside}{RGB}{185,213,169}
153 %% Faculteit Farmaceutische, Biomedische en Diergeneeskundige Wetenschappen
154 \definecolor{uafbdmain}{RGB}{68,184,243}
155 \definecolor{uafbdside}{RGB}{181,221,247}
156 %% Faculteit Geneeskunde en Gezondheidswetenschappen
157 \definecolor{uaggwmain}{RGB}{117,117,203}
158 \definecolor{uaggwside}{RGB}{198,182,210}
159 %% Faculteit Letteren en Wijsbegeerte
160 \definecolor{ualwmain}{RGB}{241,181,61}
161 \definecolor{ualwside}{RGB}{255,218,145}
162 %% Faculteit Ontwerpwetenschappen
163 \definecolor{uaowmain}{RGB}{130,161,173}
164 \definecolor{uaowside}{RGB}{200,217,216}
165 %% Faculteit Rechten
166 \definecolor{uaremain}{RGB}{210,8,36}
167 \definecolor{uareside}{RGB}{237,157,144}
168 %% Faculteit Sociale Wetenschappen
169 \definecolor{uaswmain}{RGB}{173,165,0}
170 \definecolor{uaswside}{RGB}{215,211,148}
171 %% Faculteit Toegepaste Ingenieurswetenschappen
172 \definecolor{uatimain}{RGB}{177,0,151}
173 \definecolor{uatiside}{RGB}{221,184,210}
174 %% Faculteit Wetenschappen
175 \definecolor{uawemain}{RGB}{0,108,169}
176 \definecolor{uaweside}{RGB}{151,192,223}
177 %% IOB
178 \definecolor{uaiobmain}{RGB}{230,98,8}
179 \definecolor{uaiobside}{RGB}{151,192,223}
180 \fi
181 %%
182 \if@neutralcolors
183 \colorlet{maincolor}{uauaside}
184 \colorlet{sidecolor}{uauamain}

```

```

185 \colorlet{basecolor}{uauaside}
186 \else
187 \colorlet{maincolor}{ua\fselector main}
188 \colorlet{sidecolor}{ua\fselector side}
189 \colorlet{basecolor}{uauaside}
190 \fi
191 \</cls>

```

### 7.3 Class inheritance

For convenience, we'll derive from the standard L<sup>A</sup>T<sub>E</sub>X book, letter and article class.

Before loading the class, we provide the extra options.

```

192 <*ct>
193 \newif\if@modern
194 \@modernfalse
195 \DeclareOption{modern}{\@moderntrue}
196 </ct>
197 <*ct|rp>
198 \newif\if@copyright
199 \DeclareOption{copyright}{\@copyrighttrue}
200 </ct|rp>
201 %
202 <*ct|bmt|pt|rp|le>
203 \newif\if@filled
204 \DeclareOption{filled}{\@filledtrue}
205 </ct|bmt|pt|rp|le>
206 %
207 <*ex>
208 \newif\if@examiner
209 \DeclareOption{examiner}{\@examinertrue}
210 </ex>
211 <*ct|pt>
212 \newif\if@cameraready
213 \DeclareOption{cameraready}{\@camerareadytrue}
214 </ct|pt>
215 <*pt>
216 \newif\if@bare
217 \DeclareOption{bare}{\@baretrue}
218 </pt>
219 <*le>
220 \newif\if@nofoldline
221 \DeclareOption{nofoldline}{\@nofoldlinetrue}
222 </le>

```

We execute some standard options: We load the book class for course texts, reports and PhD theses, and the scrbook class for bachelor and master theses.

```

223 <*ct|bmt|pt|rp>
224 \input{uantwerpencommonoptions.clo}
225 \ExecuteOptions{a4paper,11pt,final,oneside,openright}
226 \ProcessOptions\relax
227 </ct|bmt|pt|rp>
228 <ct|pt|rp>\LoadClassWithOptions{book}
229 <bmt>\LoadClassWithOptions{scrbook}
230 % We load the |letter| class for letters
231 <*le>
232 \input{uantwerpencommonoptions.clo}
233 \ExecuteOptions{a4paper,10pt,final,oneside,openright}
234 \ProcessOptions
235 \LoadClassWithOptions{letter}
236 \newcommand*\tat{\makeatletter @\makeatother}
237 </le>
238 % We load the |article| class for exams

```

```

239 <*ex>
240 \input{uantwerpencommonoptions.clo}
241 \ExecuteOptions{a4paper,twoside,10pt}
242 \ProcessOptions
243 \LoadClassWithOptions{article}
244 </ex>

```

## 7.4 Modern typesetting

Let's force some modern typesetting without paragraph indentation and with a decent paragraph spacing.

```

245 <*ct|bmt|pt|rp|le|ex>
246 \setlength{\parindent}{0pt}
247 \addtolength{\parskip}{0.75\baselineskip}
248 \setcounter{secnumdepth}{3}
249 </ct|bmt|pt|rp|le|ex>

```

## 7.5 Auxiliary packages

Reinventing the wheel is a waste of time, let's preload some appropriate auxiliary packages that have proven their value.

### 7.5.1 Geometry

Let's reduce the margins to 1 inch each for the documents that are unlikely to be glue bound:

```

250 <*ct|rp|ex>
251 \RequirePackage[top=2.5cm, bottom=2.5cm, left=2.5cm, right=2.5cm]{geometry}
252 </ct|rp|ex>
253 % Let's follow the instructions by ADS for the (marginal(!) glue provision):
254 <*pt>
255 \RequirePackage[paperwidth=180mm,paperheight=260mm,
256               top=2.5cm,bottom=2.5cm,left=2.6cm,right=1.8cm,twoside]
257               {geometry}
258 </pt>
259 % Also, let's follow the office templates for the bachelor's and
260 % master's theses:
261 <*bmt>
262 \RequirePackage[top=2.6cm, bottom=2.5cm, left=3.5cm, right=1.6cm]{geometry}
263 </bmt>
264 % Letters are a little bit different:
265 <*le>
266 \RequirePackage[top=1in, bottom=1in, left=1.34in, right=1in]{geometry}
267 \RequirePackage[normalem]{ulem}
268 </le>

```

### 7.5.2 Preparing for L<sup>A</sup>T<sub>E</sub>X3

Let's make things a bit easier for me.

```

269 <*ct|bmt|pt|rp|le|ex>
270 \RequirePackage{expl3}
271 %\RequirePackage[check-declarations]{expl3} % I use this during debug phase
272 \RequirePackage{xparse}
273 </ct|bmt|pt|rp|le|ex>

```

### 7.5.3 Font packages

Note that the use of cmbright is no longer imposed (as of v1.3). Using a good font is now up to the user. The packages 'newpxtext/newpxmath' and 'cmbright' are highly recommended. For writing letters, 'Calibri' is the official font of the University of Antwerp.

```
274 <*ct | bmt | pt | rp | le>
275 % no more font code
276 </ct | bmt | pt | rp | le>
```

### 7.5.4 Boilerplate packages

Some boilerplate packages and an empty macro to test against (using\ifx)

```
277 <*ct | bmt | pt | rp | le | ex>
278 \RequirePackage{iftex}
279 \RequirePackage{xstring}
280 \RequirePackage{etoolbox}
281 \RequirePackage{ifthen}
282 \IfFileExists{shellesc.sty}{\RequirePackage{shellesc}}{}
283 </ct | bmt | pt | rp | le | ex>
```

### 7.5.5 Graphics packages

Graphics packages that are required for the title page, but may come in handy for regular use as well.

Some packages for coursetext and bamathesis:

```
284 <*ct | bmt | pt | rp | le | ex>
285 \RequirePackage{graphicx}
286 \RequirePackage{graphbox}
287 \RequirePackage{soul}
288 \RequirePackage[export]{adjustbox}
289 \RequirePackage{color}
290 \RequirePackage{tikz}
291 \usetikzlibrary{positioning,calc}
292 \RequirePackage{eso-pic}
293 \RequirePackage{zref-totpages}
294 </ct | bmt | pt | rp | le | ex>
295 <*ct | rp>
296 \if@copyright
297 \RequirePackage[contents={},color=lightgray,scale=3]{background}
298 \fi
299 </ct | rp>
```

### 7.5.6 UAntwerpen color and logo scheme

```
300 <*ct | bmt | pt | rp | le | ex>
301 \RequirePackage{uantwerpencolorlogoscheme}
302 </ct | bmt | pt | rp | le | ex>
```

### 7.5.7 Header/Footer

The de-facto standard for headers and footers:

```
303 <*ct | bmt | pt | rp | le | ex>
304 \RequirePackage{fancyhdr}
305 </ct | bmt | pt | rp | le | ex>
```

## 7.6 Colors

```
306 <*ct|bmt|pt|rp|le|ex>
307 \definecolor{lightgray}{cmyk}      {0.00,0.00,0.00,0.05}
308 \definecolor{darkgray}{cmyk}       {0.00,0.00,0.00,0.80}
309 \definecolor{watermark}{cmyk}      {0.00,0.00,0.00,0.05}
310 </ct|bmt|pt|rp|le|ex>
```

## 7.7 Fancy highlighting

Though I'm not keen on highlighting, the style gurus have decided to put highlighting in the titles of the bachelor's and master's theses. The macro below highlights a token sequence using white text on the main color.

```
311 <*bmt>
312 \newcommand\@antwerpendocshl[1]{%
313   \begin{lrbox}{\@tempboxa}\end{lrbox}\@antwerpendocshlbox{\@tempboxa}}
314 \newcommand{\@antwerpendocshlbox}[1]{%
315   \tikz{%
316     \pgfpathrectangle{\pgfpoint{1pt}{0pt}}{\pgfpoint{\wd #1}{\ht #1}}%
317     \pgfusepath{use as bounding box}%
318     \node[anchor=base
319           west,align=center,fill=maincolor,text=white,outer sep=0pt,inner
320           xsep=5pt, inner ysep=0pt,minimum height=\ht\strutbox+1pt]
321     {\raisebox{1pt}{\strut}\strut\usebox{#1}};
322   }%
323 }
324 </bmt>
```

## 7.8 Fancy inset texts and quotes

```
325 <*bmt|pt|ct|rp>
326 \newcommand\insettext[1]{
327   \textcolor{basecolor}{
328     \begin{tabular}{@{\hskip3ex}\textcolor{maincolor}{\vrule width 2.5pt}%
329       \hskip3ex\large\bfseries}p{0.88\textwidth}}
330     \strut #1
331   \end{tabular}
332 }
333 }
334 \newcommand\insetquote[1]{
335   \insettext{
336     \begin{tikzpicture}[scale=0.65]
337       \fill[green!60!black] (0.4,0) -- (0.5,0) -- (0.75,-0.15) -- (0.75,0) --
338       (0.9,0) arc(-90:0:0.1) -- (1,0.65) arc(0:90:0.1) -- (0.1,0.75) arc
339       (90:180:0.1) -- (0,0.1) arc(-180:-90:0.1) -- cycle;
340       \foreach \x in {0.35,0.7} {
341         \begin{scope}[shift={(\x,0.425)},scale=0.25]
342           \fill[white] (0,0) circle[radius=0.5];
343           \fill[white] (0.5,0) arc(0:-90:1) --
344           (-0.5,-0.725) arc(-90:0:0.725) -- cycle;
345         \end{scope}
346       }
347     \end{tikzpicture}\\
348     #1
349   }
350 }
351 </bmt|pt|ct|rp>
```

## 7.9 Camera-ready version

For the course texts, this means printing no artwork (as universitas prints your front page on a pre-printed color page) This is taken care of by the titlepage and finalpage environments, so no extra code is needed here.



For PhD texts, this means providing bleed space. We implemented this using the very fine crop package.

```
352 <*pt>
353 \if@cameraready
354 \RequirePackage[cam,center,width=21truecm,height=29.7truecm]{crop}
355 \fi
356 </pt>
```

## 7.10 Data dictionary and parser

Let's start by defining our dictionary:

```
357 <*ct|bmt|pt|rp|le|ex>
358 \ExplSyntaxOn
359 \prop_new:N \g_@@_data_prop
360 </ct|bmt|pt|rp|le|ex>%
```

The dictionary can be accessed using the following document command:

```
361 <*ct|bmt|pt|rp|le|ex>
362 \NewDocumentCommand{\uantwerpendocsprop}{m}{
363   \prop_item:Nn \g_@@_data_prop{#1}
364 }
365 \NewDocumentCommand{\uantwerpendocsPROP}{m}{
366   \str_uppercase:f { \prop_item:Nn \g_@@_data_prop{#1} }
367 }
368 </ct|bmt|pt|rp|le|ex>%
```

To this end, we use the following parsing infrastructure:

```
369 <*ct|bmt|pt|rp|le|ex>
370 \NewDocumentCommand{\uantwerpendocspropread}{m}{
371   \@@_datareader:n { #1 }
372 }
373 \cs_generate_variant:Nn \prop_gput:Nnn{ Nxx }
374 \cs_new_nopar:Npn \@@_dataparser:w #1 = #2!! {
375   \tl_set:Nn \l_tmpa_tl {#1}
376   \tl_set:Nn \l_tmpb_tl {#2}
377   \tl_trim_spaces:N \l_tmpa_tl
378   \tl_trim_spaces:N \l_tmpb_tl
379   \prop_gput:Nxx \g_@@_data_prop { \l_tmpa_tl } { \l_tmpb_tl }
380 }
381 </ct|bmt|pt|rp|le|ex>
```

invoked by the following data file reader:

```
382 <*ct|bmt|pt|rp|le|ex>
383 \ior_new:N \l_@@_data_ior
384 \cs_new_nopar:Nn \@@_datareader:n {
385   \ior_open:Nn \l_@@_data_ior { uantwerpendocs-#1.data }
386   \ior_str_map_inline:Nn \l_@@_data_ior {
387     \regex_match:nnTF {=} {##1} {
388       \@@_dataparser:w ##1!!
389     }
390   }
391 }
392 \ior_close:N \l_@@_data_ior
393 }
394 </ct|bmt|pt|rp|le|ex>
```

By default, we load the generic (not yet!) and the english data file:

```
395 <*ct|bmt|pt|rp|le|ex>
396 \clist_map_inline:nn {en} {
397   \@@_datareader:n { #1 }
398 }
```

```

398 }
399 %\prop_show:N \g_@@_data_prop
400 \ExplSyntaxOff
401 </ct|bmt|pt|rp|le|ex>

```

## 7.11 Babel provisions

We will fill the dictionary from the generic data file (for elements that should not be translated, currently empty) and the language specific data files (for elements that can be translated).

```

402 <*ct|bmt|pt|rp|le|ex>
403 \newcommand*\@logo{\logopos}
404 \AtBeginDocument{
405   \makeatother
406   \@ifpackageloaded{babel}{
407     \addto\captionsenglish{%
408       \uantwerpendocspropread{en}
409     }
410     \addto\captionsdutch{%
411       \uantwerpendocspropread{nl}
412     }
413   }
414   {}
415   \uantwerpendocspropread{degree}
416   \uantwerpendocspropread{doctype}
417   \makeatletter
418 }
419 </ct|bmt|pt|rp|le|ex>

```

The English data can be found below:

```

420 <*endata>
421 org-be      = Faculty of Business and Economics
422 org-fbd     = Faculty of Pharmaceutical, Biomedical and Veterinary Sciences
423 org-ggw     = Medicine and Health Sciences
424 org-lw      = Faculty of Arts
425 org-ow      = Faculty of Design Sciences
426 org-re      = Faculty of Law
427 org-sw      = Faculty of Social Sciences
428 org-ti      = Faculty of Applied Engineering
429 org-we      = Faculty of Science
430 org-iob     = Institute of Development Policy
431 org-ua      = University of Antwerp
432 arr         = All rights reserved
433 crdisclaimer = Copyright disclaimer
434 arrphd      = The author allows to consult and copy parts of this work for personal use. Further reproduct
435 integrityclause = The PhD researcher and supervisor(s) declare that the PhD research was conducted according t
436 embargofull  = The author of this thesis declares that this document is marked confidential. The content of
437 embargotemp  = The author of this thesis declares that this document is marked confidential from __START__
438 confidential = confidential
439 of           = of
440 domainname  = uantwerp.be
441 datename    = Date
442 subjectname = Subject
443 acyearname  = Academic year
444 baname      = Bachelor of Science
445 spname      = Switching Programme
446 vpname      = Preparatory Programme
447 maname      = Master of Science
448 phdname     = PhD
449 thesisname  = Thesis
450 mthesisname = Master's thesis
451 bthesisname = Bachelor's thesis
452 lecturername = Lecturer

```

```

453 lecturersname      = Lecturers
454 supervisorname     = Supervisor
455 supervisorsname    = Supervisors
456 cosupervisorname   = Cosupervisor
457 cosupervisorsname  = Cosupervisors
458 extsupervisorname  = External supervisor
459 extsupervisorsname = External supervisors
460 examname           = Exam --- Examen
461 seriesname         = Series
462 lastname           = Last name --- Naam
463 firstname          = First name --- Voornaam
464 docketname         = Docket No. --- Rolnr.
465 roomname           = Room --- Lokaal
466 roomsname          = Rooms --- Lokalen
467 examstartname      = Start --- Begin
468 examendname         = End --- Einde
469 examdurationname   = Exam duration --- Duur van het examen
470 juryname           = Jury
471 jurymembersname    = Members
472 jurychairname      = Chair
473 bmthesisname       = Thesis to obtain the degree of
474 pthesisnamei       = Thesis submitted for the degree of
475 pthesisnameii      = at the University of Antwerp to be defended by
476 weightname         = Weight
477 </endata>

```

The Dutch data can be found below:

```

478 <*nldata>
479 org-be      = Faculteit Bedrijfswetenschappen en Economie
480 org-fbd     = Faculteit Farmaceutische, Biomedische en Diergeneeskundige Wetenschappen
481 org-ggw     = Faculteit Geneeskunde en Gezondheidswetenschappen
482 org-lw     = Faculteit Letteren en Wijsbegeerte
483 org-ow     = Faculteit Ontwerpwetenschappen
484 org-re     = Faculteit Rechten
485 org-sw     = Faculteit Sociale Wetenschappen
486 org-ti     = Faculteit Toegepaste Ingenieurswetenschappen
487 org-we     = Faculteit Wetenschappen
488 org-iob    = Instituut voor Ontwikkelingsbeleid- en beheer
489 org-ua     = Universiteit Antwerpen
490 arr        = Alle rechten voorbehouden
491 crdisclaimer = Copyright disclaimer
492 arrphd     = De auteur staat toe dat delen van dit werk geraadpleegd en gekopieerd worden voor persoonlijk gebruik
493 integrityclause = De doctoraatsonderzoeker en promotor(en) verklaren dat het doctoraatsonderzoek werd uitgevoerd
494 embargofull = De auteur van dit proefschrift verklaart dat dit document confidentieel is. De inhoud van dit document kan vertrouwelijk of anderszins wettelijk beschermd zijn
495 embargoTEMP = De auteur van dit proefschrift verklaart dat dit document confidentieel is van __START__ tot __END__
496 confidential = confidentieel
497 of          = van
498 domainname  = uantwerpen.be
499 datename    = Onderwerp
500 subjectname = Datum
501 acyearname  = Academiejaar
502 baname     = Bachelor of Science
503 spname     = Schakelprogramma
504 vpname     = Voorbereidingsprogramma
505 maname     = Master of Science
506 phdname    = Doctoraat
507 thesisname  = Afstudeerproef
508 mthesisname = Masterproef
509 bthesisname = Bachelorproef
510 lecturername = Titularis
511 lecturersname = Titularissen
512 supervisorname = Promotor
513 supervisorsname = Promotoren
514 cosupervisorname = Copromotor

```

```

515 cosupervisorsname = Copromotoren
516 extsupervisorname = Externe Promotor
517 extsupervisorsname = Externe Promotoren
518 examname          = Examen
519 seriesname         = Reeks
520 lastname           = Naam
521 firstname          = Voornaam
522 docketname         = Rolnr.
523 roomname           = Lokaal
524 roomsname          = Lokalen
525 examstartname      = Begin
526 examendname         = Einde
527 examdurationname   = Duur van het examen
528 jurynname          = Jury
529 jurymembersname    = Leden
530 jurychairname      = Voorzitter
531 bmthesisname       = Proefschrift tot het behalen van de graad van
532 pthesisnamei       = Proefschrift voorgelegd tot het behalen van de graad van
533 pthesisnameii      = aan de Universiteit Antwerpen te verdedigen door
534 weightname         = Gewicht
535 </nldata>

```

## 7.12 Bachelor and Master document types

```

536 <doctypedata>
537 nl-ba = Bachelorproef
538 nl-ma = Masterproef
539 nl-pr = Projectverslag
540 en-ba = Bachelor's thesis
541 en-ma = Master's thesis
542 en-pr = Project report
543 </doctypedata>

544 <*bmt|ct|pt|ex>
545 \ExplSyntaxOn
546 \cs_generate_variant:Nn \prop_item:Nn{ Nx }
547 \NewDocumentCommand{\uantwerpendocsdoctype}{m}{
548   \prop_item:Nx \g_@@_data_prop { #1 }
549 }
550 \ExplSyntaxOff
551 </bmt|ct|pt|ex>

```

## 7.13 Bachelor and Master disclaimers

```

552 <*bmt>
553 \newcommand\disclaimer[1]{
554   Disclaimer #1\newline\newline
555   This document is an examination document that has not been
556   corrected for any errors identified. Without prior written
557   permission of both the supervisor(s) and the author(s), any copying,
558   copying, using or realizing this publication or parts thereof
559   is prohibited. For requests for information regarding the copying
560   and/or use and/or realisation of parts of this publication, please
561   contact to the university at which the author is registered.
562   \newline\newline
563   Prior written permission from the supervisor(s) is also
564   required for the use for industrial or commercial utility of the
565   (original) methods, products, circuits and programs described in this
566   thesis, and for the submission of this publication for participation
567   in scientific prizes or competitions.
568   \newline\newline
569   This document is in accordance with the faculty regulations related to this
570   examination document and the Code of Conduct. The text has been reviewed
571   by the supervisor and the attendant.

```

```

572 }
573 \AtBeginDocument{
574   \makeatother
575   \@ifpackageloaded{babel}{
576     \addto\captionsdutch{%
577       \renewcommand\disclaimer[1]{
578         Disclaimer #1\newline\newline
579         Dit document is een examendocument dat niet werd gecorrigeerd voor
580         eventueel vastgestelde fouten. Zonder voorafgaande schriftelijke
581         toestemming van zowel de promotor(en) als de auteur(s) is overnemen,
582         kopiëren, gebruiken of realiseren van deze uitgave of gedeelten ervan
583         verboden. Voor aanvragen tot of informatie i.v.m. het overnemen en/of
584         gebruik en/of realisatie van gedeelten uit deze publicatie, wendt u
585         tot de universiteit waaraan de auteur is ingeschreven.
586         \newline\newline
587         Voorafgaande schriftelijke toestemming van de promotor(en) is eveneens
588         vereist voor het aanwenden van de in dit afstudeerwerk beschreven
589         (originele) methoden, producten, schakelingen en programma's voor
590         industrieel of commercieel nut en voor de inzending van deze
591         publicatie ter deelname aan wetenschappelijke prijzen of wedstrijden.
592         \newline\newline
593         Dit document is in overeenstemming met het facultair reglement
594         gerelateerd aan dit examendocument en de gedragscode. De tekst werd
595         nagekeken door de promotor en de begeleider.
596       }
597     }
598   }{}
599   \makeatletter
600 }
601 </bmt>

```

## 7.14 Educational degrees

```

602 (*degreedata)
603 ti-nl-ba-bk = Bachelor of Science in de industriële wetenschappen: bouwkunde
604 ti-nl-ba-ch = Bachelor of Science in de industriële wetenschappen: chemie
605 ti-nl-ba-em = Bachelor of Science in de industriële wetenschappen: elektromechanica
606 ti-nl-ba-ei = Bachelor of Science in de industriële wetenschappen: elektronica-ICT
607 ti-en-ba-bk = Bachelor of Science in de industriële wetenschappen: bouwkunde
608 ti-en-ba-ch = Bachelor of Science in de industriële wetenschappen: chemie
609 ti-en-ba-em = Bachelor of Science in de industriële wetenschappen: elektromechanica
610 ti-en-ba-ei = Bachelor of Science in de industriële wetenschappen: elektronica-ICT
611 ti-nl-ma-bk = Master of Science in de industriële wetenschappen: bouwkunde
612 ti-nl-ma-bch = Master of Science in de industriële wetenschappen: biochemie
613 ti-nl-ma-ch = Master of Science in de industriële wetenschappen: chemie
614 ti-nl-ma-em = Master of Science in de industriële wetenschappen: elektromechanica
615 ti-nl-ma-ei = Master of Science in de industriële wetenschappen: elektronica-ICT
616 ti-en-ma-ei = Master of Science in Electronics and ICT Engineering Technology
617 ti-nl-eduma-wtstem = Educatieve master of Science in de wetenschappen en technologie: STEM
618 we-nl-eduma-wtstem = Educatieve master of Science in de wetenschappen en technologie: STEM
619 we-nl-eduma-wtbchbt = Educatieve master of Science in de wetenschappen en technologie: biochemie en biotechnologie
620 we-nl-eduma-wtbio = Educatieve master of Science in de wetenschappen en technologie: biologie
621 we-nl-eduma-wtch = Educatieve master of Science in de wetenschappen en technologie: chemie
622 we-nl-eduma-wtcf = Educatieve master of Science in de wetenschappen en technologie: fysica
623 we-nl-eduma-wtinf = Educatieve master of Science in de wetenschappen en technologie: informatica
624 we-nl-eduma-wtwi = Educatieve master of Science in de wetenschappen en technologie: wiskunde
625 we-nl-ba-bircg = Bachelor of Science in de bio-ingenieurswetenschappen: cel- en genbiotechnologie
626 we-nl-ba-birvt = Bachelor of Science in de bio-ingenieurswetenschappen: chemie en voedingstechnologie
627 we-nl-ba-birlb = Bachelor of Science in de bio-ingenieurswetenschappen: land- en bosbeheer
628 we-nl-ba-birmt = Bachelor of Science in de bio-ingenieurswetenschappen: milieutechnologie
629 we-nl-ba-bio = Bachelor of Science in de biologie
630 we-nl-ma-biog = Master of Science in de biologie: evolutie en gedragsbiologie
631 we-en-ma-biocr = Master of Science in biology: biodiversity, conservation and restoration
632 we-en-ma-biogcb = Master of Science in biology: global change biology
633 we-en-ma-biomb = Master of Science in molecular biology

```

```

634 we-nl-ba-ch = Bachelor of Science in de chemie
635 we-en-ma-ch = Master of Science in chemistry
636 we-nl-ba-inf = Bachelor of Science in de informatica
637 we-en-ma-infcn = Master of Science in computer science: computer networks
638 we-en-ma-infdsai = Master of Science in computer science: data science and artificial intelligence
639 we-en-ma-infse = Master of Science in computer science: software engineering
640 we-nl-ma-infcn = Master of Science in de informatica: computernetwerken
641 we-nl-ma-infdsai = Master of Science in de informatica: data science en artificiële intelligentie
642 we-nl-ma-infse = Master of Science in de informatica: software engineering
643 we-nl-ba-fy = Bachelor of Science in de fysica
644 we-nl-ma-fy = Master of Science in de fysica
645 we-en-ma-fy = Master of Science in physics
646 we-nl-ba-wi = Bachelor of Science in wiskunde
647 we-nl-ma-wifw = Master of Science in wiskunde: fundamentele wiskunde
648 we-nl-ma-wiftw = Master of Science in wiskunde: financiële en toegepaste wiskunde
649 </degreedata>

650 <{*bmt|ct|pt|ex}>
651 \ExplSyntaxOn
652 \NewDocumentCommand{\uantwerpendocsdegree}{m}{
653   \prop_item:Nx \g_@@_data_prop { #1 }
654 }
655 \ExplSyntaxOff
656 </bmt|ct|pt|ex>

```

## 7.15 Tags

### **\facultyacronym**

The `\facultyacronym` sets the faculty acronym tag `\@facultyacronym` that is used in the header/footer information. The correct acronym also sets the faculty's name correctly.

```

657 <{*ct|bmt|pt|rp|le|ex}>
658 \newcommand*{\facultyacronym}[1]{
659   \PackageError{uantwerpendocs}
660   {The '\protect\facultyacronym{' macro is no longer available. Use
661     your faculty abbreviation in lowercase as class options instead}
662   {The interface of uantwerpendocs 4.0 has been changed. See
663     the uantwerpendocs manual under section '5.2 The class options explained'}
664 }
665 </ct|bmt|pt|rp|le|ex>

```

### **\department**

The `\department` sets the department's name tag `\@department` that is used in the title page information.

```

666 <{*ct|bmt|pt}>
667 \newcommand*{\@department}{}
668 \newcommand*{\department}[1]{
669   \renewcommand*\@department{#1}
670 }
671 </ct|bmt|pt>

```

### **\title**

The `\title` tag is native to L<sup>A</sup>T<sub>E</sub>X. It sets the `\@title` tag that will be used on the title page.

### **\titel**

This macro sets the `\@titel` tag that later will be used on the Dutch translation of the title page. Moreover, using this tag, will trigger the generation of a secondary Dutch title page. Only use this tag in an English thesis!

```

672 <{*pt}>
673 \newcommand*{\@titel}{}
674 \newcommand*{\titel}[1]{%
675   \renewcommand*\@titel{#1}
676 }
677 </pt>

```

## **\subtitle**

This macro sets the `\@subtitle` tag that later will be used on the title page, in the header/footer and to set the appropriate hyperref tag (if it is loaded).

```
678 <*ct | pt | rp>
679 \newcommand*{\@subtitle}{~}
680 \newcommand*{\@subtitleshort}{~}
681 \newcommand*{\subtitle}[2][]{%
682   \renewcommand*\@subtitle{#2}
683   \if\relax\detokenize{#1}\relax
684     \renewcommand*{\@subtitleshort}{#2}
685   \else
686     \renewcommand*{\@subtitleshort}{#1}
687   \fi
688 }
689 </ct | pt | rp>
```

## **\subtitel**

This macro sets the `\@subtitel` tag that later will be used on the Dutch translation of the title page. It will not trigger the generation of a secondary Dutch title page. That can only be done by using the `\titel` command. Only use this tag in an English thesis!

```
690 <*pt>
691 \newcommand*{\@subtitel}{}
692 \newcommand*{\subtitel}[1]{%
693   \renewcommand*\@subtitel{#1}
694 }
695 </pt>
```

## **\shorttitle**

This macro sets the `\@shorttitle` tag that later will be used in the exam class.

```
696 <*ex>
697 \newcommand*{\@shorttitle}{}
698 \newcommand*{\shorttitle}[1]{%
699   \renewcommand*\@shorttitle{#1}
700 }
701 </ex>
```

## **\author**

The author tag is native to L<sup>A</sup>T<sub>E</sub>X. It sets the `\@author` tag that will be used on the title page.

## **\courseversion**

This macro sets the `\@courseversion` tag that later will be used on the title page and in the header/footer.

```
702 <*ct>
703 \newcommand*{\@courseversion}{}
704 \newcommand*{\courseversion}[1]{\renewcommand*{\@courseversion}{#1}}
705 </ct>
```

## **\versionyear**

This macro sets the `\@versionyear` tag that later will be used on the title page and in the copyright message.

```
706 <*ct | rp>
707 \newcommand*{\@versionyear}{}
708 \newcommand*{\versionyear}[1]{\renewcommand*{\@versionyear}{#1}}
709 </ct | rp>
```

## **\publisher**

This macro sets the `\@publisher` tag that later will be used on the title page.

```
710 <*ct>
711 \newcommand*{\@publisher}{Universitas Cursusdienst |
712   Prinsesstraat 16 |
713   2000 Antwerpen |
714   T +32 3 233 23 73 |}
```

```

715 E info@cursusdienst.be}
716 \newcommand*{\publisher}[1]{\renewcommand*{\@publisher}{#1}}
717 \</ct>

```

### **\publishercode**

This macro sets the \@publishercode tag that later will be used on the title page.

```

718 \<ct>
719 \newcommand*{\@publishercode}{}
720 \newcommand*{\publishercode}[1]{\renewcommand*{\@publishercode}{#1}}
721 \</ct>

```

### **\companylogo**

This macro sets the \@companylogo tag that later will be used on the title page.

```

722 \<bmt>
723 \newcommand*{\@companylogo}{}
724 \newcommand*{\companylogo}[1]{\renewcommand*{\@companylogo}{#1}}
725 \</bmt>

```

### **\lecturer**

This macro adds lecturers (Dutch: titularissen) to the course notes. Use the macro multiple times for multiple lecturers. The order will be preserved. Note that as of v4.0 all lecturers are specified using the same macro!

```

726 \<ct|ex>
727 \ExplSyntaxOn
728 \seq_new:N \g_@@_lecturers
729 \cs_new:Nn \@@_addlecturer:n {
730   \seq_gpush:Nn \g_@@_lecturers { #1 }
731 }
732 \NewDocumentCommand{\lecturer}{m}{
733   \@@_addlecturer:n { #1 }
734 }
735 \NewDocumentCommand{\jointlecturers}{m}{
736   \seq_use:Nn \g_@@_lecturers { #1 }
737 }
738 \NewDocumentCommand{\lecturersname}{-}{
739   \if_int_compare:w \seq_count:N \g_@@_lecturers > 1
740     \uantwerpendocsprop{lecturersname}
741   \else:
742     \if_int_compare:w \seq_count:N \g_@@_lecturers > 0
743       \uantwerpendocsprop{lecturername}
744     \fi
745   \fi:
746 }
747 \AtBeginDocument{
748   \seq_greverse:N \g_@@_lecturers
749 }
750
751 \ExplSyntaxOff
752 \</ct|ex>

```

### **\extra**

The extra tag allows to specify some extra comment (e.g. the nature of the document) in the bottom bar on the title page).

```

753 \<rp>
754 \newcommand\@extra{}
755 \newcommand\extra[1]{\renewcommand\@extra{#1}}
756 \</rp>

```

### **\affiliation**

The affiliation tag allows to specify the affiliation of the author.

```

757 \<pt|rp>
758 \newcommand\@affiliation{

```



```

759 \PackageError{uantwerpendocs}
760 {Please, define the affiliation of the author using the
761   '\protect\affiliation{' command in the preamble of your
762   document.}
763 {See the uantwerpendocs manual}
764 }
765 \newcommand\affiliation[1]{\renewcommand\@affiliation{#1}}
766 </pt|rp>

```

## \supervisor

This macro allows to specify one or more supervisors with their affiliation. This can be done by invoking the macro as many times as needed. Note that as of v4.0 all supervisors are specified using the same macro!

```

767 <*bmt|pt>
768 \ExplSyntaxOn
769 \seq_new:N \g_@@_supervisors
770 \seq_new:N \g_@@_supervisorswithaffiliation
771 \cs_new:Nn \@@_addsupervisor:nn {
772   \seq_gpush:Nn \g_@@_supervisors { #1 }
773   \seq_gpush:Nn \g_@@_supervisorswithaffiliation { #1,~#2 }
774 }
775 \NewDocumentCommand{\supervisor}{mm}{
776   \@@_addsupervisor:nn { #1 } { #2 }
777 }
778 \NewDocumentCommand{\jointsupervisors}{mm}{
779   \seq_use:Nnnn \g_@@_supervisors { #2 } { #1 } { #2 }
780 }
781 \NewDocumentCommand{\jointsupervisorswithaffiliation}{mm}{
782   \seq_use:Nnnn \g_@@_supervisorswithaffiliation { #2 } { #1 } { #2 }
783 }
784 \NewDocumentCommand{\supervisorsname}{m}{
785   \if_int_compare:w \seq_count:N \g_@@_supervisors > 2
786     \uantwerpendocsprop{supervisorsname} #1
787   \else:
788     \if_int_compare:w \seq_count:N \g_@@_supervisors = 2
789       \uantwerpendocsprop{supervisorname} #1
790     \else:
791       \fi:
792     \fi:
793 }
794 </bmt|pt>
795 <*bmt>
796 \seq_new:N \g_@@_cosupervisors
797 \seq_new:N \g_@@_cosupervisorswithaffiliation
798 \cs_new:Nn \@@_addcosupervisor:nn {
799   \seq_gpush:Nn \g_@@_cosupervisors { #1 }
800   \seq_gpush:Nn \g_@@_cosupervisorswithaffiliation { #1,~#2 }
801 }
802 \NewDocumentCommand{\cosupervisor}{mm}{
803   \@@_addcosupervisor:nn { #1 } { #2 }
804 }
805 \NewDocumentCommand{\jointcosupervisors}{mm}{
806   \seq_use:Nnnn \g_@@_cosupervisors { #2 } { #1 } { #2 }
807 }
808 \NewDocumentCommand{\jointcosupervisorswithaffiliation}{mm}{
809   \seq_use:Nnnn \g_@@_cosupervisorswithaffiliation { #2 } { #1 } { #2 }
810 }
811 \NewDocumentCommand{\cosupervisorsname}{m}{
812   \if_int_compare:w \seq_count:N \g_@@_cosupervisors > 2
813     \uantwerpendocsprop{cosupervisorsname} #1
814   \else:
815     \if_int_compare:w \seq_count:N \g_@@_cosupervisors = 2
816       \uantwerpendocsprop{cosupervisorname} #1
817     \else:
818       \fi:

```

```

819 \fi:
820 }
821 \seq_new:N \g_@@_extsupervisors
822 \seq_new:N \g_@@_extsupervisorswithaffiliation
823 \cs_new:Nn \@@_addextsupervisor:nn {
824   \seq_gpush:Nn \g_@@_extsupervisors { #1 }
825   \seq_gpush:Nn \g_@@_extsupervisorswithaffiliation { #1,~#2 }
826 }
827 \NewDocumentCommand{\extsupervisor}{mm}{
828   \@@_addextsupervisor:nn { #1 } { #2 }
829 }
830 \NewDocumentCommand{\jointextsupervisors}{mm}{
831   \seq_use:Nnnn \g_@@_extsupervisors { #2 } { #1 } { #2 }
832 }
833 \NewDocumentCommand{\jointextsupervisorswithaffiliation}{mm}{
834   \seq_use:Nnnn \g_@@_extsupervisorswithaffiliation { #2 } { #1 } { #2 }
835 }
836 \NewDocumentCommand{\extsupervisorsname}{m}{
837   \if_int_compare:w \seq_count:N \g_@@_extsupervisors > 2
838     \uantwerpendocsprop{extsupervisorsname} #1
839   \else:
840     \if_int_compare:w \seq_count:N \g_@@_extsupervisors = 2
841       \uantwerpendocsprop{extsupervisorname} #1
842     \else:
843       \fi:
844     \fi:
845 }
846 </bmt>
847 <*pt>
848 \AtBeginDocument{
849   \seq_gpush:Nn \g_@@_supervisors {}
850   \seq_greverse:N \g_@@_supervisors
851   \seq_gpush:Nn \g_@@_supervisorswithaffiliation {}
852   \seq_greverse:N \g_@@_supervisorswithaffiliation
853 }
854 </pt>
855 <*bmt>
856 \AtBeginDocument{
857   \seq_gpush:Nn \g_@@_supervisors {}
858   \seq_greverse:N \g_@@_supervisors
859   \seq_gpush:Nn \g_@@_supervisorswithaffiliation {}
860   \seq_greverse:N \g_@@_supervisorswithaffiliation
861   \seq_gpush:Nn \g_@@_cosupervisors {}
862   \seq_greverse:N \g_@@_cosupervisors
863   \seq_gpush:Nn \g_@@_cosupervisorswithaffiliation {}
864   \seq_greverse:N \g_@@_cosupervisorswithaffiliation
865   \seq_gpush:Nn \g_@@_extsupervisors {}
866   \seq_greverse:N \g_@@_extsupervisors
867   \seq_gpush:Nn \g_@@_extsupervisorswithaffiliation {}
868   \seq_greverse:N \g_@@_extsupervisorswithaffiliation
869 }
870 </bmt>
871 <*bmt | pt>
872 \ExplSyntaxOff
873 </bmt | pt>

```

## \jurychair

This macro sets the \@jurychair tag that later will be used on the data page.

```

874 <*pt>
875 \newcommand*{\@jurychair}{
876   \PackageError{uantwerpendocs}
877   {Please, define a chair of the jury using the
878     '\protect\jurychair{ }' command in the preamble of your
879     document.}

```

```

880 {See the uantwerpendocs manual}
881 }
882 \newcommand*{\@jurychairaff}{}
883 \newcommand*{\jurychair}[2]{
884   \renewcommand*{\@jurychair}{#1}\renewcommand*{\@jurychairaff}{#2}}
885 \end{document}

```

## \jurymember

This macro allows for the registration of jury members and their affiliation. This can be done by invoking the macro as many times as needed. Note that as of v4.0 all jurymembers are specified using the same macro!

```

886 \begin{document}
887 \ExplSyntaxOn
888 \seq_new:N \g_@@_jurymemberswithaffiliation
889 \cs_new:Nn \@_addjurymember:nn {
890   \seq_gpush:Nn \g_@@_jurymemberswithaffiliation { #1,~#2 }
891 }
892 \NewDocumentCommand{\jurymember}{mm}{
893   \@_addjurymember:nn { #1 } { #2 }
894 }
895 \NewDocumentCommand{\jointjurymembers}{m}{
896   \seq_use:Nn \g_@@_jurymemberswithaffiliation { #1 }
897 }
898 \AtBeginDocument{
899   \seq_greverse:N \g_@@_jurymemberswithaffiliation
900 }
901 \ExplSyntaxOff
902 \end{document}

```

## \phdddegree

This macro has been discontinued. Use \degree instead.

```

903 \begin{document}
904 \newcommand*\phdddegree{
905   \PackageError{uantwerpendocs}
906   {The '\protect\phdddegree{}' macro is no longer available. Use
907     '\protect\degree{}' instead}
908   {The interface of uantwerpendocs 4.0 has been changed. Use the
909     '\protect\degree' macro to specify your degree in full text (see
910     the uantwerpendocs manual)}
911 }
912 \end{document}
913 %
914 %
915 % \begin{macrocode}
916 %   This macro sets the |\@degree| tag that later will
917 %   be used on the title pages.
918 %   The theses allow for a single degree (as multiple is physically
919 %   impossible), while a course text and an exam allow for multiple
920 %   degrees (to be specified in the desired order).
921 %   \begin{macrocode}
922 \begin{document}
923 \newcommand*\@degree{
924   \PackageError{uantwerpendocs}
925   {Please, specify the official degree description using
926     the '\protect\degree{}' macro in the preamble of your document.}
927   {See the uantwerpendocs manual}
928 }
929 \newcommand*\degree[1]{\renewcommand*\@degree{#1}}
930 \end{document}
931 %
932 % \changes{v4.06}{}{Allowed for specification of multiple degrees for
933 % course texts and exams}
934 \end{document}
935 \ExplSyntaxOn

```

```

936 \seq_new:N \g_@@_degrees
937 \cs_new:Nn \@@_adddegree:n {
938   \seq_gpush:Nn \g_@@_degrees { #1 }
939 }
940 \NewDocumentCommand{\degree}{m}{
941   \@@_adddegree:n { #1 }
942 }
943 \NewDocumentCommand{\jointdegrees}{mm}{
944   \seq_use:Nnnn \g_@@_degrees { #2 } { #1 } { #2 }
945 }
946 \AtBeginDocument{
947   \seq_greverse:N \g_@@_degrees
948   \let\degree\relax
949 }
950 \ExplSyntaxOff
951 \</ct|ex>
952

```

## **\bamadoctype**

This macro sets the \@bamadoctype tag that later will be used on the title pages.

```

953 \< *bmt | pt | ct | ex >
954 \newcommand*\@bamadoctype{
955   \PackageError{uantwerpendocs}
956   {Please, specify the official document type, either using
957     the '\protect\bamadoctype{' macro or the '\protect\bamadegree{'
958     macro in the preamble of your document.}
959   {See the uantwerpendocs manual}}
960 \newcommand*\bamadoctype[1]{
961   \renewcommand*\@bamadoctype{\uantwerpendocsdoctype{#1}}
962 }
963 \</bmt | pt | ct | ex >

```

## **\bamadegree**

This macro sets the \@bamadoctype and \@degree tags that later will be used on the title pages.

```

964 \< *bmt | pt | ct | ex >
965 \ExplSyntaxOn
966 \seq_new:N \g_uantwerpendocs_degreechunks
967 \NewDocumentCommand{\bamadegree}{m}{
968   \regex_extract_all:nnN { [^-]+ } { #1 } \g_@@_degreechunks
969   \bamadoctype{\seq_item:Nn \g_@@_degreechunks {2} - \seq_item:Nn \g_@@_degreechunks {3}}
970   \degree{\uantwerpendocsdegree{#1}}
971 }
972 \ExplSyntaxOff
973 \</bmt | pt | ct | ex >

```

## **\programme**

This macro is no longer in use.

```

974 \< *ct | pt | ex >
975 \newcommand*\{programme}[3]{
976   \PackageError{uantwerpendocs}
977   {The '\protect\programme{'} macro is no longer available. Use
978     '\protect\degree{' instead}
979   {The interface of uantwerpendocs 4.0 has been changed. Use the
980     '\protect\degree' macro to specify your degree in full text (see
981     the uantwerpendocs manual)}
982 }
983 \</ct | pt | ex >

```

## **\course**

Four the coursetext class, this macro sets one or more courses. and \@course tags that later will be used on the title page. Note that as of v4.0 all courses are specified using the same macro!

```

984 <*ct>
985 \newcommand*\coursei[2]{
986   \PackageError{uantwerpendocs}
987   {The '\protect\coursei{}' macro is no longer available. Use
988    '\protect\course{}' instead (multiple times if you need to)}
989   {The interface of uantwerpendocs 4.0 has been changed. Use the
990    '\protect\course macro instead of the \protect\coursei,
991     \protect\courseii, \protect\courseiii and \protect\courseiv macros
992     that existed earlier (see
993     the uantwerpendocs manual)'}
994 }
995 \ExplSyntaxOn
996 \seq_new:N \g_@@_courseswithcodes
997 \cs_new:Nn \@@_addcourse:nn {
998   \seq_gpush:Nn \g_@@_courseswithcodes{ \texttt{#1}~#2 }
999 }
1000 \NewDocumentCommand{\course}{mm}{
1001   \@@_addcourse:nn { #1 } { #2 }
1002 }
1003 \NewDocumentCommand{\jointcourseswithcodes}{m}{
1004   \seq_use:Nn \g_@@_courseswithcodes { #1 }
1005 }
1006 \AtBeginDocument{
1007   \seq_greverse:N \g_@@_courseswithcodes
1008 }
1009 \ExplSyntaxOff
1010 </ct>

```

For the exam class (assuming that an exam only holds for a single course), the situation is simple and we assume only a single coursecode and course name.

```

1011 <*ex>
1012 \newcommand*{\@coursecode}{}
1013 \newcommand*{\@course}{}
1014 \newcommand*{\course}[2]{
1015   \renewcommand*{\@coursecode}{#1}
1016   \renewcommand*{\@course}{#2}
1017 }
1018 </ex>

```

## **\diploma**

This macro sets the official diploma description into the \@diploma tag that later will be used on the title page.

```

1019 <*bmt | pt>
1020 \newcommand*{\diploma}[1]{
1021   \PackageError{uantwerpendocs}
1022   {The '\protect\diploma{}' macro is no longer available. Use
1023    '\protect\degree{}' instead}
1024   {The interface of uantwerpendocs 4.0 has been changed. Use the
1025    '\protect\degree' macro to specify your degree in full text (see
1026    the uantwerpendocs manual)'}
1027 }
1028 </bmt | pt>

```

## **\defensedate**

This macro sets the \@defensedate tags that later will be used on the title page. It must contain day, month and year of the public defense.

```

1029 <*pt>
1030 \newcommand*\@defensedate{ERROR - specify day, month and year}
1031 \newcommand*{\defensedate}[1]{\renewcommand*\@defensedate{#1}}
1032 </pt>

```

## **\defenselocation**

This macro sets the \@defenselocation tags that later will be used on the title page.

```

1033 <*pt>
1034 \newcommand*\@defenselocation{Antwerpen}
1035 \newcommand*\@defenselocation[1]{\renewcommand*\@defenselocation{#1}}
1036 </pt>

```

### **\titeplageimage**

This macro sets the \@titlepageimage tags that later will be used on the title page, to include the graphics.

```

1037 <*ct | pt | rp>
1038 \newcommand*\@titlepageimage{}
1039 \newcommand*\@titlepageimage[1]{\renewcommand*\@titlepageimage{#1}}
1040 </ct | pt | rp>

```

### **\embargofull**

This macro causes the full embargo message to be printed in colofon of your thesis.

```

1041 <*pt>
1042 \newif\if@fullembargo
1043 \@fullembargofalse
1044 \newif\if@tempembargo
1045 \@tempembargofalse
1046 \newcommand*\@embargofull[{
1047   \@tempembargofalse
1048   \@fullembargotrue
1049 }]
1050 </pt>

```

### **\embargotemp**

This macro causes the temporary embargo message to be printed in colofon of your thesis using the first argument of the macro as start date and the second argument as the end date.

```

1051 <*pt>
1052 \newif\if@tempembargo
1053 \@tempembargofalse
1054 \ExplSyntaxOn
1055 \tl_new:N \@embargotempstart
1056 \tl_new:N \@embargotempend
1057 \newcommand*\@embargotemp[2]{
1058   \@fullembargofalse
1059   \@tempembargotrue
1060   \tl_new:N \l_@@_embargostartdate_tl
1061   \tl_new:N \l_@@_embargoenddate_tl
1062   \tl_set:Nx \l_@@_embargostartdate_tl {#1}
1063   \tl_set:Nx \l_@@_embargoenddate_tl {#2}
1064   \regex_replace_all:nnN {\s} {\~} \l_@@_embargostartdate_tl
1065   \regex_replace_all:nnN {\s} {\~} \l_@@_embargoenddate_tl
1066   \tl_gset_eq:NN \@embargotempstart \l_@@_embargostartdate_tl
1067   \tl_gset_eq:NN \@embargotempend \l_@@_embargoenddate_tl
1068 }
1069 \ExplSyntaxOff
1070 </pt>

```

### **\doi**

This macro sets the \@doi tag that later will be used on the data page. If you don't have a doi number, just don't specify one (i.e. don't use this macro).

```

1071 <*pt>
1072 \newcommand*\@doi{}
1073 \newcommand*\@doi[1]{\renewcommand*\@doi{\url{#1}}}
1074 </pt>

```

### **\academicyear**

This macro sets the \@academicyear tag that later will be used on the title page.

```

1075 <*ct | bmt | ex>
1076 \newcommand*\@academicyear{XXX-YYYY}

```

```

1077 \newcommand*{\academicyear}[1]{\renewcommand*{\@academicyear}{#1}}
1078 </ct|bmt|ex>

```

## **\copyrightnotices**

This macro sets the \@copyrightnotices tag that later will be used on the back of the title page.

```

1079 <*ct|rp>
1080 \newcommand{\@copyrightnotices}{}
1081 \newcommand{\copyrightnotices}[1]{\renewcommand{\@copyrightnotices}{#1}}
1082 </ct|rp>
1083 <*bmt>
1084 \newcommand{\@copyrightnotices}{\disclaimer{\@bamadoctype}}
1085 </bmt>

```

## **\sender**

This macro sets the \@sender and \@senderrole tags that will be used in the letter's heading text.

```

1086 <*le>
1087 \newcommand*{\@sender}{< Specify sender using
1088   \textbackslash{}sender\{name\}\{role\} >}
1089 \newcommand*{\@senderrole}{~}
1090 \newcommand*{\sender}[2]{\renewcommand*{\@sender}{#1}\renewcommand*{\@senderrole}{#2}}
1091 </le>

```

## **\logo**

This macro sets the \@logo tag that will be used to load a graphics file with that name.

```

1092 <*le|ex>
1093 \newcommand*{\logo}[1]{\renewcommand*{\@logo}{#1}}
1094 </le|ex>

```

## **\unit**

This macro sets the \@unit tag that will be used in the letter's heading text.

```

1095 <*le>
1096 \newcommand*{\@unit}{}
1097 \newcommand*{\unit}[1]{\renewcommand*{\@unit}{#1}}
1098 </le>

```

## **\email**

This macro allows for the registration of contact email addresses for a letter. This can be done by invoking the macro as many times as needed (as of v4.2)

```

1099 <*le>
1100 \ExplSyntaxOn
1101 \seq_new:N \g_@@_emailaddresses
1102 \cs_new:Nn \@@_addemailaddress:nn {
1103   \seq_gpush:Nn \g_@@_emailaddresses {#1\tat{ }#2}
1104 }
1105 \NewDocumentCommand{\email}{mm}{
1106   \@@_addemailaddress:nn { #1 } { #2 }
1107 }
1108 \NewDocumentCommand{\jointemails}{m}{
1109   \seq_use:Nn \g_@@_emailaddresses { #1 }
1110 }
1111 \NewDocumentCommand{\ifemails}{m}{
1112   \seq_if_empty:NTF \g_@@_emailaddresses {} {#1}
1113 }
1114 \AtBeginDocument{
1115   \seq_greverse:N \g_@@_emailaddresses
1116 }
1117 \ExplSyntaxOff
1118 </le>

```

## **\phone**

This macro allows for the registration of contact phone numbers for a letter. This can be done by invoking the

macro as many times as needed (as of v4.2)

```
1119 <*le>
1120 \ExplSyntaxOn
1121 \seq_new:N \g_@@_phonenumbers
1122 \cs_new:Nn \@@_addphonenumber:n {
1123   \seq_gpush:Nn \g_@@_phonenumbers {#1}
1124 }
1125 \NewDocumentCommand{\phone}{m}{
1126   \@@_addphonenumber:n { #1 }
1127 }
1128 \NewDocumentCommand{\jointphones}{m}{
1129   \seq_use:Nn \g_@@_phonenumbers { #1 }
1130 }
1131 \NewDocumentCommand{\ifphones}{m}{
1132   \seq_if_empty:NTF \g_@@_phonenumbers {} {#1}
1133 }
1134 \AtBeginDocument{
1135   \seq_greverse:N \g_@@_phonenumbers
1136 }
1137 \ExplSyntaxOff
1138 </le>
```

### **\fax**

This macro allows for the registration of contact fax numbers for a letter. This can be done by invoking the macro as many times as needed (as of v4.2)

```
1139 <*le>
1140 \ExplSyntaxOn
1141 \seq_new:N \g_@@_faxnumbers
1142 \cs_new:Nn \@@_addfaxnumber:n {
1143   \seq_gpush:Nn \g_@@_faxnumbers {#1}
1144 }
1145 \NewDocumentCommand{\fax}{m}{
1146   \@@_addfaxnumber:n { #1 }
1147 }
1148 \NewDocumentCommand{\jointfaxes}{m}{
1149   \seq_use:Nn \g_@@_faxnumbers { #1 }
1150 }
1151 \NewDocumentCommand{\iffaxes}{m}{
1152   \seq_if_empty:NTF \g_@@_faxnumbers {} {#1}
1153 }
1154 \AtBeginDocument{
1155   \seq_greverse:N \g_@@_faxnumbers
1156 }
1157 \ExplSyntaxOff
1158 </le>
```

### **\mobile**

This macro allows for the registration of contact mobile numbers for a letter. This can be done by invoking the macro as many times as needed (as of v4.2)

```
1159 <*le>
1160 \ExplSyntaxOn
1161 \seq_new:N \g_@@_mobilenumbers
1162 \cs_new:Nn \@@_addmobilenumber:n {
1163   \seq_gpush:Nn \g_@@_mobilenumbers {#1}
1164 }
1165 \NewDocumentCommand{\mobile}{m}{
1166   \@@_addmobilenumber:n { #1 }
1167 }
1168 \NewDocumentCommand{\jointmobiles}{m}{
1169   \seq_use:Nn \g_@@_mobilenumbers { #1 }
1170 }
1171 \NewDocumentCommand{\ifmobiles}{m}{
```



```

1172 \seq_if_empty:NTF \g_@@_mobilenumbers {} {#1}
1173 }
1174 \AtBeginDocument{
1175   \seq_greverse:N \g_@@_mobilenumbers
1176 }
1177 \ExplSyntaxOff
1178 \</le>

```

### **\returnaddress**

This macro sets the \@returnaddress tag that will be used in the letter's heading text (in the area of the envelope's window).

```

1179 \<le>
1180 \newcommand*{\@returnaddress}
1181   {<specify return-address using \textbackslash\{single-line-return-address\}>}
1182 \renewcommand*{\returnaddress}[1]
1183   {\renewcommand*{\@returnaddress}{#1}}
1184 \</le>

```

### **\to**

This macro sets the \@to tag that will be used in the letter's heading text (in the area of the envelope's window).

```

1185 \<le>
1186 \newcommand*{\@to}{<Specify addressee using \textbackslash\{to\}\{name\}>}
1187 \renewcommand*{\to}[1]{\renewcommand*{\@to}{#1}}
1188 \</le>

```

### **\toorganization**

This macro sets the \@toorganization tag that will be used in the letter's heading text (in the area of the envelope's window).

```

1189 \<le>
1190 \newcommand*{\@toorganization}{ }
1191 \newcommand*{\toorganization}[1]{\renewcommand*{\@toorganization}{#1}}
1192 \</le>

```

### **\toaddress**

This macro sets the \@toaddress tag that will be used in the letter's heading text (in the area of the envelope's window).

```

1193 \<le>
1194 \newcommand*{\@toaddress}{ }
1195 \newcommand*{\toaddress}[1]{\renewcommand*{\@toaddress}{#1}}
1196 \</le>

```

### **\subject**

This macro sets the \@subject tag that will be used in the letter's heading text.

```

1197 \<le>
1198 \newcommand*{\@subject}{-}
1199 \newcommand*{\subject}[1]{\renewcommand*{\@subject}{#1}}
1200 \</le>

```

### **\opening**

This macro is much a do about nothing, but I prefer to do it this way for historic reasons.

```

1201 \<le>
1202 \renewcommand*{\opening}[1]{#1}
1203 \</le>

```

### **\closing**

This macro sets the \@closing tag that will be used to finish the letter.

```

1204 \<le>
1205 \newcommand*{\@closing}{<specify a closing formula using
1206   \textbackslash\closing\{>}

```

```
1207 \renewcommand*{\closing}[1]{\renewcommand*{\@closing}{#1}}
1208 </le>
```

### **\signature**

This macro sets the \@signature tag that will be used to finish the letter. By default this corresponds to a decent amount of vertical white space

```
1209 <*le>
1210 \newcommand*{\@signature}{\vspace*{8ex}}
1211 \renewcommand*{\signature}[1]{\renewcommand*{\@signature}{#1}}
1212 </le>
```

### **\carboncopy**

This macro will set the \@carboncopy tag that will be used in the trailer of the letter.

```
1213 <*le>
1214 \newcommand*{\@carboncopy}{}
1215 \newcommand*{\carboncopy}[1]{\renewcommand*{\@carboncopy}{#1}}
1216 </le>
```

### **\enclosed**

This macro will set the \@enclosed tag that will be used in the trailer of the letter.

```
1217 <*le>
1218 \newcommand*{\@enclosed}{}
1219 \newcommand*{\enclosed}[1]{\renewcommand*{\@enclosed}{#1}}
1220 </le>
```

### **\address**

This macro will set the \@address tag that will be used in the letter's heading text (in the area of the envelope's window).

```
1221 <*pt|rp|le>
1222 \newcommand*{\@address}{
1223   \PackageError{uantwerpendocs}
1224   {Please, set your multi-line address and contact details using the
1225     '\protect\address{}' command in the preamble of your document}
1226   {See the uantwerpendocs manual}
1227 }
1228 </pt|rp|le>
1229 %
1230 <pt|rp>\newcommand*{\address}[1]{\renewcommand*{\@address}{#1}}
1231 <le>\renewcommand*{\address}[1]{\renewcommand*{\@address}{#1}}
1232 %   \end{\macrocode}
1233 % \end{\macro}
1234 %
1235 % \begin{\macro}{\exampart}
1236 %   This macro will set the |\@examgroupnumber| tag that will be used on
1237 %   the exam title page.
1238 %   \begin{\macrocode}
1239 <*ex>
1240 \newcommand*{\@exampart}{}
1241 \newcommand*{\exampart}[1]{\renewcommand*{\@exampart}{#1}}
1242 </ex>
```

### **\examgroupnumber**

This macro will set the \@examgroupnumber tag that will be used on the exam title page.

```
1243 <*ex>
1244 \newcommand*{\@examgroupnumber}{}
1245 \newcommand*{\examgroupnumber}[1]{\renewcommand*{\@examgroupnumber}{#1}}
1246 </ex>
```

### **\examdate**

This macro will set the \@examdate tag that will be used on the exam title page.

```

1247 <*ex>
1248 \newcommand*{\@examdate}{TBD}
1249 \newcommand*{\examdate}[1]{\renewcommand*{\@examdate}{#1}}
1250 </ex>

```

## **\examlength**

This macro will set the \@examlength tag that will be used on the exam title page.

```

1251 <*ex>
1252 \newcommand*{\@examlength}{TBD}
1253 \newcommand*{\examlength}[1]{\renewcommand*{\@examlength}{#1}}
1254 </ex>

```

## **\tstart**

This macro will set the \@tstart tag that will be used on the exam title page.

```

1255 <*ex>
1256 \newcommand*{\@tstart}{TBD}
1257 \newcommand*{\tstart}[1]{\renewcommand*{\@tstart}{#1}}
1258 </ex>

```

## **\tend**

This macro will set the \@tend tag that will be used on the exam title page.

```

1259 <*ex>
1260 \newcommand*{\@tend}{TBD}
1261 \newcommand*{\tend}[1]{\renewcommand*{\@tend}{#1}}
1262 </ex>

```

## **\room**

This macro will set the \@rooms tag that will be used on the exam title page.

```

1263 <*ex>
1264 \ExplSyntaxOn
1265 \seq_new:N \g_@@_rooms
1266 \cs_new:Nn \@@_addroom:n {
1267   \seq_gpush:Nn \g_@@_rooms { #1 }
1268 }
1269 \NewDocumentCommand{\room}{m}{
1270   \@@_addroom:n { #1 }
1271 }
1272 \NewDocumentCommand{\jointrooms}{m}{
1273   \seq_use:Nn \g_@@_rooms { #1 }
1274 }
1275 \NewDocumentCommand{\roomsname}{}{
1276   \if_int_compare:w \seq_count:N \g_@@_rooms > 1
1277     \uantwerpendocsprop{roomsname}
1278   \else:
1279     \uantwerpendocsprop{roomname}
1280   \fi:
1281 }
1282 \AtBeginDocument{
1283   \seq_greverse:N \g_@@_rooms
1284 }
1285
1286 \ExplSyntaxOff
1287 </ex>

```

## **\extrainfo**

This macro will set the \@extrainfo tag that will be used on the back of the exam title page. When as (optional) first argument 'firstpage' is given, the extra info will start on the first page below the title block. In that case, we assume that conservation of space is your concern, so the extra info will also not be terminated with a 'clearpage'. If no optional first argument is given (or the default 'separatepage' is given), the extra info will start on a new page and will be terminated by a clearpage.

```

1288 <*ex>

```

```

1289 \newcommand{\@extrainfo}{}
1290 \newcommand\extrainfo[2][separatepage]{
1291   \ifthenelse{\equal{#1}{separatepage}}{
1292     % then
1293     \renewcommand{\@extrainfo}{\clearpage #2 \clearpage}
1294   }
1295   {
1296     % else
1297     \ifthenelse{\equal{#1}{firstpage}}{
1298       {
1299         \renewcommand{\@extrainfo}{#2}
1300       }
1301       {
1302         \PackageError{uantwerpendocs}
1303         {The first (optional) argument of '\protect\extrainfo' can
1304          only be 'separatepage' or 'firstpage'}
1305         {See the uantwerpendocs manual}'}
1306       }
1307     }
1308 }
1309 </ex>

```

## \studentnr

This macro will set the \@studentnr tag that will be used in the header of the pages.

```

1310 <*ex>
1311 \newcommand*{\@studentnr}{0}
1312 \newcommand*{\studentnr}[1]{\renewcommand*{\@studentnr}{#1}}
1313 </ex>

```

## 7.16 Dirty reverse video tricks

Try not to throw up in your mouth...

```

1314 <*bmt>
1315 \ExplSyntaxOn
1316 \seq_new:N \l_title_seq
1317 \cs_generate_variant:Nn \seq_set_split:Nnn { Nnf }
1318 \cs_new_nopar:Npn \@_reversevideo:f #1
1319 {
1320   \seq_set_split:Nnf \l_title_seq {~} { #1 }
1321   \seq_set_map:NNn \l_title_seq \l_title_seq {\@uantwerpendocshl{##1}}
1322   \seq_use:Nnnn \l_title_seq { ~ } { ~ } { ~ }
1323 }
1324 \NewDocumentCommand{\reversevideo}{m}{
1325   \@_reversevideo:f { #1 }
1326 }
1327 \ExplSyntaxOff
1328 </bmt>

```

## 7.17 Header and Footer

The fancyhdr package is used to make a decent header and footer. The header and footer of the coursetext class are defined to be:

```

1329 <*ct>
1330 \if@twoside
1331 \lhead[\small\thepage]{\slshape\small\rightmark}
1332 \chead[]{}
1333 \rhead[\slshape\small\leftmark]{\small\thepage}
1334 \lfoot[\small\uantwerpendocsprop{org-ua} -- \@facultyacronym]{\small\@courseversion}
1335 \cfoot[]{}

```

```

1336 \rfoot[] {\small \@title{} \ifdefvoid{\@subtitleshort}{}{ --- \@subtitleshort}}
1337 \else
1338 \lhead[] {\small \leftmark}
1339 \chead[] {}
1340 \rhead[] {\small \thepage}
1341 \lfoot[] {\small \@courseversion}
1342 \cfoot[] {\small \uantwerpendocsprop{org-ua} -- \@facultyacronym}
1343 \rfoot[] {\small \@title{}}
1344 \fi
1345 \fancypagestyle{plain}{%
1346   \renewcommand*{\headrulewidth}{0pt}
1347   \renewcommand*{\footrulewidth}{0pt}
1348   \lhead[] {}
1349   \chead[] {}
1350   \rhead[] {}
1351   \lfoot[] {}
1352   \cfoot[\small \thepage]{\small \thepage}
1353   \rfoot[] {}
1354 }
1355 \end{ct}

```

The header and footer of the bamathesis class are defined to be:

```

1356 \begin{bmt}
1357 \AtBeginDocument{
1358   \setlength{\headheight}{13.7pt}
1359   \renewcommand*{\headrulewidth}{0pt}
1360   \renewcommand*{\footrulewidth}{0pt}
1361   \newsavebox\smalllogo
1362   \savebox\smalllogo{\raisebox{-1ex}{\includegraphics[width=2.5cm]{\logopos}}}
1363   \if@twoside
1364     \lhead[] {\footnotesize\slshape\rightmark}
1365     \chead[] {}
1366     \rhead[\footnotesize\slshape\leftmark] {}
1367     \lfoot[\footnotesize\thepage~\textcolor{maincolor}{\textbf{||}}]{\usebox\smalllogo}
1368     \cfoot[\footnotesize\@bamadoctype]{\footnotesize\@bamadoctype}
1369     \rfoot[\usebox\smalllogo]{\footnotesize\textcolor{maincolor}{\textbf{||}}~\thepage}
1370   \else
1371     \lhead[] {\footnotesize\slshape\leftmark}
1372     \chead[] {}
1373     \rhead[] {}
1374     \lfoot[] {\usebox\smalllogo}
1375     \cfoot[] {\footnotesize\@bamadoctype}
1376     \rfoot[] {\footnotesize\textcolor{maincolor}{\textbf{||}}~\thepage}
1377   \fi
1378   \fancypagestyle{plain}{\pagestyle{fancy}}
1379   % \patchcmd{\chapter}{\thispagestyle{plain}}{\thispagestyle{fancy}}{}{}
1380 }
1381 \end{bmt}

```

The header and footer of the phdthesis and report are defined to be:

```

1382 \begin{pt|rp}
1383 \if@twoside
1384   \lhead[\small \thepage]{\slshape\small\rightmark}
1385   \chead[] {}
1386   \rhead[\slshape\small\leftmark]{\small \thepage}
1387   \lfoot[] {}
1388   \cfoot[] {}
1389   \rfoot[] {}
1390 \else
1391   \lhead[] {\small \leftmark}
1392   \chead[] {}
1393   \rhead[] {\small \thepage}
1394   \lfoot[] {}
1395   \cfoot[] {}

```

```

1396 \rfoot[]{}
1397 \fi
1398 \fancypagestyle{plain}{%
1399 \lhead[]{}
1400 \chead[]{}
1401 \rhead[]{}
1402 \lfoot[]{}
1403 \cfoot[\small\thepage]{\small\thepage}
1404 \rfoot[]{}
1405 }
1406 </pt | rp>

```

The header and footer of the letter class are defined to be:

```

1407 <*le>
1408 \lhead[]{}
1409 \chead[]{}
1410 \rhead[]{}
1411 \lfoot[\small\textcolor{gray}{\@date}]{\textcolor{gray}{\@date}}
1412 \cfoot[]{}
1413 \rfoot[\small\textcolor{gray}{\pagename~\thepage~\uantwerpendocsprop{of}~\ztotpages}]
1414 {\small\textcolor{gray}{\pagename~\thepage~\uantwerpendocsprop{of}~\ztotpages}}
1415 </le>

```

The header and footer of the exam class are defined to be:

```

1416 <*ex>
1417 \lhead[]{}
1418 \chead[]{}
1419 \cfoot[\small \thepage/\ztotpages]{\small\thepage/\ztotpages}
1420 \if@examiner
1421 \rhead[\small EXAMINER VERSION]{\small EXAMINER VERSION}
1422 \AddToShipoutPicture{
1423 \put(60,40){\rotatebox{60}{\textcolor{watermark}{
1424 \fontsize{105}{130}\selectfont Examiner Version}}}}
1425 \else
1426 \rhead[\small Student nr. \@studentnr]{\small Student nr. \@studentnr}
1427 \fi
1428 </ex>

```

Some common code remains:

```

1429 <*ct>
1430 \setlength{\headheight}{13.7pt}
1431 \renewcommand*{\headrulewidth}{1pt}
1432 \renewcommand*{\footrulewidth}{1pt}
1433 \pagenumbering{arabic}
1434 </ct>
1435 <*pt | rp | le>
1436 \setlength{\headheight}{13.7pt}
1437 \renewcommand*{\headrulewidth}{0pt}
1438 \renewcommand*{\footrulewidth}{0pt}
1439 </pt | rp | le>
1440 <*ex>
1441 \setlength{\headheight}{13.7pt}
1442 \renewcommand*{\headrulewidth}{0pt}
1443 </ex>

```

Remains to take care of filling

```

1444 <*ct | mt | pt | rp | le>
1445 \if@filled\else
1446 \raggedright
1447 \fi
1448 \raggedbottom
1449 \onecolumn
1450 </ct | mt | pt | rp | le>

```

## 7.18 Copyright notice

### `\@crnotice`

This is the standard text that will be used for the `\@crnotice` tag.

```
1451 <*ct|rp>
1452 \newcommand{\@crnotice}{
1453   {
1454     \setlength\parindent{0em}
1455     This document has been typeset using \LaTeX{} and the
1456     \texttt{uantwerpendocs} package.\
1457     \@copyrightnotices
1458
1459 </ct|rp>
1460 <ct>    \@courseversion
1461 <*ct|rp>
1462
1463     CONFIDENTIAL AND PROPRIETARY.
1464
1465     \copyright{} \@versionyear{} \uantwerpendocsprop{org-ua},
1466     \uantwerpendocsprop{arr}.
1467   }
1468 }
1469 </ct|rp>
1470 <*bmt>
1471 \newcommand{\@crnotice}{
1472   \@copyrightnotices
1473 }
1474 </bmt>
```

## 7.19 Fancy chapter headers for the phdthesis and report class

```
1475 <*pt|rp>
1476 \def\@makechapterhead#1{%
1477   \vspace*{1ex}%
1478   \begin{flushright}
1479     \makebox[0pt][l]{\rule[-0.4em]{10cm}{1.8em}}\textcolor{white}
1480     {\LARGE\textbf{~\chaptername~}}
1481     \raisebox{-24pt}{
1482       \begin{tikzpicture}
1483         \foreach \theta in {0,5,...,355} {
1484           \node[color=white] at (\theta:0.025)
1485             {\fontsize{72}{12}\selectfont\textbf{\thechapter}};
1486         }
1487         \node[color=gray] at (0,0)
1488           {\fontsize{72}{12}\selectfont\textbf{\thechapter}};
1489       \end{tikzpicture}
1490     }\hspace*{-8pt}
1491     \par\nobreak
1492     \interlinepenalty\@M
1493     \huge\textbf{\textcolor{darkgray}{\rule[-0.5ex]{0em}{2.6ex}~#1}}
1494     \par\nobreak
1495   \end{flushright}
1496   \rule{\textwidth}{1pt}
1497   \vspace{5\p@\par\nobreak
1498 }
1499 \def\@schapter#1{%
1500   \@makeschapterhead{#1}%
1501   \@afterheading
1502 }
1503 \def\@makeschapterhead#1{%
1504   \vspace*{1ex}%
1505   \begin{flushright}
```

```

1506 \LARGE\textbf{\textcolor{darkgray}{\rule[-0.5ex]{0em}{2.6ex}~#1}}
1507 \end{flushright}
1508 \rule{\textwidth}{1pt}
1509 \vspace{5\p@}\par
1510 }
1511 % overwrite appendix
1512 \def\appendix{
1513 \setcounter{chapter}{0}
1514 \renewcommand*\thechapter{\Alph{chapter}}
1515 \renewcommand\chaptername\appendixname
1516 }
1517 </pt|rp>

```

## 7.20 Fancy chapter headers for the bamathesis class

```

1518 <*bmt>
1519 \addtokomafont{section}{\color{basecolor}}
1520 \addtokomafont{chapter}{\color{basecolor}}
1521 </bmt>

```

## 7.21 Title page for the masterthesis and coursetext classes

The title page is generated using the `\maketitle` command. As the book class from which we inherit already defines this command, we need to renew it.

### `\maketitle`

The macro for the coursetext class:

```

1522 <*ct>
1523 \renewcommand\maketitle{%
1524 \pagestyle{empty}
1525 \begin{titlepage}
1526 \setlength\parskip{0pt}%
1527 \setlength\parindent{0pt}%
1528 \AddToShipoutPicture*{%
1529 \put(0,0){%
1530 \if@modern
1531 \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1532 \clip (0,0) rectangle(\paperwidth,\paperheight);
1533
1534 \begin{scope}
1535 \clip (2.125,20.192) rectangle (\paperwidth,6);
1536 \fill[sidecolor]
1537 (2.125,20.192) rectangle (\paperwidth,6);
1538 \node[anchor=south west]
1539 at (2.125,6)
1540 {\ifx\@titlepageimage\@empty
1541 \else
1542 \includegraphics[keepaspectratio,
1543 scale=0.01,
1544 min size={18.875cm}{14.192cm}]{\@titlepageimage}
1545 \fi};
1546 \end{scope}
1547
1548 \node
1549 [anchor=west,text width=13.75cm,align=left,font=\Huge,uauaside]
1550 at (2.125,27)
1551 {
1552 \textsf{\textbf{\@title}}
1553 };
1554
1555 \node
1556 [anchor=west,text width=13.75cm,align=left,font=\Large,uauaside]
1557

```



```

1558 at (2.125,25.5)
1559 {
1560   \textsf{\textbf{\@subtitle}}
1561 };
1562
1563 \node
1564 [anchor=base west,maincolor,text width=13.75cm,align=left,font=\LARGE]
1565 at (2.125,24)
1566 {\textsf{\textbf{\@author}}};
1567
1568
1569 \node
1570 [anchor=west,text width=13.75cm,align=left,font=\large,uauaside]
1571 at (2.125,22)
1572 {\textsf{\jointcourseswithcodes{\}}};
1573
1574 \fill[maincolor] (2.125,6)
1575 -- (\paperwidth,6)
1576 -- (\paperwidth,2.625)
1577 -- (2.55,2.625)
1578 arc (-90:-180:0.425)
1579 -- cycle;
1580
1581 \node[white,anchor=west,align=left,font=\large]
1582 (SN) at (2.55,5.1)
1583 {
1584   \begin{tabular}{@{}l@{~\,},p{14.5cm}}
1585     \textsf{\lecturersname}
1586     & \textsf{\textbf{\jointlecturers{ | }}}
1587   \end{tabular}
1588 };
1589
1590 \node[white,anchor=west,text width=17.5cm,align=left,font=\small]
1591 at (2.55,3.7)
1592 {\textsf{\jointdegrees{\}\{\}\}\}\}
1593   \textsf{\textbf{\@faculty{}} \ifx\@department\empty\else |
1594     \@department{ } \fi | \@academicyear \hfill
1595     \@publishercode}\}\}
1596 \textsf{\@publisher}};
1597
1598 \node[anchor=west] at (2.125,1.313)
1599 {\includegraphics[width=4.75cm]{\logopos}};
1600 \end{tikzpicture}
1601 \else
1602 \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1603   \clip (0,0) rectangle(\paperwidth,\paperheight);
1604   \if@cameraready
1605   \else
1606   \fill[uauamain] (0,29.7) -- (2.2,29.7) -- (2.2,21.435) arc
1607   (0:-90:0.235) -- (0,21.2) -- cycle;
1608   \node[anchor=west] at (2.2,1.8)
1609   {\includegraphics[width=5.2cm]{\logoposua}};
1610   \fi
1611
1612 \node
1613 [anchor=north west,text width=14.75cm,align=left]
1614 at (5,27.1)
1615 {
1616   \fontsize{16}{20}\selectfont\textsf{\textbf{\uantwerpendocsprop{acyearname}}}\}\}\[1ex]
1617   \fontsize{16}{20}\selectfont\textsf{\@academicyear}
1618 };
1619
1620 \node
1621 [anchor=north west,text width=14.75cm,align=left]
1622 at (5,22.7)

```



```

1688 \global\let\maketitle\relax
1689 \global\let\@thanks\@empty
1690 \global\let\title\relax
1691 \global\let\author\relax
1692 \global\let\date\relax
1693 \global\let\and\relax
1694 \pagestyle{fancy}
1695 \thispagestyle{empty}
1696 }
1697 </ct>

```

## **\makefinalpage**

Below, one can find the code for the final page of the coursetext class:

```

1698 <*ct>
1699 \newcommand\makefinalpage{
1700   \if@cameraready
1701   \else
1702   \cleardoublepage
1703   \thispagestyle{empty}
1704   \if@copyright\NoBgThispage\fi
1705   ~% intentionally blank page
1706   \clearpage
1707   \thispagestyle{empty}
1708   \if@copyright\NoBgThispage\fi
1709   \AddToShipoutPicture*{%
1710     \put(0,0){%
1711       \if@modern
1712       \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1713         \clip (0,0) rectangle(\paperwidth,\paperheight);
1714         \fill[sidecolor] (0,0) rectangle (2.125cm,2.625cm);
1715       \end{tikzpicture}
1716       \else
1717       \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1718         \clip (0,0) rectangle(\paperwidth,\paperheight);
1719         \fill[uauamain] (0,21.2) rectangle (21,29.7);
1720       \end{tikzpicture}
1721       \fi
1722     }
1723   }
1724   ~
1725   \fi
1726 }
1727 </ct>

```

## **\maketitle**

And next, the code for the title page of the bamathesis class:

```

1728 <*bmt>
1729 \renewcommand\maketitle{%
1730   \pagestyle{empty}
1731   \begin{titlepage}
1732     \setlength\parskip{0pt}%
1733     \setlength\parindent{0pt}%
1734     \AddToShipoutPicture*{%
1735       \put(0,0){%
1736         \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1737           \clip (0,0) rectangle(\paperwidth,\paperheight);
1738           \node
1739             [anchor=north east,align=right]
1740             at (\paperwidth-1.6cm,\paperheight-2.6cm)
1741             {\bfseries\large
1742              \uantwerpendocsprop{acyearname}\[.75ex]\Large\@academicyear};
1743           \node (title)
1744             [anchor=north west,align=left,

```

```

1745     text width={\paperwidth-5.1cm},font=\Huge,text=white,
1746     xshift=1pt]
1747     at (3.5cm,\paperheight-6.4cm)
1748     {\sethlcolor{maincolor}%
1749      \textsf{\textbf{\reversevideo{\@title}}}%
1750      \ifx\@subtitle\empty\else\\textsf{\reversevideo{\@subtitle}}\fi};
1751     \node
1752     [anchor=north west,font=\LARGE,yshift=-1cm,xshift=-1pt]
1753     at (title.south west)
1754     {%
1755       \textsf{\textbf{\@author}}
1756     };
1757
1758     \node
1759     [anchor=west,align=left,
1760     text width={\paperwidth-5.1cm},font=\normalsize]
1761     at (3.5cm,12cm)
1762     {\textsf{\@bamadoctype}\\%
1763      \textsf{\textbf{\@degree}}
1764     };
1765
1766     \node
1767     [anchor=west,align=left,
1768     text width={\paperwidth-5.1cm},font=\normalsize]
1769     at (3.5cm,7.5cm)
1770     {\supervisorsname{\\}
1771      \textbf{\jointsupervisorswithaffiliation{\\}{-\\-\\}}%
1772      \cosupervisorsname{\\}
1773      \textbf{\jointcosupervisorswithaffiliation{\\}{-\\~\\}}%
1774      \extsupervisorsname{\\}
1775      \textbf{\jointextsupervisorswithaffiliation{\\}{-}}
1776     };
1777
1778     \ifx\@companylogo\@empty
1779     \else
1780     \node[anchor=south east] at
1781     (\paperwidth-1.6cm,1.5cm)
1782     {\@companylogo};
1783     \fi
1784
1785
1786     \node[anchor=south west] at
1787     (1.6cm,1.5cm)
1788     {\includegraphics[width=6.2cm]{\logopos}};
1789     \end{tikzpicture}
1790   }
1791 }
1792 \end{titlepage}%
1793 ~\par\relax
1794 \clearpage
1795 \vspace*{\stretch{1}}
1796 \@crnotice
1797 \clearpage
1798 \setcounter{footnote}{0}%
1799 \global\let\thanks\relax
1800 \global\let\maketitle\relax
1801 \global\let\@thanks\@empty
1802 \global\let\title\relax
1803 \global\let\author\relax
1804 \global\let\date\relax
1805 \global\let\and\relax
1806 \pagestyle{fancy}
1807 \thispagestyle{empty}
1808 }
1809 </bmt>

```

## **\makefinalpage**

Below, one can find the code for the final page of the bamathesis class:

```
1810 <*bmt>
1811 \newcommand\makefinalpage{
1812 }
1813 </bmt>
```

## **7.22 Title page for the phdthesis classes**

The title page is generated using the \maketitle command. As the book class from which we inherit already defines this command, we need to renew it.

## **\maketitle**

Below, one can find the code for the title page of the phdthesis class:

```
1814 <*pt>
1815 \ExplSyntaxOn
1816 \tl_new:N \embargotempwithdates
1817 \newcommand\prepmaketitle{
1818   \tl_new:N \l_@@_embargotemp_tl
1819   \tl_set:Nx \l_@@_embargotemp_tl {\prop_item:Nn \g_@@_data_prop{embargotemp}}
1820   \regex_replace_all:nVN {__START__} \embargotempstart \l_@@_embargotemp_tl
1821   \regex_replace_all:nVN {__END__} \embargotempend \l_@@_embargotemp_tl
1822   \regex_replace_all:nnN {\~} {\ } \l_@@_embargotemp_tl
1823   \tl_gset_eq:NN \embargotempwithdates \l_@@_embargotemp_tl
1824 }
1825 \ExplSyntaxOff
1826 \renewcommand\maketitle{%
1827   \prepmaketitle
1828   \pagestyle{empty}
1829   \if@bare\else
1830     \begin{titlepage}
1831       \setlength\parskip{0pt}%
1832       \setlength\parindent{0pt}%
1833       \AddToShipoutPicture*{%
1834         \put(0,0){%
1835           \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
1836             \useasboundingbox (0,0) rectangle(\paperwidth,\paperheight);
1837             \fill[lightgray]
1838               (2.125,19) rectangle (\paperwidth+3mm,6);
1839             \begin{scope}
1840               \clip (2.125,19) rectangle (\paperwidth+3mm,6);
1841               \node[anchor=south west]
1842                 at (2.125,6)
1843                 {\ifx\@titlepageimage\@empty
1844                  \else
1845                   \includegraphics[keepaspectratio,
1846                    scale=0.01,
1847                    min size={16.175cm}{13cm}]{\@titlepageimage}
1848                  \fi};
1849             \end{scope}
1850
1851             \node
1852               [anchor=west,text width=13.75cm,align=left,font=\Huge,uauaside]
1853               at (2.125,23.5)
1854               {
1855                 \textsf{\textbf{\@title}}
1856               };
1857
1858             \node
1859               [anchor=west,text width=13.75cm,align=left,font=\Large,uauaside]
1860               at (2.125,21.5)
1861               {
```

```

1862     \textsf{\textbf{\@subtitle}}
1863 };
1864
1865 \node
1866 [anchor=base west,maincolor,
1867 text width=13.75cm,align=left,font=\LARGE]
1868 at (2.125,20)
1869 {\textsf{\textbf{\@author}}};
1870
1871 \fill[maincolor] (2.125,6)
1872 -- (\paperwidth+3mm,6)
1873 -- (\paperwidth+3mm,2.625)
1874 -- (2.55,2.625)
1875 arc (-90:-180:0.425)
1876 -- cycle;
1877
1878 \node[white,anchor=west,align=left,font=\large]
1879 (SN) at (2.55,4.9)
1880 {
1881   \begin{tabular}{@{}l@{~\,},p{11.5cm}}
1882     \textsf{\supervisorsname{}}
1883     & \textsf{\textbf{\jointsupervisors{ | }{}}}
1884   \end{tabular}
1885 };
1886
1887
1888 \node[white,anchor=west,text width=14.5cm,align=left,font=\small]
1889 at (2.55,3.7)
1890 {\textsf{\uantwerpendocsprop{pthesisnamei}
1891   \@degree{}}\
1892 \textsf{\textbf{\@faculty{}} \ifx\@department\empty\else |
1893   \@department{ } \fi | \@defenselocation, \@defensedate}}};
1894
1895 \node[anchor=west] at
1896 (2.125,1.313)
1897 {\includegraphics[width=4.75cm]{\logoposua}};
1898
1899 \if@tempbargo
1900   \node[anchor=east,font=\large\bfseries,uauaside] at (
1901     (17,1.313) {\uantwerpendocsPROP{confidential}};
1902   \else
1903     \if@fullembargo
1904       \node[anchor=east,font=\large\bfseries,uauaside] at (
1905         (17,1.313) {\uantwerpendocsPROP{confidential}};
1906     \fi
1907   \fi
1908 \end{tikzpicture}
1909 }
1910 }
1911 \end{titlepage}%
1912 ~\par\relax
1913 \cleardoublepage
1914 \fi
1915 \begin{center}
1916   \includegraphics[width=4.75cm]{\logoposua}
1917   \vfill
1918   \@faculty\
1919   \@department\par
1920   \vfill
1921   \Huge\@title\par
1922   \large\@subtitle\par
1923   \vfill
1924   \normalsize\uantwerpendocsprop{pthesisnamei}\
1925   \@degree\
1926   \uantwerpendocsprop{pthesisnameii}\

```

```

1927 \medskip
1928 \textbf{\@author}
1929 \vfill
1930 \if@tempembargo
1931 \uantwerpendocsPROP{confidential}
1932 \else
1933 \if@fullembargo
1934 \uantwerpendocsPROP{confidential}
1935 \fi
1936 \fi
1937 \vfill
1938 \begin{minipage}[b]{0.4\textwidth}
1939 \@defenselocation, \@defensedate
1940 \end{minipage}
1941 \hfill
1942 \begin{minipage}[b]{0.4\textwidth}
1943 \flushright
1944 \supervisorsname{\}
1945 \jointsupervisors{\}{}
1946 \end{minipage}
1947 \end{center}
1948 \clearpage
1949 \noindent\textbf{\uantwerpendocsprop{juryname}}\hfill\break
1950 \textit{\uantwerpendocsprop{jurychairname}}\hfill\break
1951 \@jurychair{}\ifdefvoid{\@jurychairaff}{}{, \@jurychairaff}\hfill\break
1952 \textit{\supervisorsname{}}\hfill\break
1953 \jointsupervisorswithaffiliation{\}{}{\}\hfill\break
1954 \hfill\break
1955 \textit{\uantwerpendocsprop{jurymembersname}}\hfill\break
1956 \jointjurymembers{\}\hfill\break
1957 \hfill\break
1958 \vfill
1959 \noindent\textbf{Contact}\hfill\break
1960 \smallskip
1961 \@author\hfill\break
1962 \@affiliation\hfill\break
1963 \@address\hfill\break
1964 \vfill
1965 \noindent \uantwerpendocsprop{integrityclause}\hfill\break
1966 \vfill
1967 \if@fullembargo
1968 \noindent \uantwerpendocsprop{embargofull}
1969 \vfill
1970 \fi
1971 \if@tempembargo
1972 \noindent \embargotempwithdates
1973 \vfill
1974 \fi
1975 \noindent\textbf{\uantwerpendocsprop{crdisclaimer}}\hfill\break
1976 \uantwerpendocsprop{arrphd}
1977 \ifdefempty{\@doi}{}{
1978 ~\hfill\break
1979 \vfill
1980 \noindent\begin{minipage}[b]{.5\linewidth}
1981 \@doi
1982 \end{minipage}
1983 }
1984 \thispagestyle{empty}
1985 \ifx\@titel\empty
1986 \else
1987 \clearpage
1988 \begin{center}
1989 \vfill
1990 ~
1991

```

```

1992 \vfill
1993 Dutch title:
1994 \vfill
1995 \Huge\@titel\par
1996 \large\@subtitel\par
1997 \vfill
1998 ~
1999 \vfill
2000 \end{center}
2001 \fi
2002 \setcounter{footnote}{0}%
2003 \global\let\thanks\relax
2004 \global\let\maketitle\relax
2005 \global\let\@thanks\@empty
2006 \global\let\title\relax
2007 \global\let\author\relax
2008 \global\let\date\relax
2009 \global\let\and\relax
2010 \clearpage
2011 \pagestyle{fancy}
2012 \thispagestyle{empty}
2013 }
2014 </pt>

```

## 7.23 Bookcover for the PhD class

### `\makebookcover`

This macro creates a book cover. It only works if you don't specify the `cameraready` and `bare` class options, as this cover loads the first and last page of your PDF.

```

2015 < *pt>
2016 \ExplSyntaxOn
2017 \msg_new:nnnn { bookcover } { spine-too-small }
2018   { The~spine~width~(1mm)~is~too~small. }
2019   { It~must~be~at~least~8mm~to~typeset~any~spine~text. }
2020 \msg_new:nnnn { bookcover } { spine-big-enough }
2021   { The~spine~width~(1mm)~is~big~enough. }
2022   { It~must~be~at~least~8mm~to~typeset~the~spine~text. }
2023 \newcommand\makebookcover[1]{
2024   \fp_new:N \g_@@_pageweight_fp
2025   \fp_set:Nn \g_@@_pageweight_fp { #1 }
2026   \fp_new:N \g_@@_pagecount_fp
2027   \fp_set:Nn \g_@@_pagecount_fp { \ztotpages }
2028   \fp_new:N \g_@@_spinewidth_fp
2029   \fp_set:Nn \g_@@_spinewidth_fp { 0.000625 * \g_@@_pageweight_fp * \g_@@_pagecount_fp }
2030   % for a two-sided book: spinewidth (in mm) = number of pages / 20 (for 80g/m2 paper)
2031   \bool_new:N \g_@@_printonspine_bool
2032   \fp_compare:nNnTF { \g_@@_spinewidth_fp } < { 6.0 } {
2033     \msg_warning:nnx { bookcover } { spine-too-small } { \fp_use:N \g_@@_spinewidth_fp }
2034     \bool_gset_false:N \g_@@_printonspine_bool
2035   }{
2036     \msg_info:nnx { bookcover } { spine-big-enough } { \fp_use:N \g_@@_spinewidth_fp }
2037     \bool_gset_true:N \g_@@_printonspine_bool
2038   }
2039   \str_new:N \g_@@_covertemplate_str
2040   \str_set:Nn \g_@@_covertemplate_str {
2041     \documentclass[coverheight=26cm,coverwidth=18cm,
2042       spinewidth=---spinewidth---mm,bleedwidth=3mm]{bookcover}
2043     \newcommand\selector{---faculty---}
2044     \makeatletter
2045     \newif\if@cmymk\@cmymktrue
2046     \newif\if@neutralcolors\@neutralcolorsfalse
2047     \newif\if@printonspine---printonspine---
2048     \makeatother

```



```

2049 \usepackage{uantwerpencolorlogoscheme}
2050 \renewcommand{\familydefault}{\sfdefault}
2051 \newbookcovercomponenttype{title}{
2052     \vspace{2em}\centering
2053     \rotatebox[origin=c]{-90}{
2054         \fontsize{15}{0}\selectfont\color{uauaside}\textbf{\vphantom{Ag}---arg---1}
2055     }
2056     \vfill
2057 }
2058 \newbookcovercomponenttype{author}{
2059     \vfill\centering
2060     \rotatebox[origin=c]{-90}{
2061         \fontsize{13}{0}\selectfont\color{maincolor}\textbf{\vphantom{Ag}---arg---1}
2062     }
2063     \vspace{13mm+2em}
2064 }
2065 \newbookcovercomponenttype{logo}{
2066     \vfill\hfill\includegraphics[width=5mm]{---arg---1}\hfill\vspace{5mm}
2067 }
2068 \begin{document}
2069 \begin{bookcover}
2070     \bookcovercomponent{normal}{front}{
2071         \includegraphics[width=\coverwidth+1mm,page=1]{---jobname---}
2072     }
2073     \makeatletter
2074     \if@printonspine
2075         \bookcovercomponent{title}{spine}{---title---}
2076         \bookcovercomponent{author}{spine}{---author---}
2077         \bookcovercomponent{logo}{spine}{icon-uantwerpen-ua-cmyk}
2078     \fi
2079     \makeatother
2080     \bookcovercomponent{normal}{back}[-1mm,0mm,0mm,0mm]{
2081         \includegraphics[width=\coverwidth+1mm,page=---lastpage---]{---jobname---}
2082     }
2083 \end{bookcover}
2084 \end{document}
2085 }
2086 \cs_new:Npn \g_@@_stamptemplate:nx ##1 ##2 {
2087     \exp_args:NNnx \str_replace_all:Nnn \g_@@_coverttemplate_str { ---##1--- } { ##2 }
2088 }
2089 \cs_new:Npn \g_@@_stamptemplate:nn ##1 ##2 {
2090     \str_replace_all:Nnn \g_@@_coverttemplate_str { ---##1--- } { ##2 }
2091 }
2092 \g_@@_stamptemplate:nx {author} {\@author }
2093 \g_@@_stamptemplate:nx {title} {\@title}
2094 \g_@@_stamptemplate:nx {jobname} {\@jobname}
2095 \g_@@_stamptemplate:nx {lastpage} {\fp_use:N \g_@@_pagecount_fp }
2096 \g_@@_stamptemplate:nx {spinewidth} {\fp_use:N \g_@@_spinewidth_fp }
2097 \g_@@_stamptemplate:nx {faculty} {\fselector}
2098 \bool_if:NTF \g_@@_printonspine_bool
2099     {\g_@@_stamptemplate:nn {printonspine} { \@printonspinettrue }}
2100     {\g_@@_stamptemplate:nn {printonspine} { \@printonspinefalse }}
2101 \g_@@_stamptemplate:nx {arg} {\c_hash_str}
2102 \str_replace_all:Nnn \g_@@_coverttemplate_str {\} {\~}
2103 \iow_new:N \g_@@_coverfile_iow
2104 \iow_open:Nn \g_@@_coverfile_iow { \@jobname-cover.tex }
2105 \iow_now:Nx \g_@@_coverfile_iow { \g_@@_coverttemplate_str }
2106 \iow_close:N \g_@@_coverfile_iow
2107 }
2108 \ExplSyntaxOff
2109 \end{pt}

```

## **\makefinalpage**

Below, one can find the code for the final page of the phdthesis class:

```

2110 < *pt>
2111 \newcommand\makefinalpage{
2112   \if@bare\else
2113   \cleardoublepage
2114   \thispagestyle{empty}
2115   ~% intentionally blank page
2116   \clearpage
2117   \thispagestyle{empty}
2118   \AddToShipoutPicture*{%
2119     \put(0,0){%
2120       \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
2121         \useasboundingbox (0,0) rectangle (\paperwidth,\paperheight);
2122         \fill[sidecolor] (-3mm,-3mm) rectangle (2.125cm,2.625cm);
2123       \end{tikzpicture}
2124     }
2125   }
2126   ~
2127   \fi
2128 }
2129 < /pt>

```

## 7.24 Title page for the report classes

The title page is generated using the `\maketitle` command. As the report class from which we inherit already defines this command, we need to renew it.

### `\maketitle`

Below, one can find the code for the title page of the report class:

```

2130 < *rp>
2131 \renewcommand\maketitle{%
2132   \pagestyle{empty}
2133   \setlength\parskip{0pt}%
2134   \setlength\parindent{0pt}%
2135   \begin{titlepage}
2136     \AddToShipoutPicture*{%
2137       \put(0,0){%
2138         \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
2139           \clip (0,0) rectangle(\paperwidth,\paperheight);
2140           \fill[lightgray]
2141             (2.125,20.192) rectangle (\paperwidth,6);
2142           \begin{scope}
2143             \clip (2.125,20.192) rectangle (\paperwidth,6);
2144             \node[anchor=south west]
2145               at (2.125,6)
2146               {\ifx\@titlepageimage\@empty
2147                \else
2148                \includegraphics[keepaspectratio,
2149                  scale=0.01,
2150                  min size={18.875cm}{14.192cm}]{\@titlepageimage}
2151                \fi};
2152           \end{scope}
2153
2154           \node
2155             [anchor=west,text width=17cm,align=left,font=\Huge,uauaside]
2156             at (2.125,\paperheight-3cm)
2157             {
2158               \textsf{\textbf{\@title}}
2159             };
2160
2161           \node
2162             [anchor=west,text width=17cm,align=left,font=\Large,uauaside]
2163             at (2.125,\paperheight-5cm)
2164             {

```

```

2165      \textsf{\textbf{\@subtitle}}
2166    };
2167
2168    \node
2169      [anchor=base west,maincolor,
2170       text width=17cm,align=left,font=\LARGE]
2171      at (2.125,\paperheight-6.5cm)
2172      {\textsf{\textbf{\@author}}};
2173
2174      \fill[maincolor] (2.125,6)
2175      -- (\paperwidth,6)
2176      -- (\paperwidth,2.625)
2177      -- (2.55,2.625)
2178      arc (-90:-180:0.425)
2179      -- cycle;
2180
2181      \node[white,anchor=west,text width=17cm,align=left,font=\small]
2182      at (2.55,5.3)
2183      {\textsf{\textbf{\@extra}}};
2184
2185      \node[white,anchor=west,text width=17cm,align=left,font=\small]
2186      at (2.55,4)
2187      {\textsf{\textbf{\@affiliation{}}
2188        | \@versionyear}\@
2189        \address}};
2190
2191      \node[anchor=west] at
2192      (2.125,1.313)
2193      {\includegraphics[width=4.75cm]{\logopos}};
2194    \end{tikzpicture}
2195  }
2196 }
2197 \end{titlepage}%
2198 ~\par\relax
2199 \cleardoublepage
2200 \begin{center}
2201   \includegraphics[width=4.75cm]{\logopos}
2202   \vfill
2203   \@affiliation\\
2204   \@extra\par
2205   \vfill
2206   \Huge\textsf{\@title}\par
2207   \large\textsf{\@subtitle}\par
2208   \vfill
2209   \textbf{\@author}
2210   \vfill
2211 \end{center}
2212 \clearpage
2213 \vfill
2214 \textbf{Contact}\\
2215 \smallskip
2216 \@author\\
2217 \@affiliation\\
2218 \@address\\
2219 \vfill
2220 \copyright{} \@versionyear{} \@author\\
2221 \uantwerpendocsprop{arr}.
2222 \vfill
2223 \setcounter{footnote}{0}%
2224 \global\let\thanks\relax
2225 \global\let\maketitle\relax
2226 \global\let\@thanks\@empty
2227 \global\let\title\relax
2228 \global\let\author\relax
2229 \global\let\date\relax

```

```

2230 \global\let\and\relax
2231 \pagestyle{fancy}
2232 \thispagestyle{empty}
2233 \
2234 }
2235 </rp>

```

## **\makefinalpage**

Below, one can find the code for the final page of the phdthesis class:

```

2236 <rp>
2237 \newcommand\makefinalpage{
2238 \cleardoublepage
2239 \thispagestyle{empty}
2240 ~% intentionally blank page
2241 \clearpage
2242 \thispagestyle{empty}
2243 \begin{tikzpicture}[remember picture,overlay]
2244 \node at (current page.center) {
2245 \begin{tikzpicture}[inner sep=0pt]
2246 \clip (0,0) rectangle(\paperwidth,\paperheight);
2247 \fill[sidecolor] (0,0) rectangle (2.125cm,2.625cm);
2248 \end{tikzpicture}
2249 };
2250 \end{tikzpicture}
2251 }
2252 </rp>

```

## **7.25 Title page for the letter class**

### **7.25.1 Title Page**

## **\maketitle**

The top of the letter is generated using the \maketitle command.

```

2253 <le>
2254 \newcommand\maketitle{%
2255 \pagestyle{fancy}
2256 \thispagestyle{empty}
2257 \AddToShipoutPicture*{%
2258 \put(0,0){%
2259 \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
2260 \clip (0,0) rectangle(\paperwidth,\paperheight);
2261 \path (current page.north west) +(1.8cm,-1.2cm)
2262 node[anchor=north west] {
2263 \includegraphics[height=1.1cm]{\@logo}
2264 };
2265 \if@nofoldline\else
2266 \draw (current page.north west)
2267 +(1cm,-98mm) -- +(1.5cm,-98mm);
2268 \fi
2269 % 90 x 45
2270 % pos: 20mm van kant, 15mm van onderkant
2271 \path (current page.north east) +(-100mm,-65mm)
2272 node[anchor=west,text width=80mm,align=left] {
2273 \scriptsize\textcolor{gray}{\uline{\@returnaddress}}\\*
2274 \normalsize\@to\\*
2275 \ifx\@toorganization\@empty\else\@toorganization\\*\fi%
2276 \@toaddress
2277 };
2278 \end{tikzpicture}
2279 }
2280 }

```

```

2281 ~\\[3ex]
2282 \textcolor{uauaside}{\textbf{\@sender}}
2283 \ifx\@senderrole\@empty\\[1.75ex]\else \\*\@senderrole\\[1.75ex]\fi
2284 \@faculty{
2285 \ifx\@unit\@empty\else\\* \@unit\fi~\\[1.75ex]
2286 \@address\\[1.75ex]
2287 \ifemails{E~\jointemails{\\phantom{E~}}\\}
2288 \ifphones{T~\jointphones{\\phantom{T~}}\\}
2289 \iffaxes{F~\jointfaxes{\\phantom{F~}}\\}
2290 \ifmobiles{M~\jointmobiles{\\phantom{M~}}\\}
2291 ~\\[4ex]
2292 \begin{tikzpicture}[anchor=north west,align=left,outer sep=0,inner sep=0]
2293   \path
2294     (0,0) node { \scriptsize \strut
2295       \textcolor{gray}{\uppercase\expandafter{\uantwerpendocsprop{datename}}} } }
2296     (4cm,0) node { \scriptsize \strut
2297       \textcolor{gray}{\uppercase\expandafter{\uantwerpendocsprop{subjectname}}} } }
2298     (0,-2.5ex) node { \strut \@date }
2299     (4cm,-2.5ex) node[align=left] { \strut \@subject };
2300 \end{tikzpicture}~\\[4ex]
2301 }
2302 </le>

```

The trailer of the page is automatically generated at the end of the document:

```

2303 <*le>
2304 \newif\ifletterclosed
2305 \letterclosedfalse
2306 \newcommand\closeletter{
2307   \ifletterclosed
2308   \else
2309     \@closing\\*[3ex]\@signature~\\[3ex]
2310     \@sender
2311     \ifx\@senderrole\@empty\\[8ex]\else\\*\@senderrole\\[8ex]\fi
2312     \setlength{\parskip}{0em}
2313     \ifx\@carboncopy\@empty\else \MakeUppercase{\ccname}: \@carboncopy\\[4ex]\fi
2314     \ifx\@enclosed\@empty\else \MakeUppercase{\enclname}: \@enclosed\fi
2315     \letterclosedtrue
2316     \pagestyle{empty}
2317     \clearpage
2318   \fi
2319 }
2320 \AtEndDocument{
2321   \closeletter
2322 }
2323 </le>

```

## 7.26 Title page for the exam class

### \maketitle

The title page of the exam class is generated using the \maketitle command.

```

2324 <*ex>
2325 \renewcommand\maketitle{%
2326   \pagestyle{fancy}
2327   \AddToShipoutPicture*{%
2328     \put(0,0){%
2329       \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
2330         \clip (0,0) rectangle(\paperwidth,\paperheight);
2331         \fill[lightgray]
2332           (2.125,{\paperheight-7cm}) rectangle (\paperwidth,6);
2333       \node
2334         [anchor=west,text width=(\paperwidth-5cm),align=left]

```

```

2336 at (2.125,{\paperheight-3cm})
2337 {%
2338   \fontsize{18}{22}\selectfont%
2339   \textsf{\textbf{\@course{}}}%
2340   \ifx\@exampart\@empty
2341     \else \textsf{\textbf{ --- \@exampart}}\fi
2342 };
2343 \node
2344 [anchor=west,text width={\paperwidth-5cm},align=left]
2345 at (2.125,{\paperheight-4cm})
2346 {%
2347   \fontsize{12}{18}\selectfont%
2348   \textsf{\@coursecode}%
2349 };
2350
2351 \node
2352 [anchor=west,text width={\paperwidth-5cm},align=left,font=\large]
2353 at (2.125,{\paperheight-5cm})
2354 {%
2355   \fontsize{12}{18}\selectfont%
2356   \textsf{\uantwerpendocsprop{seriesname} \@examgroupnumber{} \hfill \@examdate{}}
2357 };
2358
2359 \node[anchor=south west,align=left,inner sep=0pt] at (3,21)
2360 {%
2361   \fontsize{14}{19}\selectfont%
2362   \textsf{\uantwerpendocsprop{examname}}%
2363 };
2364
2365 \node[anchor=south west,align=left,inner sep=0pt] at (3,19)
2366 {%
2367   \fontsize{12}{18}\selectfont%
2368   \textsf{\uantwerpendocsprop{lastname}}%
2369 };
2370 \foreach \nn in {0,1,...,33} {
2371   \draw[fill=white] (3,18) ++({0.5*\nn},0) rectangle +(0.5,0.8);
2372 }
2373
2374 \node[anchor=south west,align=left,inner sep=0pt] at (3,17)
2375 {%
2376   \fontsize{12}{18}\selectfont%
2377   \textsf{\uantwerpendocsprop{firstname}}%
2378 };
2379
2380 \foreach \nn in {0,1,...,23} {
2381   \draw[fill=white] (3,16) ++({0.5*\nn},0) rectangle +(0.5,0.8);
2382 }
2383
2384 \node[anchor=south west,align=left,inner sep=0pt] at (16,17)
2385 {%
2386   \fontsize{12}{18}\selectfont%
2387   \textsf{\uantwerpendocsprop{docketname}}%
2388 };
2389 \foreach \nn in {0,1,...,7} {
2390   \draw[fill=white] (16,16) ++({0.5*\nn},0) rectangle +(0.5,0.8);
2391 }
2392
2393 \node[anchor=south west,align=left,inner sep=0pt,text width=17cm]
2394 at (3,14)
2395 {%
2396   \fontsize{12}{21}\selectfont%
2397   \textsf{\uantwerpendocsprop{examdurationname}: \@examlength}%
2398 };
2399 \node[anchor=south west,align=left,inner sep=0pt,text width=17cm]
2400 at (3,11)

```

```

2401      {%
2402      \fontsize{12}{15}\selectfont%
2403      \textsf{\begin{tabular}{@{}l@{}}%
2404      \untwerpendocsprop{examstartname}& : & \@tstart\\
2405      \untwerpendocsprop{examendname} & : & \@tend
2406      \end{tabular}}
2407  };
2408
2409  \node[anchor=south west,align=left,inner sep=0pt,text width=17cm]
2410  at (3,8)
2411  {%
2412      \fontsize{12}{21}\selectfont%
2413      \textsf{\roomsname: \jointrooms{, }}
2414  };
2415
2416  \node
2417  [anchor=base west,uauamain,
2418  text width={\paperwidth-5cm},align=left,font=\LARGE]
2419  at (2.125,{\paperheight-6.5cm})
2420  {\textsf{\textbf{\@author}}};
2421
2422  \fill[gray] (2.125,6)
2423  -- (\paperwidth,6)
2424  -- (\paperwidth,2.625)
2425  -- (2.55,2.625)
2426  arc (-90:-180:0.425)
2427  -- cycle;
2428
2429  \node[white,anchor=west,align=left,font=\large]
2430  (SN) at (2.55,4.9)
2431  {
2432      \begin{tabular}{@{}l@{~\,},p{14.5cm}}
2433      \textsf{\lecturersname}
2434      & \textsf{\textbf{\jointlecturers{ | }}}
2435      \end{tabular}
2436  };
2437
2438  \node[white,anchor=west,text width=17.5cm,align=left,font=\small]
2439  at (2.55,3.7)
2440  {\textsf{\jointdegrees{\}\{\}\}\}
2441   \textsf{\textbf{\@faculty{}}}};
2442
2443  \node[anchor=west] at (2.125,1.313)
2444  {\includegraphics[width=4.75cm]{\logopos}};
2445  \end{tikzpicture}
2446  }
2447  }
2448  ~\par\relax
2449  \clearpage
2450  \lfoot[\small \@shorttitle]{\small \@shorttitle}
2451  \rfoot[\small Groep \@examgroupnumber{} ---
2452  \@academicyear]{\small Groep \@examgroupnumber{} --- \@academicyear}
2453  \renewcommand*{\footrulewidth}{1pt}
2454  \@extrainfo{}
2455  }
2456  \end{ex}

```

## 7.27 Auxiliary functions to typeset exams

### \question

Add a small box with the weight of the question on the current line (right aligned).

```

2457  \end{ex}
2458  \newcounter{question}

```

```

2459 \setcounter{question}{0}
2460 \renewcommand*\thequestion{\@arabic\c@question}
2461 \newcommand{\question}[1]{
2462   \stepcounter{question}
2463   \thequestion.~#1%
2464 }
2465 \</ex>

```

### **\questionweight**

Add a small box with the weight of the question on the current line (right aligned).

```

2466 \<ex>
2467 \newcommand*\questionweight[1]{%
2468   \hspace{\fill}
2469   \begin{tabular}{|c|}
2470     \hline
2471     \small \uantwerpendocsprop{weightname}: #1\\
2472     \hline
2473   \end{tabular}\\
2474 }
2475 \</ex>

```

### **\engdut**

typesets the question in two columns, the left column taking the English variant of the question and the right column taking the Dutch variant.

```

2476 \<ex>
2477 \newcommand{\engdut}[2]{%
2478   \begin{tabular}{ccc}%
2479     \selectlanguage{english}%
2480     \begin{minipage}[t]{0.45\textwidth}%
2481       #1
2482     \end{minipage}%
2483     &~~~&
2484     \selectlanguage{dutch}%
2485     \begin{minipage}[t]{0.45\textwidth}%
2486       #2
2487     \end{minipage}%
2488   \end{tabular}
2489   \selectlanguage{english}%
2490 }
2491 \</ex>

```

### **\setmcsymbol**

sets the symbol to be used as multiple choice mark (by default a square).

```

2492 \<ex>
2493 \newcommand*\@mcsymbol{\square}
2494 \newcommand*\setmcsymbol[1]{\renewcommand\@mcsymbol{#1}}
2495 \</ex>

```

### **\mc**

typesets a multiple choice answer candidate (monolingual, i.e. in a single column).

```

2496 \<ex>
2497 \newcommand\mc[1]{%
2498   \hfill\break\qqquad\begin{tabular}{cc}
2499     $\@mcsymbol$
2500     &
2501     \begin{minipage}[t]{0.9\textwidth}%
2502       #1
2503     \end{minipage}%
2504   \end{tabular}
2505 }
2506 \</ex>

```



## **\engdutm**

typesets a multiple choice answer candidate in two columns, the left column taking the English variant of the question and the right column taking the Dutch variant.

```
2507 <*ex>
2508 \newcommand{\engdutm}[2]{%
2509   \hfill\break\begin{tabular}{cccc}
2510     $\mcsymbol$
2511     &
2512     \selectlanguage{english}%
2513     \begin{minipage}[t]{0.42\textwidth}%
2514       #1
2515     \end{minipage}%
2516     &--&
2517     \selectlanguage{dutch}%
2518     \begin{minipage}[t]{0.42\textwidth}%
2519       #2
2520     \end{minipage}%
2521   \end{tabular}
2522   \selectlanguage{english}%
2523 }
2524 </ex>
```

## **\insertsolutionspagepartial**

fills the remainder of the page with 'fill-out' squares. as observing/controlling the current line position in L<sup>A</sup>T<sub>E</sub>X is not easy, one has to provide the number of centimeters below the bottom of the page, one wants to start the fill-out squares.

```
2525 <*ex>
2526 \newcommand\insertsolutionspagepartial[1]{
2527   ~\relax
2528   \AddToShipoutPicture*{%
2529     \put(0,0){%
2530       \begin{tikzpicture}
2531         \clip (0,0) rectangle (21,#1);
2532 % \draw[densely dotted, step=0.5cm,black!20] (0.999,0.990) grid (20,1.5);
2533 \draw[densely dotted, step=0.5cm,black!20] (0.999,1.499) grid (2,2.5);
2534 \draw[densely dotted, step=0.5cm,black!20] (18.999,1.499) grid (20,2.5);
2535
2536 \draw[densely dotted, step=0.5cm,black!20] (0.999,2.499) grid (20,27);
2537 \draw[densely dotted, step=0.5cm,black!20] (0.999,27) grid (16,28);
2538 \draw[densely dotted, step=0.5cm,black!20] (19.499,27) grid (20,28);
2539 \draw[densely dotted, step=0.5cm,black!20] (0.99,27.999) grid
2540 (20,28.5);
2541 \draw[ultra thick] (1,#1) -- (20,#1);
2542 \end{tikzpicture}
2543 }
2544 }%
2545 \clearpage
2546 \relax
2547 }
2548 </ex>
```

## **\insertsolutionspage**

inserts a full solutions page, i.e. flushes the current page and inserts a full page with 'fill-out' squares. The argument allows for specifying a watermark text (e.g. 'Scrap paper').

```
2549 <*ex>
2550 \newcommand\insertsolutionspage[1]{
2551   \clearpage
2552   \AddToShipoutPicture*{%
2553     \put(0,0){%
2554       \begin{tikzpicture}
2555         \clip (0,0) rectangle (21,29.5);
```

```

2556      \draw[densely dotted, step=0.5cm,black!20] (0.999,1.499) grid (2,2.5);
2557      \draw[densely dotted, step=0.5cm,black!20] (18.999,1.499) grid (20,2.5);
2558
2559      \draw[densely dotted, step=0.5cm,black!20] (0.999,2.499) grid (20,28);
2560      \draw[densely dotted, step=0.5cm,black!20] (0.999,28) grid (16,28.5);
2561      \draw[densely dotted, step=0.5cm,black!20] (19.499,28) grid (20,28.5);
2562      \end{tikzpicture}
2563  }
2564  \put(120,150){\rotatebox{60}{\textcolor{watermark}{
2565      \fontsize{105}{130}\selectfont\textsf{#1}}}
2566  }
2567  }
2568  }%
2569  ~\relax
2570 }
2571 </ex>

```

## 7.28 References

```

2572 <*ct | bmt | pt | rp>
2573 \AtBeginDocument{
2574   \@ifpackageloaded{hyperref}{
2575     \hypersetup{
2576       breaklinks=true,
2577       colorlinks=true,
2578       citecolor=black,
2579       filecolor=black,
2580       linkcolor=black,
2581       pageanchor=true,
2582       pdfpagemode=UseOutlines,
2583       urlcolor=black,
2584       pdftitle={\@title},
2585       pdfsubject={\@subtitle},
2586       pdfauthor={\@author}
2587     }
2588   }{}
2589 }
2590 </ct | bmt | pt | rp>

```

# Part II. The beamer theme

## 8 User guide

```
<*bmrug>
\documentclass[aspectratio=1610]{beamer}
\usetheme[ti]{uantwerpen}
\usepackage[english]{babel}

The packages below are for demonstration purpose only.
They are not required for the template to work
\usepackage{metalogo}
\usepackage{kantlipsum}
\usepackage{pgfplots}
\usepackage{booktabs}

some stuff to typeset code
\newcommand*\command[1]{\tt \textbackslash #1}
\NewEnviron{codesnippet}[1][0.8\textwidth]{
  \scriptsize
  \quad\framebox[#1][l]{\texttt{
    \setlength\textwidth{#1}
    \begin{minipage}{0.9\textwidth}
      \BODY
    \end{minipage}
  }}
}
}
\newcommand*\ind[1][2ex]{\hspace*{#1}}
\newcommand*\bframe[1][]{\command{begin}\{#1frame\}}
\newcommand*\eframe[1][]{\command{end}\{#1frame\}}

\title{This is your \texttt{\textbackslash}title{}}
\subtitle[my short title]{This is your \texttt{\textbackslash}subtitle{}}
\date[my short date]{This is your \texttt{\textbackslash}date{}}
\author[my short author]{This is your \texttt{\textbackslash}author{}}

\begin{document}

\begin{frame}[negativefill]
  \maketitle
\end{frame}

\begin{frame}
  \maketitle
\end{frame}

\begin{frame}[negative]
  \maketitle
\end{frame}

\begin{frame}
  {What's on the menu?}
  {Bon app\`etit!}
  ~\\
  \tableofcontents
\end{frame}

\section{Loading the theme and theme options}

\begin{frame}[negative]
  \sectionpage
```

```
\end{frame}
```

```
\begin{frame}
```

```
{Using our beamer theme}
```

The `\texttt{uantwerpen}` beamer theme is distributed by CTAN. It should be installed with your `\TeX{}` distribution by default.

You can load the package in your preamble as:

```
\begin{codesnippet}
```

```
\command{documentclass}[aspectratio=1610]\{beamer\}\
```

```
\command{usetheme}[theme-options-go-here]\{uantwerpen\}\
```

```
\command{usepackage}[english]\{babel\}
```

```
\end{codesnippet}
```

```
\heading{Remarks}
```

```
\begin{itemize}
```

```
\item The theme behaves well for all supported beamer aspect ratios.
```

```
\item  $16\times 10$  is currently your best option to maximize your slide size given a modern LCD-projector!
```

```
\item Only \texttt{dutch} and \texttt{english} are supported.
```

```
The correct logoware is selected using the babel language option!
```

```
\end{itemize}
```

```
\end{frame}
```

```
\begin{l3qframe}[t,rqgraphic={
```

```
\begin{minipage}{0.35\textwidth}
```

```
\footnotesize
```

```
\begin{center}
```

```
\begin{tabular}{c}
```

```
\toprule
```

```
\bfseries option\
```

```
\midrule
```

```
\tt be \
```

```
\tt fbd \
```

```
\tt ggw \
```

```
\tt lw \
```

```
\tt ow \
```

```
\tt re \
```

```
\tt sw \
```

```
\tt ti \
```

```
\tt we \
```

```
\tt iob \
```

```
\bottomrule
```

```
\end{tabular}
```

```
\end{center}
```

```
\end{minipage}
```

```
}]
```

```
{Theme options}{}
```

The following theme options may come in handy:

```
\begin{description}
```

```
\item[\tt X] to invoke your own faculty's colors and logos,  
with X one of the options in the table on the right\
```

```
(I assume you know your faculty abbreviation)
```

```
\item[\tt nofonts] disables font loading, so you can load your own fonts
```

```
\item[\tt rgb] to select RGB color encoding (best for projecting, default)
```

```
\item[\tt cmyk] to select CMYK color encoding (best for printing)
```

```
\item[\tt neutralcolors] to disable your faculty colors and use the  
standard UAntwerpen colors
```

```
\end{description}
```

```
\medskip
```

The defaults of the theme are:

```

\begin{itemize}
\item no faculty option ($\rightarrow$ standard UAntwerpen logos)
\item \texttt{rgb}
\end{itemize}

\end{13qframe}

\begin{frame}[t]
{A note on the compiler you are using}
{Fonts galore}

Depending on the type of compiler you use, a different font scheme
is loaded:
\begin{description}
\item[\LaTeX] --- ancient compiler - no support\\
    Don't use!
\item[pd\LaTeX] --- very old school compiler - no OTF/TTF support\\
    Computer Modern Sans Serif is used as font
\item[\XeLaTeX] --- old school compiler - the first to have OTF/TTF
    support\\
    Calibri is used as font (with cmbright math fonts)
\item[\LuaLaTeX] --- current compiler - your best option\\
    Calibri is used as font (with cmbright math fonts)
\end{description}

\end{frame}

\section{Title slides}

\begin{frame}[negative]
\sectionpage
\end{frame}

\begin{frame}[t]
{Title slides}
\heading{Contents} ---
The contents of the title slide can be set in your preamble
using the classical \LaTeX{} commands:
\begin{itemize}
\item \command{title}\{\}
\item \command{subtitle}\{\}
\item \command{author}\{\}
\item \command{date}\{\}
\end{itemize}
We don't specify an institute, as the logos do so.

\heading{Code} --- The titleslide is easily typeset as:\\
\begin{codesnippet}
\begin{bframe}[option]
\ind\command{maketitle}
\eframe
\end{codesnippet}

with no option, or one of: \texttt{normal}, \texttt{negative},
\texttt{negativefill}.
\end{frame}

\section{Regular slides}

\subsection{Bare}

\begin{frame}[negative]
\sectionpage
\end{frame}

```

```

\begin{frame}[negative]
  \subsectionpage
\end{frame}

\begin{frame}[t]
  {Frame titles}
  {And subtitles}
  \heading{How to specify them!}\\
  Titles are specified using \command{frametitle}\{\}\} or
  \command{framesubtitle}\{\}\} or even easier as first and second argument
  to the \texttt{frame} environment (or their derived versions).

  \begin{codesnippet}
    \bframe[][options go here, comma separated]\\
    \ind\{first argument\}\\
    \ind\{second argument\}\\
    \ind frame contents \\
    \eframe
  \end{codesnippet}
  \bigskip

  \heading{Don't need them?}\\
  If you need a slide without titles: just don't specify them!

  \heading{Want to get rid of the footer as well?}\\
  Specify the \texttt{plain} option to the frame.
\end{frame}

\begin{frame}[t]
  {The canvas}

  \heading{Flavors} --- The canvas of the slide has four flavors:
  \begin{description}
    \item[normal]
      the ordinary white background slide
    \item[negativefill]
      a reverse video slide on a background (in maincolor) without white
      margins
    \item[negative]
      a reverse video slide on a bakcground (in maincolor) with white
      margins
    \item[graphicfill]
      a graphic canvas without white margins (graphic can be photo,
      graph, \ldots)
    \item[graphic] a graphic canvas with white margins (graphic can be
      anything)
  \end{description}
  They are specified as options to the frame environment (or its
  derivatives).

  \heading{Remarks}
  \begin{itemize}
    \item You don't need to specify the normal canvas, it is the
      default.
    \item In handout mode the negative and negativefill canvas will be
      typeset as normal canvas (to allow for easy printing).
    \item The graphic option has many variants that we will discuss later.
  \end{itemize}
\end{frame}

\begin{frame}[negativefill]
  {A negativefill slide}
  {with a subtle subtitle}
  \kant[1]

```

```

\end{frame}

\begin{frame}[negative,t]
  {A negative slide}
  {with a subtle subtitle}
  Don't do this! Don't use a title and subtitle, nor straight text
  but put material on this slide that does not touch or cross the
  edges of the background!\\
  E.g., the graph on the bottom right
  \place[anchor=south east] at (0.9,0.1) {
    \begin{tikzpicture}[white]
      \begin{axis}
        [width=4cm,height=5cm,grid=both,font=\footnotesize]
        \addplot[white] {x^2};
      \end{axis}
    \end{tikzpicture}
  }
  The best advice is not to reserve this canvas for title frames and
  intermission slides.
\end{frame}

\begin{frame}[t]
  {Vertical alignment}

  You can easily specify the vertical alignment of your frame
  contents, using the options
  \begin{description}
    \item[\texttt{t}] for top
    \item[\texttt{c}] for center
    \item[\texttt{b}] for bottom
  \end{description}

  Example:\\[1ex]
  \begin{codesnippet}
    \bframe[] [t]\\
    \ind\{Title\}\\
    \ind\{Subtitle\}\\
    \ind frame contents\\
    \eframe
  \end{codesnippet}
\end{frame}

\begin{frame}[t]
  {Colors}
  {What a wonderful world}

  \heading{Standard colors}\\
  You can select the theme colors using:\\
  \textcolor{maincolor}{Main color}:
  can be specified as \LaTeX-color \emph{maincolor}\\
  \textcolor{sidecolor}{Side color}:
  can be specified as \LaTeX-color \emph{sidecolor}\\
  \textcolor{basecolor}{Base color}:
  can be specified as \LaTeX-color
  \emph{basecolor}

  \heading{Advice}\\
  \begin{itemize}
    \item Stick to the standard colors or use grayscale tints!
    \item Only use color when functional (e.g. in graphs)
  \end{itemize}

  \heading{Alert}
  You can use \alert{\command{alert{}}}} to grab the attention of the

```

```

user. It will typeset your content in \alert{red}.

\heading{Not taking any advice?}\\
You can fiddle with the colors, but do so in smart way.
Use \command{setbeamercolor}. You can see how it is used in the
\texttt{beamercolorthemeuantwerpen.sty} file.
\end{frame}

\begin{frame}[t]
{Logo demo}

The logo's can be used as follows (but you should not need them):
\begin{itemize}
\item \command{includegraphics[width=3cm]{\command{logopos}}}\
\begin{center}
\begin{tikzpicture}
\draw[fill,white] (0,0) rectangle node
{\includegraphics[width=3cm]{\logopos}} (4,1.25);
\end{tikzpicture}
\end{center}
\item \command{includegraphics[width=3cm]{\command{logoneg}}}\
\begin{center}
\begin{tikzpicture}
\draw[fill] (0,0) rectangle node
{\includegraphics[width=3cm]{\logoneg}} (4,1.25);
\end{tikzpicture}
\end{center}
\item \command{includegraphics[width=3cm]{\command{logomonowhite}}}\
\begin{center}
\begin{tikzpicture}
\draw[fill] (0,0) rectangle node
{\includegraphics[width=3cm]{\logomonowhite}} (4,1.25);
\end{tikzpicture}
\end{center}
\end{itemize}
\end{frame}

\subsection{With graphic eye candy}

\begin{frame}[negative]
\subsectionpage
\end{frame}

\begin{frame}[t]
{Basic idea}

\heading{The idea} --- put support material (photo or graph) on the
slide next to the frame content.
This is done by
\begin{itemize}
\item specifying an appropriate canvas
\item using an appropriate frame derivative
\end{itemize}

\heading{Good combinations}
\begin{center}\small
\begin{tabular}{ccc}
\toprule
\bfseries frame option & \bfseries graphic on frame
& \bfseries corresponding frame derivative\\
\midrule
lqgraphic & left quarter & r3qframe \\
rqgraphic & right quarter & l3qframe \\
lhgraphic & left half & rhframe \\
rhgraphic & right half & lhframe
\end{tabular}
\end{center}

```



```

        thgraphic & top half      & bhframe \\
        bhgraphic & bottom half   & thframe\\
        \bottomrule
    \end{tabular}
\end{center}

\end{frame}

\begin{l3qframe}[rqgraphic]
{Some Random Title}
{Please, adapt!}

\small
The slide has been typeset as:\\
\begin{codesnippet}[\textwidth]
    \bframe[l3q][rqgraphic=\{<load photo here>\}\}\\
    \ind\{Title\}\\
    \ind\{Subtitle\}\\
    \ind frame contents\\
    \eframe[l3q]
\end{codesnippet}
\smallskip

\subheading{Remarks}
\begin{itemize}
\item Load photo as:\\
    \command{includegraphics}[width=0.25\command{paperwidth}, min height=\command{textheight}]
    \{image.jpg\}
\item If \texttt{rqgraphic} is specified without argument, a standard photo
    is loaded.
\item Note: you can avoid rounding the corner using the
    frame option \texttt{noround} (may be useful when not using a photo)
\end{itemize}
\end{l3qframe}

\begin{r3qframe}[lqgraphic,t]
{Some Random Title}
{Please, adapt!}

\small
The slide has been typeset as:\\
\begin{codesnippet}[\textwidth]
    \bframe[r3q][lqgraphic=\{<load photo here>\}\}\\
    \ind\{Title\}\\
    \ind\{Subtitle\}\\
    \ind frame contents\\
    \eframe[r3q]
\end{codesnippet}
\smallskip

\subheading{Remarks}
\begin{itemize}
\item Load photo as:\\
    \command{includegraphics}[width=0.25\command{paperwidth}, min height=\command{textheight}]
    \{image.jpg\}
\item If \texttt{rqgraphic} is specified without argument, a standard photo
    is loaded.
\item Note: you can avoid rounding the corner using the
    frame option \texttt{noround} (may be useful when not using a photo)
\end{itemize}
\end{r3qframe}

\begin{lhframe}[rhgraphic]
{Some Random Title}

```

```

\small
The slide has been typeset as:\\
\begin{codesnippet}[\textwidth]
  \bframe[lh][rhgraphic=\{<load photo here>\}\}\\
  \ind\{Title\}\\
  \ind\{Subtitle\}\\
  \ind frame contents\\
  \eframe[lh]
\end{codesnippet}
\smallskip

\subheading{Remarks}
\begin{itemize}
\item Load photo as:\\
  \command{includegraphics}[min
    width=0.5\command{paperwidth}, min height=\command{textheight}]
    \{image.jpg\}
\item If \texttt{rqgraphic} is specified without argument, a standard photo
  is loaded.
\item Note: avoid rounding the corner using \texttt{noround}
\end{itemize}
\end{lhframe}

\begin{rhframe}[lhgraphic,t]
  {Some Random Title}

  \small
  The slide has been typeset as:\\
  \begin{codesnippet}[\textwidth]
    \bframe[rh][lhgraphic=\{<load photo here>\}\}\\
    \ind\{Title\}\\
    \ind\{Subtitle\}\\
    \ind frame contents\\
    \eframe[rh]
  \end{codesnippet}
  \smallskip

  \subheading{Remarks}
  \begin{itemize}
  \item Load photo as:\\
    \command{includegraphics}[min
      width=0.5\command{paperwidth}, min height=\command{textheight}]
      \{image.jpg\}
  \item If \texttt{rqgraphic} is specified without argument, a standard photo
    is loaded.
  \item Note: avoid rounding the corner using \texttt{noround}
  \end{itemize}
\end{rhframe}

\begin{bhframe}[thgraphic,t]
  {Some Random Title}{Please, adapt!}
  \small
  The slide has been typeset as:
  \begin{codesnippet}[\textwidth]
    \bframe[bh][thgraphic=\{<load photo here>\}\}\\
    \ind\{Title\}\\
    \ind\{Subtitle\}\\
    \ind frame contents\\
    \eframe[bh]
  \end{codesnippet}
\end{bhframe}

\begin{thframe}[bhgraphic,t]
  {Some Random Title}
  {Please, adapt!}

```

```

\small
The slide has been typeset as:
\begin{codesnippet}[\textwidth]
  \bframe[th][bhgraphic=\{<load photo here>\}\}\
  \ind\{Title\}\
  \ind\{Subtitle\}\
  \ind frame contents\
  \eframe[th]
\end{codesnippet}
\end{thframe}

\section{Intermission slides}

\begin{frame}[negative]
  \sectionpage
\end{frame}

\subsection{Standard section slides}

\begin{frame}[negative]
  \subsectionpage
\end{frame}

\begin{frame}[t]
  {Basic idea}

  You can select any of the canvas templates: negative, negativefill,
  graphic, graphicfill and normal, and combine it with:
  \begin{description}
    \item[\command{sectionpage}]
    \item[\command{subsectionpage}]
  \end{description}

  Example:\[1ex]
  \begin{codesnippet}[0.8\textwidth]
    \bframe[] [negative]\
    \ind \command{sectionpage}\
    \eframe\[-\
    \bframe[] [negative]\
    \ind \command{subsectionpage}\
    \eframe
  \end{codesnippet}\[1ex]
  (this how the previous two slide were generated)
\end{frame}

\subsection{Custom intermission slides}

\begin{frame}[negative]
  \subsectionpage
\end{frame}

\begin{frame}[t]
  {Basic idea}

  If you are a fan of graphic material in slideware, you can use a
  \texttt{graphic} or \texttt{graphicfill} canvas in combination with
  small snippets you put on the slide using\[1ex]
  \quad\command{place[node options] at (x,y) \{<material>\}\}\[1ex]
  with
  \begin{itemize}
    \item  $(x,y)=(0,0)$  the bottom left of the slide and  $(1,1)$  the top
      right of the slide
    \item \texttt{node options} any options you want to hand over to the
      tikz node that is used to position the material.
  \end{itemize}
\end{frame}

```

```
\medskip
```

E.g., the next slide was created using:\\[1ex]

```
\begin{codesnippet}[0.8\textwidth]
  \bframe[] [graphic,t]\\
  \ind\command{place} at (0.5,0.5) \{\command{uantwerpenicon[scale=0.8]}\}\\
  \eframe
\end{codesnippet}
\medskip
```

You will have to run `\LaTeX{}` twice in order for the position to be correct!

```
\end{frame}
```

```
\begin{frame}[graphic,t]
  \place at (0.5,0.5) {\uantwerpenicon[scale=0.8]}
\end{frame}
```

```
\begin{frame}[t]
  {Shading photographs}
```

Often you need make a photograph a little bit more opaque in order for the (white) text to readable.

To this end you can use the following command\\[1ex]

```
\qqad\command{darken[s]{<material>}}\\[1ex]
with  $s$  a value between 0 and 1 to specify the level of darkening.
```

E.g., the next slide was created using:

```
\begin{codesnippet}[0.9\textwidth]
  \bframe[] [graphicfill=\command{darken}%
  [0.25]\command{includegraphics}%
  [scale=0.1,min width=\command{paperwidth},min height=\command{paperheight}]]%
  \{Images/uantwerpen-09.jpg\}\},t]\\
  \command{place} [anchor=north east] at (0.95,0.5) \{\
  \ind\command{uantwerpencallout}\{3\}\{2.5\}\{\
  \ind\ind\command{bfseries} You cannot be serious!\textbackslash\textbackslash[1ex]\\
  \ind\ind John McEnroe\}\\
  \}\\
  \eframe
\end{codesnippet}
\end{frame}
```

```
\begin{frame}[graphicfill={\darken[0.25]}%
  {\includegraphics[scale=0.1,min width=\paperwidth,min height=\paperheight]}%
  {Images/uantwerpen-09.jpg}}},t]
  \place [anchor=north east] at (0.95,0.5) {
    \uantwerpencallout{3}{2.5}{
      \bfseries You cannot be serious!\\[1ex]
      John McEnroe}
  }
\end{frame}
```

```
\begin{frame}[t]
  {Shading photographs locally}
```

You can also choose to shade the local backdrop of the material you put on the side. If you like the `\command{uantwerpencallout}` command of the previous slide, you can give it an optional argument to set the fill opacity of the backdrop behind the text.

E.g., the next slide was created using:

```
\begin{codesnippet}[0.9\textwidth]
  \bframe[] [graphic,t]\\
  \ind\command{place} [anchor=north west] at (0.1,0.9) \{\
  \ind\ind\command{uantwerpencallout}[fill opacity=0.5]\{4.5\}\{2.5\}\{\
```

```

\ind\ind\ind\command{bfseries} I'll be back!\textbackslash\textbackslash[1ex]\\
\ind\ind\ind Arnold Schwarzenegger\\
\\
\eframe
\end{codesnippet}
\medskip

The \command{uantwerpencallout} command has the following syntax:\\[1ex]
\quad\command{uantwerpencallout}[options]{\width\}{\height\}{\contents\}}
\medskip

Remember to run \LaTeX{} twice in order for the position of the
callout to be correct!
\end{frame}

\begin{frame}[graphic,t]
\place [anchor=north west] at (0.1,0.9) {
\uantwerpencallout[fill opacity=0.5]{4.5}{2.5}{
\bfseries I'll be back!\\[1ex]
Arnold Schwarzenegger}
}
\end{frame}

\section{Demo of some inner theme parts}

\begin{frame}[negative]
\sectionpage
\end{frame}

\begin{frame}[t]
{Headings}
{on two levels}
You can set headings on two levels, by using
\begin{itemize}
\item\command{heading}{\}
\item\command{subheading}{\}
\end{itemize}
\heading{Main subject}~\\
blabla
\subheading{Subtopic 1}~\\
blabla
\subheading{Subtopic 2}~\\
blabla
\heading{Next main subject}~\\
blabla
\end{frame}

\newcommand\listdemo[1][itemize]{
\begin{#1}
\item First level
\begin{#1}
\item Second level
\begin{#1}
\item Third level
\end{#1}
\end{#1}
\end{#1}
}

\begin{frame}[t]
{Itemize / enumerations}
{Different styles}
Usage:\\
Set them (in your preamble) using: \command{setbeamertemplate}{\itemize items\}[triangle]\\

```

The default of the uantwerpen beamer template is set to `\texttt{square}` to be similar to our logo.

`\medskip`

```
\begin{columns}
  \column[T]{0.3\textwidth}
  \alert{default}
  \setbeamertemplate{itemize items}[default]
  \listdemo
  \column[T]{0.3\textwidth}
  \alert{triangle}
  \setbeamertemplate{itemize items}[triangle]
  \listdemo
  \column[T]{0.3\textwidth}
  \alert{circle}
  \setbeamertemplate{itemize items}[circle]
  \listdemo
\end{columns}~\
\bigskip
```

```
\begin{columns}
  \column[T]{0.3\textwidth}
  \alert{ball}
  \setbeamertemplate{itemize items}[ball]
  \listdemo
  \column[T]{0.3\textwidth}
  \alert{square}
  \setbeamertemplate{itemize items}[square]
  \listdemo
  \column[T]{0.3\textwidth}
  \alert{enumeration}
  \setbeamertemplate{itemize items}[circle]
  \listdemo[enumerate]
\end{columns}
\end{frame}
```

```
\begin{frame}[t]
{Block material}
{Nothing special}
```

```
\vfill
\begin{block}{This is a block}
  Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi ac
  arcu est, vel posuere velit. In congue erat vel lorem ornare pretium.
\end{block}
\vfill
\begin{exampleblock}{This is an example block}
  Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi ac
  arcu est, vel posuere velit. In congue erat vel lorem ornare pretium.
\end{exampleblock}
\vfill
\begin{alertblock}{This is an alert block}
  Lorem ipsum dolor sit amet, consectetur adipiscing elit. Morbi ac
  arcu est, vel posuere velit. In congue erat vel lorem ornare pretium.
\end{alertblock}
\vfill
\end{frame}
\section{Advanced material}
```

```
\begin{frame}[negative]
\sectionpage
\end{frame}
```

```
\begin{frame}[t]
{Customizing the template}
```

If you want to override logos/colors to create a template for your own research group or department:  
renew the commands below. The redefinitions must be put just after the `\command{begin\{document\}}` statement.\\
The construction below allows you to put the stuff in a style file that you must load after (!) the `\command{usetheme}` command.\\[lex]

```
\begin{codesnippet}[0.95\textwidth]
  \command{AtBeginDocument\{}}\\
  \ind\command{renewcommand*}\command{logopos}\{your-pos-logo-filename-here\}}\\
  \ind\command{renewcommand*}\command{logoneg}\{your-negative-logo-filename-here\}}\\
  \ind\command{renewcommand*}\command{logomonowhite}\{your-mono-logo-filename-here\}}\\
  \ind\command{renewcommand*}\command{iconfile}\{your-icon-filename-here\}}\\
  \ind\command{colorlet}\{maincolor\}\{your-favorite-color\}}\\
  \ind\command{colorlet}\{sidecolor\}\{your-secondfavorite-color\}}\\
  \ind\command{colorlet}\{basecolor\}\{some-solid-color\}}\\
  \}
\end{codesnippet}~\\[lex]
\end{frame}
```

```
\begin{frame}
  {Some genuine advice}
  \small

  Dear user,

  Candy slides are nice for PR, but bad for conveying a message.

  Beamer is a tool to typeset technical presentations. Need more
  animation and eye candy? Use other tools. They are much easier in
  ruining your audiences' day.

  Effective slides are simple slides.\\
  Go by cognitive consonance, flirt with cognitive dissonance, but
  stay away from cognitive cacophony.
  This presentation is i.m.ho. a bad one, as it shows the
  cacophony of possibilities. But hey, you were the one asking for it.

  A lot of effort has gone into this template. I hope you like it.
  If you have good suggestions, e-mail me. If you have questions, I
  might even help you.

  Cheers!

  Walter Daems\\
  (April 2024)
\end{frame}
```

```
\end{document}
</bmrug>
```

## 9 Implementation

### 9.0.1 Main beamer theme

```
2591 <*bmr>
2592 %      Copyright 2024 by Walter Daems <walter.daems@uantwerpen.be>
2593 %
2594 %      This file may be distributed and/or modified
2595 %
2596 %      1. under the LaTeX Project Public License and/or
```

```

2597 %      2. under the GNU Public License.
2598 %
2599 %      See the file doc/licenses/LICENSE for more details.
2600
2601 \newif\if@nofonts
2602 \@nofontsfalse
2603 \DeclareOption{nofonts}{\@nofontstrue}
2604
2605 \input{uantwerpencommonoptions.clo}
2606
2607 \ProcessOptions
2608
2609 \RequirePackage{uantwerpencolorlogoscheme}
2610
2611 \AtBeginDocument{
2612   \def\appropriatelogo{\logopos}
2613   \def\appropriateslidenumber{%
2614     \usebeamercolor{pageno in head/foot}%
2615     \insertframenummer/\inserttotalframenummer}%
2616 }
2617
2618 \mode<presentation>
2619
2620 \RequirePackage{tikz}
2621 \RequirePackage{graphicx}
2622 \RequirePackage{graphbox}
2623 \RequirePackage[export]{adjustbox}
2624 \RequirePackage{environ}
2625
2626 \setbeamersize{
2627   text margin left=.8cm,
2628   text margin right=.8cm
2629 }
2630
2631 \usecolortheme{uantwerpen}
2632 \usefonttheme{uantwerpen}
2633 \useinnertheme{uantwerpen}
2634 \useoutertheme{uantwerpen}
2635
2636 \setbeamertemplate{navigation symbols}{}
2637 \setbeamertemplate{blocks}[rounded][shadow=true]
2638
2639 \mode
2640 <all>
2641 </bmr>

```

## 9.0.2 Beamer color theme

```

2642 <*bmrcolor>
2643 %      Copyright 2024 by Walter Daems <walter.daems@uantwerpen.be>
2644 %
2645 %      This file may be distributed and/or modified
2646 %
2647 %      1. under the LaTeX Project Public License and/or
2648 %      2. under the GNU Public License.
2649 %
2650 %      See the file doc/licenses/LICENSE for more details.
2651
2652 \mode<presentation>
2653
2654 \RequirePackage{uantwerpencolorlogoscheme}
2655
2656 %% define main color
2657 \setbeamercolor{palette primary}{fg=maincolor}
2658 \setbeamercolor{palette secondary}{fg=sidecolor}

```



```

2659 \setbeamercolor{palette tertiary}{fg=uauaside}
2660 \setbeamercolor{palette quaternary}{fg=uauamain}
2661
2662 \setbeamercolor{normal text}{fg=basecolor}
2663 \setbeamercolor{inverse normal text}{fg=white!95!maincolor}
2664 \setbeamercolor{alerted text}{fg=uauamain}
2665 \setbeamercolor{example text}{fg=white!95!maincolor}
2666
2667 \setbeamercolor{heading}{fg=basecolor}
2668 \setbeamercolor{subheading}{fg=basecolor}
2669 \setbeamercolor{inverse heading}{fg=white}
2670 \setbeamercolor{inverse subheading}{fg=white!75!maincolor}
2671
2672 \setbeamercolor{block body}{bg=black!4}
2673 \setbeamercolor{block title}{bg=black!8,fg=maincolor}
2674 \setbeamercolor{block body example}{bg=black!4}
2675 \setbeamercolor{block title example}{bg=black!8}
2676 \setbeamercolor{block body alerted}{bg=black!4}
2677 \setbeamercolor{block title alerted}{bg=black!8}
2678
2679 \setbeamercolor{itemize item}{parent=normal text}
2680 \setbeamercolor{enumerate item}{parent=normal text}
2681 \setbeamercolor{itemize subitem}{parent=normal text}
2682 \setbeamercolor{enumerate subitem}{parent=normal text}
2683 \setbeamercolor{itemize subsubitem}{parent=normal text}
2684 \setbeamercolor{enumerate subsubitem}{parent=normal text}
2685
2686 \setbeamercolor{frametitle}{fg=maincolor}
2687 \setbeamercolor{framesubtitle}{fg=sidecolor}
2688 \setbeamercolor{inverse frametitle}{fg=white}
2689 \setbeamercolor{inverse framesubtitle}{fg=white!80!maincolor}
2690
2691 \setbeamercolor{title in title page}{fg=maincolor}
2692 \setbeamercolor{subtitle in title page}{fg=sidecolor}
2693 \setbeamercolor{author in title page}{fg=maincolor}
2694 \setbeamercolor{date in title page}{fg=sidecolor}
2695 \setbeamercolor{inverse title in title page}{fg=white}
2696 \setbeamercolor{inverse subtitle in title page}{fg=white!75!maincolor}
2697 \setbeamercolor{inverse author in title page}{fg=white}
2698 \setbeamercolor{inverse date in title page}{fg=white!75!maincolor}
2699
2700 \setbeamercolor{pageno in head/foot}{fg=basecolor}
2701 \setbeamercolor{inverse pageno in head/foot}{fg=white}
2702
2703 \setbeamercolor{section in toc}{fg=basecolor}
2704 \setbeamercolor{subsection in toc}{fg=basecolor}
2705 \setbeamercolor{section number projected}{fg=white,bg=basecolor}
2706 \setbeamercolor{subsection number projected}{fg=white,bg=basecolor}
2707
2708 \setbeamercolor{section title}{fg=maincolor}
2709 \setbeamercolor{section name}{fg=maincolor}
2710 \setbeamercolor{inverse section title}{fg=white}
2711 \setbeamercolor{inverse section name}{fg=white}
2712
2713 \setbeamercolor{subsection title}{fg=sidecolor}
2714 \setbeamercolor{subsection name}{fg=sidecolor}
2715 \setbeamercolor{inverse subsection title}{fg=white!75!maincolor}
2716 \setbeamercolor{inverse subsection name}{fg=white!75!maincolor}
2717 \mode
2718 <all>
2719 </bmrcolor>

```

### 9.0.3 Beamer font theme

```

2720 <*bmrfont>

```

```

2721 %      Copyright 2024 by Walter Daems
2722 %
2723 %      This file may be distributed and/or modified
2724 %
2725 %      1. under the LaTeX Project Public License and/or
2726 %      2. under the GNU Public License.
2727 %
2728 %      See the file doc/licenses/LICENSE for more details.
2729 \usetikzlibrary{calc}
2730 \if@nofonts
2731 \else
2732 \RequirePackage{iftex}
2733 % Uncomment the following line if in MiKTeX you get the error
2734 % message that \ifluatex is already defined.
2735 % You first option is to update all your packages both in user as in
2736 % admin mode to fix your setup.
2737 % Your second option is to avoid the warning uncommenting the
2738 % following line:
2739 % \let\ifluatex\relax
2740 \iftutex
2741   \usepackage{cmbright}
2742   \usefonttheme{serif}
2743   \usepackage{fontspec}
2744   \setmainfont
2745   [UprightFont = *,
2746    BoldFont = *b,
2747    ItalicFont = *i,
2748    BoldItalicFont = *z,
2749   ]
2750   {calibri}
2751   \usepackage{sansmathaccent}
2752 \fi
2753 \fi
2754 \usepackage{bm}
2755
2756 \mode<presentation>
2757
2758 \setbeamerfont{normal text}{} % ignored currently
2759 \setbeamerfont{alerted text}{}
2760 \setbeamerfont{example text}{}
2761
2762 \setbeamerfont{structure}{}
2763 \setbeamerfont{tiny structure}{size=\tiny}
2764
2765 \setbeamerfont{title}{size=\large,parent=structure}
2766 \setbeamerfont{title in head/foot}{}
2767 \setbeamerfont{title in sidebar}{size=\tiny}
2768
2769 \setbeamerfont{pageno in head/foot}{size=\tiny}
2770
2771 \setbeamerfont{subtitle}{size=\small,parent=title}
2772
2773 \setbeamerfont{author}{}
2774 \setbeamerfont{author in head/foot}{}
2775 \setbeamerfont{author in sidebar}{size=\tiny}
2776
2777 \setbeamerfont{date}{}
2778 \setbeamerfont{date in head/foot}{}
2779 \setbeamerfont{date in sidebar}{}
2780
2781 \setbeamerfont{part name}{size=\LARGE}
2782 \setbeamerfont{part title}{size=\LARGE,parent=title}
2783
2784 \setbeamerfont{section name}{size=\Large}
2785 \setbeamerfont{section title}{size=\Large,parent=title}

```

```

2786
2787 \setbeamerfont{section in toc}{parent=structure}
2788 \setbeamerfont{section in toc shaded}{parent=section in toc}
2789 \setbeamerfont{section in head/foot}{}
2790 \setbeamerfont{section in sidebar}{size=\tiny}
2791 \setbeamerfont{section number projected}
2792   {size=\small,parent={section in toc,projected text}}
2793
2794 \setbeamerfont{subsection name}{size=\large}
2795 \setbeamerfont{subsection title}{size=\large,parent=title}
2796
2797 \setbeamerfont{subsection in toc}{}
2798 \setbeamerfont{subsection in toc shaded}{parent=subsection in toc}
2799 \setbeamerfont{subsection in head/foot}{}
2800 \setbeamerfont{subsection in sidebar}{}
2801
2802 \setbeamerfont{subsubsection in toc}{size=\footnotesize}
2803 \setbeamerfont{subsubsection in toc shaded}{parent=subsubsection in toc}
2804 \setbeamerfont{subsubsection in head/foot}{}
2805 \setbeamerfont{subsubsection in sidebar}{}
2806
2807 \setbeamerfont{headline}{parent={tiny structure}}
2808 \setbeamerfont{footline}{parent={tiny structure}}
2809
2810 \setbeamerfont{frametitle}
2811   {parent=structure,size=\renewcommand*{\baselinestretch}{0.85}\LARGE\bfseries}
2812 \setbeamerfont{framesubtitle}{parent=frametitle,size=\normalsize\bfseries}
2813
2814 \setbeamerfont{caption}{size=\small}
2815 \setbeamerfont{caption name}{parent={structure,caption}}
2816
2817 \setbeamerfont{button}{size=\tiny}
2818
2819 \setbeamerfont{block body}{size=\scriptsize}
2820 \setbeamerfont{block body alerted}{parent={block body}}
2821 \setbeamerfont{block body example}{parent={block body}}
2822 \setbeamerfont{block title}{size=\small,series=\bfseries,parent={structure,block body}}
2823 \setbeamerfont{block title alerted}{parent={block title,alerted text}}
2824 \setbeamerfont{block title example}{parent={block title,example text}}
2825
2826 \setbeamerfont{item}{parent=structure}
2827 \setbeamerfont{subitem}{parent=item}
2828 \setbeamerfont{subsubitem}{parent=subitem}
2829
2830 \setbeamerfont{item projected}{size=\tiny,parent={item,projected text}}
2831 \setbeamerfont{subitem projected}{parent=item projected}
2832 \setbeamerfont{subsubitem projected}{parent=subitem projected}
2833
2834 \setbeamerfont{itemize item}{parent=item}
2835 \setbeamerfont{itemize subitem}{parent=subitem}
2836 \setbeamerfont{itemize subsubitem}{parent=subsubitem}
2837
2838 \setbeamerfont{enumerate item}{parent=item}
2839 \setbeamerfont{enumerate subitem}{parent=subitem}
2840 \setbeamerfont{enumerate subsubitem}{parent=subsubitem}
2841
2842 \setbeamerfont{itemize/enumerate body}{}
2843 \setbeamerfont{itemize/enumerate subbody}{size=\small}
2844 \setbeamerfont{itemize/enumerate subsubbody}{size=\footnotesize}
2845
2846 \setbeamerfont{description item}{parent=item}
2847
2848 \setbeamerfont{projected text}{parent={tiny structure}}
2849
2850 \setbeamerfont{abstract}{size=\small}

```

```

2851 \setbeamerfont{abstract title}{parent={abstract,structure},size=\normalsize}
2852
2853 \setbeamerfont{verse}{family=\rmfamily,shape=\itshape}
2854
2855 \setbeamerfont{quotation}{shape=\itshape}
2856 \setbeamerfont{quote}{parent=quotation}
2857
2858 \setbeamerfont{note page}{size=\small}
2859
2860 \mode
2861 <all>
2862 \bmrfont

```

#### 9.0.4 Beamer inner theme

```

2863 \bmrinner
2864 % Copyright 2024 by Walter Daems <walter.daems@uantwerpen.be>
2865 %
2866 % This file may be distributed and/or modified
2867 %
2868 % 1. under the LaTeX Project Public License and/or
2869 % 2. under the GNU Public License.
2870 %
2871 % See the file doc/licenses/LICENSE for more details.
2872
2873 \mode<presentation>
2874
2875 \setlength\parskip{0.5\baselineskip}
2876 \setlength\parindent{0em}
2877
2878 % use square (can also be circle or ball
2879 \setbeamertemplate{sections/subsections in toc}[square]
2880 \setbeamertemplate{itemize items}[square]
2881
2882 %\setbeamertemplate{description item}[align left]
2883
2884 \newif\if@noround
2885 \@noroundfalse
2886
2887 \newcommand*\uantwerpenleftshape[3][ ]{
2888   \newcommand\mycradius{0.05*(\getlength{\paperheight}-1.6)}%
2889   \coordinate (bl) at #2;
2890   \coordinate (tr) at #3;
2891   \if@noround
2892     \path[#1] (bl) rectangle (tr);
2893   \else
2894     \path[#1] (bl|-tr) -- (tr) -- (bl|tr) -- ($ (bl)+(\mycradius,0)$)
2895     arc(-90:-180:\mycradius) -- cycle;
2896   \fi
2897 }
2898 \newcommand*\uantwerpenrightshape[3][ ]{
2899   \newcommand\mycradius{0.05*(\getlength{\paperheight}-1.6)}%
2900   \coordinate (bl) at #2;
2901   \coordinate (tr) at #3;
2902   \if@noround
2903     \path[#1] (bl) rectangle (tr);
2904   \else
2905     \path[#1] (bl|-tr) -- (tr) -- ($ (bl|tr)+(0,\mycradius)$)
2906     arc(0:-90:\mycradius) -- (bl) -- cycle;
2907   \fi
2908 }
2909
2910 \newcommand*\darken[2][0.5]{%
2911   \begin{tikzpicture}[inner sep=0pt,outer sep=0pt]
2912     \node (a) {#2};

```

```

2913 \fill[fill=black,opacity=#1] (a.south west) rectangle (a.north east);
2914 \end{tikzpicture}
2915 }
2916
2917 \newcommand\uantwerpencallout[4][\]{
2918 \begin{tikzpicture}
2919 \uantwerpenleftshape[fill=black,fill opacity=0.0,text opacity=1,text=white,#1]
2920 {{(-#2/2},{-#3/2})}{{(#2/2},{#3/2})}
2921 \node[align=left,anchor=center] at (0,0) { \callout\ #4 };
2922 \end{tikzpicture}
2923 }
2924
2925 \newcommand\callout[1][scale=0.70711]{
2926 \begin{tikzpicture}[#1]
2927 \fill[maincolor] (0.4,0) -- (0.5,0) -- (0.75,-0.15) -- (0.75,0) --
2928 (0.9,0) arc(-90:0:0.1) -- (1,0.65) arc(0:90:0.1) -- (0.1,0.75) arc
2929 (90:180:0.1) -- (0,0.1) arc(-180:-90:0.1) -- cycle;
2930 \foreach \x in {0.35,0.7} {
2931 \begin{scope}[shift={(\x,0.425)},scale=0.25]
2932 \fill[white] (0,0) circle[radius=0.5];
2933 \fill[white] (0.5,0) arc(0:-90:1) --
2934 (-0.5,-0.725) arc(-90:0:0.725) -- cycle;
2935 \end{scope}
2936 }
2937 \end{tikzpicture}
2938 }
2939
2940 \newcommand*\uantwerpenicon[1][scale=1]{
2941 \includegraphics[#1]{\iconfile}
2942 }
2943
2944 \newcommand\heading[1]{\par{\usebeamercolor{\maybeinverse heading}\color{fg}{\small\bfseries #1~}}}
2945 \newcommand\subheading[1]{\par{
2946 \usebeamercolor{\maybeinverse
2947 subheading}\color{fg}{\footnotesize\it\bfseries #1~}}}
2948
2949 \mode
2950 <all>
2951 \bmrinner

```

## 9.0.5 Beamer outer theme

```

2952 (*bmrouter)
2953 % Copyright 2024 by Walter Daems <walter.daems@uantwerpen.be>
2954 %
2955 % This file may be distributed and/or modified
2956 %
2957 % 1. under the LaTeX Project Public License and/or
2958 % 2. under the GNU Public License.
2959 %
2960 % See the file doc/licenses/LICENSE for more details.
2961
2962 \mode<presentation>
2963
2964 \newcommand*\getlength[1]{\strip@pt#1/28.45274}
2965 \newcommand*\pw{\getlength{\paperwidth}}%
2966 \newcommand*\ph{\getlength{\paperheight}}%
2967
2968 \newif\if@rhtext
2969 \@rhtextfalse
2970 \newif\if@lhtext
2971 \@lhtextfalse
2972 \newif\if@rqtext
2973 \@rqtextfalse
2974 \newif\if@lqtext

```

```

2975 \@lqtextfalse
2976 \newif\if@bhtext
2977 \@bhtextfalse
2978 \gdef\maybeinverse{}
2979
2980 \define@key{beamerframe}{noround}[true]{
2981   \expandafter\csname @noround#1\endcsname
2982 }
2983
2984 \define@key{beamerframe}{normal}[true]{
2985   \setbeamertemplate{title page}[main]
2986   \setbeamertemplate{section page}[main]%
2987   \setbeamertemplate{subsection page}[main]%
2988   \setbeamertemplate{background canvas}[normal]
2989   \gdef\maybeinverse{}
2990 }
2991
2992 \mode<handout|trans>
2993
2994 \define@key{beamerframe}{negativefill}[true]{
2995 }
2996
2997 \define@key{beamerframe}{negative}[true]{
2998 }
2999
3000 \mode
3001 <all>
3002
3003 \mode<beamer|second>
3004
3005 \define@key{beamerframe}{negativefill}[true]{
3006   \gdef\maybeinverse{inverse }%
3007   \usebeamercolor[fg]{\maybeinverse normal text}%
3008   \setbeamertemplate{title page}[negativefill]
3009   \setbeamertemplate{section page}[negative]%
3010   \setbeamertemplate{subsection page}[negative]%
3011   \setbeamertemplate{background canvas}[negativefill]%
3012 }
3013
3014 \define@key{beamerframe}{negative}[true]{
3015   \gdef\maybeinverse{inverse }%
3016   \usebeamercolor[fg]{\maybeinverse normal text}%
3017   \setbeamertemplate{title page}[negative]
3018   \setbeamertemplate{section page}[negative]%
3019   \setbeamertemplate{subsection page}[negative]%
3020   \setbeamertemplate{background canvas}[negative]%
3021 }
3022
3023 \mode
3024 <all>
3025
3026 \define@key{beamerframe}{graphicfill}[{\includegraphics[scale=0.1,min
3027   width=\paperwidth,min height=\paperheight]{Images/uantwerpen-01.jpg}}]{
3028   \gdef\maybeinverse{inverse }%
3029   \usebeamercolor[fg]{\maybeinverse normal text}%
3030   \setbeamertemplate{background canvas}[graphicfill]{#1}
3031 }
3032
3033 \define@key{beamerframe}{graphic}[{\includegraphics[scale=0.1,min
3034   width=\textwidth,min height=\textheight]{Images/uantwerpen-02.jpg}}]{
3035   \gdef\maybeinverse{inverse }%
3036   \usebeamercolor[fg]{\maybeinverse normal text}%
3037   \setbeamertemplate{background canvas}[graphic]{#1}
3038 }
3039

```

```

3040 \define@key{beamerframe}{lhgraphic}
3041 [{\includegraphics[scale=0.1,min width=0.5\paperwidth,min
3042   height=\textheight]{Images/uantwerpen-03.jpg}}]{
3043   \gdef\maybeinverse{}%
3044   \setbeamertemplate{background canvas}[lhgraphic]{#1}
3045   \@rhttexttrue
3046 }
3047
3048 \define@key{beamerframe}{lqgraphic}
3049 [{\includegraphics[scale=0.1,min width=0.5\paperwidth,min
3050   height=\textheight]{Images/uantwerpen-04.jpg}}]{
3051   \gdef\maybeinverse{}%
3052   \setbeamertemplate{background canvas}[lqgraphic]{#1}
3053   \@rqttexttrue
3054 }
3055
3056 \define@key{beamerframe}{rhgraphic}
3057 [{\includegraphics[scale=0.1,min width=0.5\paperwidth,min
3058   height=\textheight]{Images/uantwerpen-05.jpg}}]{
3059   \gdef\maybeinverse{}%
3060   \setbeamertemplate{background canvas}[rhgraphic]{#1}
3061   \@lhttexttrue
3062 }
3063
3064 \define@key{beamerframe}{rqgraphic}
3065 [{\includegraphics[scale=0.5,min width=0.5\paperwidth,min
3066   height=\textheight]{Images/uantwerpen-05.jpg}}]{
3067   \gdef\maybeinverse{}%
3068   \setbeamertemplate{background canvas}[rqgraphic]{#1}
3069   \@lqttexttrue
3070 }
3071
3072 \define@key{beamerframe}{thgraphic}
3073 [{\includegraphics[scale=0.5,min width=\paperwidth,min
3074   height=0.5\textheight]{Images/uantwerpen-06.jpg}}]{
3075   \gdef\maybeinverse{}%
3076   \setbeamertemplate{background canvas}[thgraphic]{#1}
3077   \@bhttexttrue
3078 }
3079
3080 \define@key{beamerframe}{bhgraphic}
3081 [{\includegraphics[scale=0.5,min width=\paperwidth,min
3082   height=0.5\textheight]{Images/uantwerpen-07.jpg}}]{
3083   \gdef\maybeinverse{}%
3084   \setbeamertemplate{background canvas}[bhgraphic]{#1}
3085 }
3086
3087 \BeforeBeginEnvironment{frame}{%
3088   \gdef\maybeinverse{}%
3089   \setbeamertemplate{title page}[main]%
3090   \setbeamertemplate{section page}[main]%
3091   \setbeamertemplate{subsection page}[main]%
3092   \setbeamertemplate{background canvas}[normal]%
3093   \usebeamercolor{fg}{normal text}%
3094 }
3095
3096 % The following does not work as \end{frame} is never executed by
3097 % beamer!
3098 % \AtEndEnvironment{frame}{\gdef\maybeinverse{}}
3099
3100 \NewEnviron{rhframe}[3][[]]{%
3101   \begin{frame}[#1]{#2}{#3}
3102     \begin{minipage}[t]{0.525\textwidth}
3103       ~
3104     \end{minipage}

```

```

3105 \begin{minipage}[t]{0.465\textwidth}
3106 \BODY
3107 \end{minipage}
3108 \end{frame}
3109 }
3110
3111 \NewEnviron{r3qframe}[3][]{%
3112 \begin{frame}[#1]{#2}{#3}
3113 \begin{minipage}[t]{0.23\textwidth}
3114 ~
3115 \end{minipage}
3116 \begin{minipage}[t]{0.76\textwidth}
3117 \BODY
3118 \end{minipage}
3119 \end{frame}
3120 }
3121
3122 \NewEnviron{lhframe}[3][]{%
3123 \begin{frame}[#1]{#2}{#3}
3124 \begin{minipage}[t]{0.465\textwidth}
3125 \BODY
3126 \end{minipage}
3127 \begin{minipage}[t]{0.525\textwidth}
3128 ~
3129 \end{minipage}
3130 \end{frame}
3131 }
3132
3133 \NewEnviron{l3qframe}[3][]{%
3134 \begin{frame}[#1]{#2}{#3}
3135 \begin{minipage}[t]{0.77\textwidth}
3136 \BODY
3137 \end{minipage}
3138 \begin{minipage}[t]{0.22\textwidth}
3139 ~
3140 \end{minipage}
3141 \end{frame}
3142 }
3143
3144 \NewEnviron{bhframe}[3][]{%
3145 \begin{frame}[#1]{#2}{#3}
3146 \BODY
3147 \end{frame}
3148 }
3149
3150 \NewEnviron{thframe}[3][]{%
3151 \begin{frame}[#1]{#2}{#3}
3152 \BODY
3153 \end{frame}
3154 }
3155
3156 %%%%%%%%%%%
3157 % Order:
3158 % 1. option is executed
3159 % 2. frametitle is typeset
3160 % 3. canvas is typeset
3161 % 4. frame is typeset
3162 %%%%%%%%%%%
3163
3164 \def\ps@uantwerpen@titlepage{%
3165 \setbeamercolor{title in title page}{parent=palette primary}
3166 \setbeamertemplate{footline}[empty]
3167 \@nameuse{ps@uantwerpen}
3168 }
3169

```



```

3170 \defbeamertemplate*{background canvas}{negativefill}[1]
3171 {%
3172   \gdef\appropriatelogo{\logomonowhite}%
3173   \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}}%
3174   \insertframenumbers/\inserttotalframenumbers}%
3175   \color{maincolor}\vrule width\paperwidth height\paperheight
3176 }
3177
3178 \defbeamertemplate*{background canvas}{negative}[1]
3179 {%
3180   \gdef\appropriatelogo{\logopos}%
3181   \gdef\appropriateslidenumber{}%
3182   \begin{tikzpicture}
3183     \clip (0,0) rectangle (\pw,\ph);
3184     \untwerpenleftshape[fill=maincolor]{(0.8,0.8)}{(\pw-0.8,\ph-0.8)}
3185   \end{tikzpicture}
3186 }
3187
3188 \defbeamertemplate*{background canvas}{graphicfill}[1]
3189 {%
3190   \gdef\appropriatelogo{\logoneg}%
3191   \gdef\appropriateslidenumber{}%
3192   \begin{tikzpicture}
3193     \clip (0,0) rectangle (\pw,\ph);
3194     \node[align=center] at (0.5*\pw,0.5*\ph) {#1};
3195   \end{tikzpicture}%
3196 }
3197
3198 \defbeamertemplate*{background canvas}{graphic}[1]
3199 {%
3200   \gdef\appropriatelogo{\logopos}%
3201   \gdef\appropriateslidenumber{}%
3202   \begin{tikzpicture}
3203     \clip (0,0) rectangle (\pw,\ph);
3204     \begin{scope}
3205       \untwerpenleftshape[clip]{(0.8,0.8)}{(\pw-0.8,\ph-0.8)}
3206       \node[align=center] at (0.5*\pw,0.5*\ph) {#1};
3207     \end{scope}
3208   \end{tikzpicture}%
3209 }
3210
3211 \defbeamertemplate*{background canvas}{lhgraphic}[1]
3212 {%
3213   \gdef\maybeinverse{}%
3214   \gdef\appropriatelogo{\logopos}%
3215   \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}}%
3216   \insertframenumbers/\inserttotalframenumbers}%
3217   \pgfmathsetmacro\dx{0.5*\pw-1.2}%
3218   \pgfmathsetmacro\dy{\ph-1.6}%
3219   \begin{tikzpicture}
3220     \clip (0,0) rectangle (\pw,\ph);
3221     \begin{scope}
3222       \untwerpenleftshape[clip]{(0.8,0.8)}{(0.8+\dx,0.8+\dy)}
3223       \node[align=center] at (0.8+0.5*\dx,0.8+0.5*\dy) {#1};
3224     \end{scope}
3225   \end{tikzpicture}
3226   \@tempwatrue
3227 }
3228
3229 \defbeamertemplate*{background canvas}{lqgraphic}[1]
3230 {%
3231   \gdef\maybeinverse{}%
3232   \gdef\appropriatelogo{\logopos}%
3233   \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}}%
3234   \insertframenumbers/\inserttotalframenumbers}%

```

```

3235 \pgfmathsetmacro\dx{0.25*\pw-1.2}%
3236 \pgfmathsetmacro\dy{\ph-1.6}%
3237 \begin{tikzpicture}
3238   \clip (0,0) rectangle (\pw,\ph);
3239   \begin{scope}
3240     \uantwerpenleftshape[clip]{(0.8,0.8)}{(0.8+\dx,0.8+\dy)}
3241     \node[align=center] at (0.8+0.5*\dx,0.8+0.5*\dy)
3242       {#1};
3243   \end{scope}
3244 \end{tikzpicture}
3245 \@tempswatrue
3246 }
3247
3248 \defbeamertemplate*{background canvas}{rhgraphic}[1]
3249 {%
3250   \gdef\maybeinverse{}%
3251   \gdef\appropriatelogo{\logopos}%
3252   \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}}%
3253   \insertframenummer/\inserttotalframenummer}%
3254 \pgfmathsetmacro\dx{0.5*\pw-1.2}%
3255 \pgfmathsetmacro\dy{\ph-1.6}%
3256 \begin{tikzpicture}
3257   \clip (0,0) rectangle (\pw,\ph);
3258   \begin{scope}[shift={(0.5*\pw,0)}]
3259     \uantwerpenrightshape[clip]{(0.4,0.8)}{(0.4+\dx,0.8+\dy)}
3260     \node[align=center] at (0.8+0.5*\dx,0.8+0.5*\dy) {#1};
3261   \end{scope}
3262 \end{tikzpicture}
3263 \@tempswatrue
3264 }
3265
3266 \defbeamertemplate*{background canvas}{rqgraphic}[1]
3267 {%
3268   \gdef\maybeinverse{}%
3269   \gdef\appropriatelogo{\logopos}%
3270   \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}}%
3271   \insertframenummer/\inserttotalframenummer}%
3272 \pgfmathsetmacro\dx{0.25*\pw-1.2}%
3273 \pgfmathsetmacro\dy{\ph-1.6}%
3274 \begin{tikzpicture}
3275   \clip (0,0) rectangle (\pw,\ph);
3276   \begin{scope}[shift={(0.75*\pw,0)}]
3277     \uantwerpenrightshape[clip]{(0.4,0.8)}{(0.4+\dx,0.8+\dy)}
3278     \node[align=center] at (0.8+0.5*\dx,0.8+0.5*\dy) {#1};
3279   \end{scope}
3280 \end{tikzpicture}
3281 \@tempswatrue
3282 }
3283
3284 \defbeamertemplate*{background canvas}{thgraphic}[1]
3285 {%
3286   \gdef\maybeinverse{}%
3287   \gdef\appropriatelogo{\logopos}%
3288   \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}}%
3289   \insertframenummer/\inserttotalframenummer}%
3290 \pgfmathsetmacro\dx{\pw-1.6}%
3291 \pgfmathsetmacro\dy{0.5*\ph-0.8}%
3292 \begin{tikzpicture}
3293   \clip (0,0) rectangle (\pw,\ph);
3294   \begin{scope}[shift={(0,0.5*\ph)}]
3295     \uantwerpenleftshape[clip]{(0.8,0)}{(0.8+\dx,\dy)}
3296     \node[align=center] at (0.8+0.5*\dx,0.5*\dy) {#1};
3297   \end{scope}
3298 \end{tikzpicture}
3299 \@tempswatrue

```

```

3300 }
3301
3302 \defbeamertemplate*{background canvas}{bhgraphic}[1]
3303 {%
3304   \gdef\maybeinverse{}%
3305   \gdef\appropriatelogo{\logopos}%
3306   \gdef\appropriateslidenumber{\usebeamercolor{pageno in head/foot}}%
3307   \insertframenumber/\inserttotalframenumber}%
3308   \pgfmathsetmacro\dx{\pw-1.6}%
3309   \pgfmathsetmacro\dy{0.5*\ph-0.8}%
3310   \begin{tikzpicture}
3311     \clip (0,0) rectangle (\pw,\ph);
3312     \begin{scope}[shift={(0,0.8)}]
3313       \untwerpenleftshape[clip] {(0.8,0)}{(0.8+\dx,\dy)}
3314       \node[align=center] at (0.8+0.5*\dx,0.5*\dy) {#1};
3315     \end{scope}
3316   \end{tikzpicture}
3317   \@tempwatrue
3318 }
3319
3320
3321 \defbeamertemplate*{background canvas}{normal}
3322 {%
3323   \gdef\maybeinverse{}%
3324   \gdef\appropriatelogo{\logopos}%
3325   \gdef\appropriateslidenumber{\usebeamercolor{pageno in
3326     head/foot}}\insertframenumber/\inserttotalframenumber}%
3327 }
3328
3329
3330 \defbeamertemplate*{title page}{main}[1] []
3331 {%
3332   \thispagestyle{untwerpen@titlepage}%
3333   \begin{tikzpicture}
3334     \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
3335     \node[anchor=center] at (0.5*\textwidth,0.75*\ph)
3336     {\includegraphics[height=.9\logounitheight]{\logopos}};
3337     \node[
3338       text width=0.98\textwidth,
3339       text=basecolor,
3340       align=center] at (0.5*\textwidth,0.5*\ph) {
3341       \begin{beamercolorbox}[wd=\textwidth,center]{title in title page}
3342         \LARGE\bfseries\inserttitle\\[1ex]
3343         \usebeamercolor[fg]{subtitle in title page}
3344         \color{fg}\large\bfseries\insertsubtitle
3345       \end{beamercolorbox}
3346     };
3347     \node[
3348       text width=0.98\textwidth,
3349       color=basecolor,
3350       align=center] at (0.5*\textwidth,0.25*\ph) {
3351       \begin{beamercolorbox}[wd=\textwidth,center]{author in title page}
3352         \large\bfseries\insertauthor
3353       \end{beamercolorbox}
3354     };
3355     \node[
3356       text width=0.98\textwidth,
3357       color=basecolor,
3358       align=center] at (0.5*\textwidth,0.15*\ph) {
3359       \begin{beamercolorbox}[wd=\textwidth,center]{date in title page}
3360         \normalsize\bfseries\insertdate
3361       \end{beamercolorbox}
3362     };
3363   \end{tikzpicture}
3364 }

```

```

3365
3366 \defbeamertemplate*{title page}{negative}[1] []
3367 {
3368   \begin{tikzpicture}
3369     \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
3370     \node[
3371       text width=0.98\textwidth,
3372       align=center] at (0.5*\textwidth,0.5*\ph) {
3373       \begin{beamercolorbox}[wd=\textwidth,center]{inverse title in title page}
3374         \LARGE\bfseries\inserttitle\\[1ex]
3375         \usebeamercolor[fg]{\maybeinverse subtitle in title page}
3376         \color{fg}\large\bfseries\insertsubtitle
3377       \end{beamercolorbox}
3378     };
3379     \node[
3380       text width=0.98\textwidth,
3381       align=center,] at (0.5*\textwidth,0.25*\ph) {
3382       \begin{beamercolorbox}[wd=\textwidth,center]{inverse author in title page}
3383         \large\bfseries\insertauthor
3384       \end{beamercolorbox}
3385     };
3386     \node[
3387       text width=0.98\textwidth,
3388       color=basecolor,
3389       align=center] at (0.5*\textwidth,0.15*\ph) {
3390       \begin{beamercolorbox}[wd=\textwidth,center]{inverse date in title page}
3391         \normalsize\bfseries\insertdate
3392       \end{beamercolorbox}
3393     };
3394   \end{tikzpicture}
3395 }
3396
3397 \defbeamertemplate*{title page}{negativefill}[1] []
3398 {
3399   \thispagestyle{uantwerpen@titlepage}
3400   \begin{tikzpicture}
3401     \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
3402     \node[anchor=center] at (0.5*\textwidth,0.75*\ph)
3403     {\includegraphics[height=.9\logounitheight]{\logomonowhite}};
3404     \node[
3405       draw,rectangle,
3406       text width=0.98\textwidth,
3407       color=maincolor,
3408       align=center] at (0.5*\textwidth,0.5*\ph) {
3409       \begin{beamercolorbox}[wd=\textwidth,center]{inverse title in title page}
3410         \LARGE\bfseries\inserttitle\\[1ex]
3411         \usebeamercolor[fg]{inverse subtitle in title page}
3412         \color{fg}\large\bfseries\insertsubtitle
3413       \end{beamercolorbox}
3414     };
3415     \node[
3416       text width=0.98\textwidth,
3417       color=maincolor,
3418       align=center] at (0.5*\textwidth,0.25*\ph) {
3419       \begin{beamercolorbox}[wd=\textwidth,center]{inverse author in title page}
3420         \large\bfseries\insertauthor
3421       \end{beamercolorbox}
3422     };
3423     \node[
3424       text width=0.98\textwidth,
3425       color=basecolor,
3426       align=center] at (0.5*\textwidth,0.15*\ph) {
3427       \begin{beamercolorbox}[wd=\textwidth,center]{inverse date in title page}
3428         \normalsize\bfseries\insertdate
3429       \end{beamercolorbox}

```

```

3430     };
3431 \end{tikzpicture}
3432 }
3433
3434 \defbeamertemplate*{section page}{main}[1] []
3435 {%
3436 \begin{tikzpicture}
3437 \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
3438 \node[
3439 text width=0.98\textwidth,
3440 text=basecolor,
3441 align=center] at (0.5*\textwidth,0.55*\ph) {
3442 \begin{beamercolorbox}[wd=\textwidth,center]{section title}
3443 \Large\bfseries\insertsectionnumber.\~\insertsection
3444 \end{beamercolorbox}
3445 };
3446 \end{tikzpicture}
3447 }
3448
3449 \defbeamertemplate*{subsection page}{main}[1] []
3450 {%
3451 \begin{tikzpicture}
3452 \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
3453 \node[
3454 text width=0.98\textwidth,
3455 text=basecolor,
3456 align=center] at (0.5*\textwidth,0.55*\ph) {
3457 \begin{beamercolorbox}[wd=\textwidth,center]{section title}
3458 \Large\bfseries\insertsectionnumber.\~\insertsection
3459 \end{beamercolorbox}
3460 };
3461 \node[
3462 text width=0.98\textwidth,
3463 text=basecolor,
3464 align=center] at (0.5*\textwidth,0.45*\ph) {
3465 \begin{beamercolorbox}[wd=\textwidth,center]{subsection title}
3466 \large\bfseries\insertsubsection
3467 \end{beamercolorbox}
3468 };
3469 \end{tikzpicture}
3470 }
3471
3472 \defbeamertemplate*{section page}{negative}[1] []
3473 {
3474 \begin{tikzpicture}
3475 \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
3476 \node[
3477 text width=0.98\textwidth,
3478 text=basecolor,
3479 align=center] at (0.5*\textwidth,0.55*\ph) {
3480 \begin{beamercolorbox}[wd=\textwidth,center]{inverse section title}
3481 \Large\bfseries\insertsectionnumber.\~\insertsection
3482 \end{beamercolorbox}
3483 };
3484 \end{tikzpicture}
3485 }
3486
3487 \defbeamertemplate*{subsection page}{negative}[1] []
3488 {
3489 \begin{tikzpicture}
3490 \clip (0,0) rectangle (\textwidth,\paperheight-0.075cm);
3491 \node[
3492 text width=0.98\textwidth,
3493 text=basecolor,
3494 align=center] at (0.5*\textwidth,0.55*\ph) {

```

```

3495     \begin{beamercolorbox}[wd=\textwidth,center]{inverse section title}
3496     \Large\bfseries\insertsectionnumber.\~\insertsection
3497     \end{beamercolorbox}
3498 };
3499 \node[
3500     text width=0.98\textwidth,
3501     text=basecolor,
3502     align=center] at (0.5*\textwidth,0.45*\ph) {
3503     \begin{beamercolorbox}[wd=\textwidth,center]{inverse subsection title}
3504     \large\bfseries\insertsubsection
3505     \end{beamercolorbox}
3506 };
3507 \end{tikzpicture}
3508 }
3509
3510 \defbeamertemplate*{footline}{empty}
3511 {
3512 }
3513
3514 \defbeamertemplate*{footline}{normal}
3515 {%
3516     \leavevmode%
3517     \hbox{\begin{beamercolorbox}
3518         [wd=.5\paperwidth,ht=0.55cm,dp=0.25cm,left,leftskip=.8cm
3519         plus1fill]{author in head/foot}%
3520         \includegraphics[height=0.35\logounitheight]{\appropriatelogo}
3521         \hskip0pt plus 1fill ~
3522     \end{beamercolorbox}}%
3523     \begin{beamercolorbox}[wd=.5\paperwidth,ht=0.55cm,dp=0.25cm,
3524         right,rightskip=.8cm plus1fill]{\maybeinverse pageno in head/foot}%
3525         \usebeamerfont{pageno in head/foot}~\hskip0pt plus 1fill
3526         \appropriateslidenumber
3527     \end{beamercolorbox}}%
3528     \vskip0pt%
3529 }
3530
3531 \defbeamertemplate*{frametitle}{empty}
3532 {
3533 }
3534
3535 \defbeamertemplate*{frametitle}{normal}
3536 {%
3537     \vskip0.75cm%
3538     \if@rhtext%
3539         \@tempdima=0.5\textwidth%
3540         \@tempdimb=0.5\textwidth%
3541         \advance\@tempdima by0.5\beamer@leftmargin%
3542         \advance\@tempdimb by-0.5\beamer@leftmargin%
3543     \else%
3544         \if@rqttext%
3545             \@tempdima=0.23\textwidth%
3546             \@tempdimb=0.77\textwidth%
3547         \else%
3548             \if@lhtext%
3549                 \@tempdima=0em%
3550                 \@tempdimb=0.5\textwidth%
3551                 \advance\@tempdimb by-0.5\beamer@leftmargin%
3552             \else%
3553                 \if@lqttext%
3554                     \@tempdima=0em%
3555                     \@tempdimb=0.77\textwidth%
3556                 \else%
3557                     \if@bhtext%
3558                         \@tempdima=0em%
3559                         \@tempdimb=\textwidth%

```

```

3560 \vskip0.5\textheight%
3561 \else%
3562 \@tempdima=0em%
3563 \@tempdimb=\textwidth%
3564 \fi%
3565 \fi%
3566 \fi%
3567 \fi%
3568 \fi%
3569 \hskip\@tempdima%
3570 \begin{beamercolorbox}[wd=\@tempdimb]{\maybeinverse frametitle}%
3571 \usebeamerfont{frametitle}\insertframetitle\[\[0.5ex]%
3572 \ifx\insertframesubtitle\@empty%
3573 {\usebeamerfont{framesubtitle}%
3574 \usebeamercolor[fg]{\maybeinverse framesubtitle}~\strut\par}%
3575 \vskip-1ex%
3576 \else%
3577 {\usebeamerfont{framesubtitle}%
3578 \usebeamercolor[fg]{\maybeinverse framesubtitle}%
3579 \insertframesubtitle\strut\par}%
3580 \fi%
3581 \if@tempswa\else\vskip-.3cm\fi% set inside beamercolorbox... evil here...
3582 \end{beamercolorbox}%
3583 }
3584
3585 \newdimen\xlleft
3586 \newdimen\ylleft
3587 \newdimen\xupright
3588 \newdimen\yupright
3589 \newdimen\xcurrent
3590 \newdimen\ycurrent
3591 \newcommand*\extractlleftuadocs[1]{\path (#1);\pgfgetlastxy{\xlleft}{\ylleft};}
3592 \newcommand*\extractuprightuadocs[1]{\path (#1);\pgfgetlastxy{\xupright}{\yupright};}
3593 \newcommand*\extractcurrentuadocs[1]{\path (#1);\pgfgetlastxy{\xcurrent}{\ycurrent};}
3594
3595 \DeclareRobustCommand\place{\@ifnextchar[{\@place}{\@place[align=left] }}
3596 \def\@place[#1] at (#2,#3)#4{
3597 \begin{tikzpicture}[overlay,remember picture]
3598 \extractlleftuadocs{$(current page.south west)$}
3599 \extractuprightuadocs{$(current page.north east)$}
3600 \node[#1] at
3601 ({\xlleft*(1-#2)+\xupright*#2},{\ylleft*(1-#3)+\yupright*#3}) {#4};
3602 \end{tikzpicture}
3603 }
3604
3605 \mode
3606 <all>
3607 \bmrouter>

```

# Change History

## v1.0

- General: Consolidated uacoursetext class and uamasterthesis class . . . . . 1
- Added option qr . . . . . 37
- Added option titlepagenoartwork . . . . . 37
- Added option titlepagetableonly . . . . . 37

## v1.1

- General: Small bugfixes and ‘filled’ option . . . . . 1
- Added option user documentation . . . . . 4
- Fixed typo on programme’s name (e-umlaut) . . . . . 53
- Made raggedright conditional on option ‘filled’, because it can’t be undone . . . . . 62

## v1.2

- General: Added lmodern package and increased headheight to 13.7pt to please Fancyhdr . . . . . 1
- Added lmodern package to please MikTeX . . . . . 39
- Increased headheight to please Fancyhdr . . . . . 62

## v1.3

- General: Minor bugfixes, abandonment of a few packages, font freedom . . . . . 1
- Abandoned use of cmbright - no more font dictatorship for theses and courses . . . . . 39
- Added inclusion of background package . . . . . 39
- Changed eso-pic for tikz . . . . . 67, 69

## v1.4

- General: Implemented uantwerpenletter class . . . . . 1
- Implemented letter class . . . . . 37

## v1.5

- General: Replaced bottom arcs in footer of letter by official PDF versions . . . . . 1
- Implemented new footer . . . . . 76

## v1.6

- General: Added diploma codes for Faculty of Applied Economics . . . . . 1
- Added diploma code documentation . . . . . 6
- Added diploma codes . . . . . 53

## v1.7

- General: Added babel translations of elements of master’s thesis title page . . . . . 1
- Added babel tags of elements of master’s thesis title page . . . . . 42
- Embedded babel translations of keywords into title page . . . . . 64, 67

## v1.8

- General: Corrected minor typographic mistakes, added signature and solved problems with shell escape . . . . . 1
- Added missing packages ifmtarg and shellesc . . . . . 39
- Added signature . . . . . 58
- Allowed for empty senderrole . . . . . 76, 77
- Inserted blank one but last page . . . . . 67

## v1.81

- General: Bugfixes for release v1.8 . . . . . 1
- Apparently shellesc is still missing from quite a number of installations, therefore, conditional loading . . . . . 39

## v1.9

- General: Integrated uantwerpenexam class into package . . . . . 1
- Added etoolbox for convenience reasons . . . . . 39
- Implemented uantwerpenexam class . . . . . 37

## v2.0

- General: Implemented uantwerpenphdthesis class into package . . . . . 1
- Implemented final page . . . . . 73, 76
- Implemented title page . . . . . 69
- Implemented uantwerpenphdthesis class . . . . . 37
- Removed package ifmtarg because unreliable . . . . . 39
- Updated diploma code documentation to incorporate PhD degrees . . . . . 6

## v2.1

- General: Bugfix release after promotion event on research day . . . . . 1
- Increased intercolumn spacing for engdut . . . . . 80
- Added appropriate \appendix command . . . . . 63
- Added subtitle to phd text . . . . . 47
- Allow for setting the multiple choice mark symbol . . . . . 80
- Changed default to empty . . . . . 59
- Corrected erroneous line breaking . . . . . 80, 81
- Corrected information page (p4) jury spacing . . . . . 69
- Corrected spacing in title + exampart . . . . . 77
- Ensured that subtitle is really optional by adding default space value . . . . . 47

## v2.2

- General: Improved visibility of chapter numbers by adding a white outline . . . . . 1
- Added white chapter number outline . . . . . 63
- Corrected spacing . . . . . 63

## v2.3

- General: Reworked masterthesis to bamathesis and minor bug fixes . . . . . 1
- Added boxes to fill out name and docket number . . . . . 77
- Added diploma level . . . . . 53
- Introduced bachelor level codes to allow for bachelor theses . . . . . 6
- Now Groep has been replaced by Reeks to be consistent with UAntwerpen PC-room nomenclature . . . . . 77
- The command \extrainfo now allows for an extra (optional) first argument ‘firstpage’ . . . . . 59

## v2.4

- General: Added option for diploma without specialization for EM . . . . . 1
- Added code for Master EM without specialization . . . . . 53

## v2.5

- General: changed publisher to universitas in default . . . . . 47
- changed publisher to universitas in example . . . . . 12
- Corrected for ‘one page too early’ in solutionspagepartial . . . . . 81
- Corrected formatting in case of absent ISBN or depot number . . . . . 69
- Shortened ‘voorbereidingsprogramma’ and ‘schakelprogramma’ tags . . . . . 52

## v3.0

- General: Adapted to the new house style of UAntwerpen and added a beamer template . . . . . 1
- Added iftex . . . . . 39
- Changed REC in RE, TEW in BE and WET in WE (according to official naming scheme) . . . . . 46

## v3.1

- General: Renamed generic images to be unique for TexLive distribution . . . . . 1



v3.2	General: Small bugfixes (e.g., frame numbering instead of page numbering) . . . . .	1	robust font code for overleaf . . . . .	97
v4.00	General: Last update of house style (phdthesis coursetext and bamathesis), added uantwerpenreport class, improvements based on use feedback and major rework to benefit from expl3, removed all diploma codes to ease maintainability . . . . .	1	v4.06	General: Solved font issue on title page of exams, improved gender neutralilty of PhD jury chair, allowed for multiple degree programs for exams and course texts, corrected disclaimers, replaced 'basic usage' in documentation by heavily commented examples . . . . .
	Discontinued: removed all diploma codes . . . . .	53		added quite some info to the examples . . . . .
	Removed diploma codes, as too many faculties are requesting to maintain them . . . . .	6		Improved genderneutrality by substituting chairman by chair . . . . .
	Removed option qr again . . . . .	37		improved organization of the docstrip container . . . . .
	Removed options titlepagetableonly and titlepagenoartwork . . . . .	37	v4.07	General: Minor bugfixes on the request of the library . . . . .
	This function is now obsolete . . . . .	46	v4.08	General: Minor bugfixes on the request of the Antwerp Doctoral School . . . . .
	Total rewrite of this part based on expl3 . . . . .	42	v4.09	General: Minor bugfixes on the request of users . . . . .
v4.01	General: Adapted coursetext again to universitas agreement + added bleed version for phd texts + small bugfixes . . . . .	1		Allowed continuation of letter after closing it to allow for providing extras in the same document . . . . .
	Added cameraready option . . . . .	40		Now using ccname en enclname to make trailer language independent . . . . .
	Added option cameraready . . . . .	37		You can now leave the subtitle blank without annoying empty reverse video . . . . .
v4.02	General: Added in-style bamathesis class . . . . .	1	v4.10	General: Updated PhD template to comply with new PhD regulations (regarding defense date, DOI number, scientific integrity clause, embargo clauses and copyright disclaimer) . . . . .
	Added bachelor/master degrees of FTI and FWET . . . . .	45		Added DOI number . . . . .
	Added bachelor/master disclaimers . . . . .	44		Added doi option and removed isbn and depot options . . . . .
	Added bachelor/master document types . . . . .	44		Added full embargo option . . . . .
	Added highlighting facilities . . . . .	40		Added research integrity clause to colofon . . . . .
	Added some fancy inset texts and quotes . . . . .	40		Added temporary embargo option . . . . .
	Now using scrbook for bamathesis, with colored chapter and section titles . . . . .	64		Removed ISBN and depot number . . . . .
v4.03	General: Small bugfixes and corrections to optional fields of letter class . . . . .	1	v4.11	General: Removed spurious 'check-declarations' expl3 debugging option, as this breaks other packages . . . . .
v4.04	General: Made titlepages insensitive to parindent and parskip settings + small bugfixes . . . . .	1	v4.12	General: Allowed for double use of degree specification and corrected title spacings in examples; improved protective scoping in beamertheme; adopted l3build; corrected camerareadydocumentation; enabled making a book cover for phd class . . . . .
	Added department name . . . . .	46		Introduced makebookcover macro for PhD class . . . . .
	Added dutch translation option to phdtext class . . . . .	46, 47		
	Added option bare to phd text classes . . . . .	37		
	Added some suggestions for a two column summary of a bamathesis . . . . .	14		
v4.05	General: Small bugfixes: more robust fonts for overleaf, added some missing degrees . . . . .	1		
	Added bachelor degrees (dutch) in english mode for FTI . . . . .	45		

# Index

Numbers written in *italic* refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.

Symbols	
\, .....	1584, 1881, 2432
\@@ .....	371, 374, 384, 388, 397, 729, 733, 771, 776, 798, 803, 823, 828, 889, 893, 937, 941, 997, 1001, 1102, 1106, 1122, 1126, 1142, 1146, 1162, 1166, 1266, 1270, 1318, 1325
\@M .....	1492
\@academicyear .....	1076, 1077, 1594, 1617, 1742, 2452
\@address .....	1222, 1230, 1231, 1964, 2189, 2218, 2286
\@affiliation .....	758, 765, 1963, 2187, 2203, 2217
\@afterheading .....	1501
\@arabic .....	2460
\@author .....	1566, 1641, 1755, 1869, 1928, 1962, 2092, 2172, 2209, 2216, 2220, 2420, 2586
\@bamadoctype .....	954, 961, 1084, 1368, 1375, 1762
\@baretrue .....	217
\@bhtextfalse .....	2977
\@bhtexttrue .....	3077
\@camerareadytrue .....	213
\@carboncopy .....	1214, 1215, 2313
\@closing .....	1205, 1207, 2309
\@cmkyfalse .....	8, 10
\@cmkytrue .....	9, 2045
\@companylogo ..	723, 724, 1778, 1782
\@copyrightnotices .....	1080, 1081, 1084, 1457, 1472
\@copyrighttrue .....	199
\@course .....	1013, 1016, 2339
\@coursecode .....	1012, 1015, 2348
\@courseversion .....	703, 704, 1334, 1341, 1460
\@crnotice ...	1452, 1471, 1684, 1796
\@date .....	1411, 2298
\@defensedate ..	1030, 1031, 1893, 1939
\@defenselocation .....	1034, 1035, 1893, 1939
\@degree 916, 923, 929, 1763, 1891, 1925	
\@department .....	667, 669, 1593, 1594, 1625, 1892, 1893, 1919
\@doi .....	1072, 1073, 1978, 1982
\@enclosed .....	1218, 1219, 2314
\@examdate .....	1248, 1249, 2356
\@examgropunumber .....	1236
\@examgroupnumber .....	1244, 1245, 2356, 2451, 2452
\@examinertrue .....	209
\@examlength .....	1252, 1253, 2397
\@exampart ...	1240, 1241, 2340, 2341
\@extra .....	754, 755, 2183, 2204
\@extrainfo ..	1289, 1293, 1299, 2454
\@faculty .....	12, 17, 27, 1593, 1624, 1892, 1918, 2284, 2441
\@facultyacronym .....	90, 1334, 1342
\@filledtrue .....	204
\@fullembargofalse .....	1043, 1058
\@fullembargottrue .....	1048
\@ifnextchar .....	3595
\@ifpackageloaded .....	16, 94, 406, 575, 2574
\@jurychair .....	875, 884, 1951
\@jurychairaff .....	882, 884, 1951
\@lhtextfalse .....	2971
\@lhtexttrue .....	3061
\@logo .....	403, 1093, 2263
\@lqttextfalse .....	2975
\@lqttexttrue .....	3069
\@makechapterhead .....	1476
\@makeschapterhead .....	1500, 1503
\@mcsymbol ...	2493, 2494, 2499, 2510
\@modernfalse .....	194
\@moderntrue .....	195
\@nameuse .....	3167
\@neutralcolorsfalse .....	3, 2046
\@neutralcolorstrue .....	4
\@nofoldlinetrue .....	221
\@nofontsfalse .....	2602
\@nofontstrue .....	2603
\@noroundfalse .....	2885
\@place .....	3595, 3596
\@printonspinefalse .....	2100
\@printonspinettrue .....	2099
\@publisher .....	711, 716, 1596
\@publishercode ..	719, 720, 1595, 1669
\@returnaddress ...	1180, 1183, 2273
\@rhtextfalse .....	2969
\@rhtexttrue .....	3045
\@rqtextfalse .....	2973
\@rqtexttrue .....	3053
\@schapter .....	1499
\@sender .....	1087, 1090, 2282, 2310
\@senderrole ..	1089, 1090, 2283, 2311
\@shorttitle .....	697, 699, 2450
\@signature .....	1210, 1211, 2309
\@studentnr .....	1311, 1312, 1426
\@subject .....	1198, 1199, 2299
\@subtitel .....	691, 693, 1996
\@subtitle ..	679, 682, 1560, 1633, 1750, 1862, 1922, 2165, 2207, 2585
\@subtitleshort ..	680, 684, 686, 1336
\@tempboxa .....	313
\@tempbargofalse ..	1045, 1047, 1053
\@tempbargottrue .....	1059
\@tend .....	1260, 1261, 2405
\@thanks .....	1689, 1801, 2005, 2226
\@titel .....	673, 675, 1986, 1995
\@title 1336, 1343, 1553, 1632, 1749,	1855, 1921, 2093, 2158, 2206, 2584
\@titlepageimage ...	1038, 1039, 1540, 1544, 1843, 1847, 2146, 2150
\@to .....	1186, 1187, 2274
\@toaddress .....	1194, 1195, 2276
\@toorganization ..	1190, 1191, 2275
\@tstart .....	1256, 1257, 2404
\@quantwerpendocshl .....	312, 1321
\@quantwerpendocshlbox .....	313, 314
\@unit .....	1096, 1097, 2285
\@versionyear .....	707, 708, 1465, 2188, 2220
\_ .....	2233
\~ .....	1064, 1065, 1822

## A

\academicyear .....	1077
\address .....	1225, 1230, 1231
\addto .....	17, 95, 407, 410, 576
\addtokomafont .....	1519, 1520
\addtolength .....	247
\AddToShipoutPicture .....	1422, 1528, 1709, 1734, 1833, 2118, 2136, 2257, 2327, 2528, 2552
\advance .....	3541, 3542, 3551
\affiliation .....	761, 765
\appendix .....	1512
\appendixname .....	1515
\appropriateLogo ...	2612, 3172, 3180, 3190, 3200, 3214, 3232, 3251, 3269, 3287, 3305, 3324, 3520
\appropriateslidenumber .....	2613, 3173, 3181, 3191, 3201, 3215, 3233, 3252, 3270, 3288, 3306, 3325, 3526
\AtBeginDocument .....	14, 92, 404, 573, 747, 848, 856, 898, 946, 1006, 1114, 1134, 1154, 1174, 1282, 1357, 2573, 2611
\AtEndDocument .....	2320
\AtEndEnvironment .....	3098
\author .....	1691, 1803, 2007, 2228

## B

\backgroundsetup .....	1680
\bamadegree .....	957, 967
\bamadoctype .....	957, 960, 969
\baselineskip .....	247, 1979, 2875
\baselinestretch .....	2811
\beamer@leftmargin ..	3541, 3542, 3551
\BeforeBeginEnvironment .....	3087
\bookcovercomponent .....	2070, 2075, 2076, 2077, 2080
\bool .....	2031, 2034, 2037, 2098

## C

\c .....	2101
\c@question .....	2460
\callout .....	2921, 2925
\captionsdutch .....	17, 95, 410, 576
\captionsenglish .....	407
\carboncopy .....	1215
\ccname .....	2313
\centering .....	2052, 2059



\input	224, 232, 240, 2605	\LoadClassWithOptions	228, 229, 235, 243	\noindent	1949, 1960, 1966, 1969, 1973, 1976, 1981
\insertauthor	3352, 3383, 3420	\logo	1093	<b>O</b>	
\insertdate	3360, 3391, 3428	\logomonowhite	105, 3172, 3403	\onecolumn	1449
\insertframenumber	2615, 3174, 3216, 3234, 3253, 3271, 3289, 3307, 3326	\logomonowhiteua	106	\opening	1202
\insertframesubtitle	3572, 3579	\logoneg	103, 3190	<b>P</b>	
\insertframetitle	3571	\logonegua	104	\PackageError	659, 759, 876, 905, 924, 955, 976, 1021, 1223, 1302
\insertsection	3443, 3458, 3481, 3496	\logopos	101, 403, 1362, 1599, 1788, 2193, 2201, 2444, 2612, 3180, 3200, 3214, 3232, 3251, 3269, 3287, 3305, 3324, 3336	\pagename	1413, 1414
\insertsectionnumber	3443, 3458, 3481, 3496	\logoposua	102, 1609, 1897, 1916	\pagenumbering	1433
\insertsolutionspage	2550	\logonitheight	24, 25, 30, 36, 43, 50, 56, 62, 68, 74, 80, 86, 3336, 3403, 3520	\pagestyle	1378, 1524, 1694, 1730, 1806, 1828, 2011, 2132, 2231, 2255, 2316, 2326
\insertsolutionspagepartial	2526	\lselector	23, 96, 101, 102, 103, 104, 105, 106	\parindent	246, 1454, 1527, 1733, 1832, 2134, 2876
\insertsubsection	3466, 3504	<b>M</b>		\parskip	247, 1526, 1732, 1831, 2133, 2312, 2875
\insertsubtitle	3344, 3376, 3412	\macrocode	1232	\patchcmd	1379
\inserttitle	3342, 3374, 3410	\makeatletter	19, 99, 236, 417, 599, 2044, 2073	\path	2261, 2271, 2293, 2892, 2894, 2903, 2905, 3591, 3592, 3593
\inserttotalframenumber	2615, 3174, 3216, 3234, 3253, 3271, 3289, 3307, 3326	\makeatother	15, 93, 236, 405, 574, 2048, 2079	\pgfgetlastxy	3591, 3592, 3593
\insetquote	334	\makebookcover	2023	\pgfmathsetmacro	3217, 3218, 3235, 3236, 3254, 3255, 3272, 3273, 3290, 3291, 3308, 3309
\insettext	326, 335	\makebox	1479	\pgfpathrectangle	316
\interlinepenalty	1492	\makefinalpage	1699, 1811, 2111, 2237	\pgfpoint	316
\ior	383, 385, 386, 392	\maketitle	1523, 1688, 1729, 1800, 1826, 2004, 2131, 2225, 2254, 2325	\pgfusepath	317
\iow	2103, 2104, 2105, 2106	\MakeUppercase	2313, 2314	\ph	2966, 3183, 3184, 3193, 3194, 3203, 3205, 3206, 3218, 3220, 3236, 3238, 3255, 3257, 3273, 3275, 3291, 3293, 3294, 3309, 3311, 3335, 3340, 3350, 3358, 3372, 3381, 3389, 3402, 3408, 3418, 3426, 3441, 3456, 3464, 3479, 3494, 3502
\it	2947	\maybeinverse	2944, 2946, 2978, 2989, 3006, 3007, 3015, 3016, 3028, 3029, 3035, 3036, 3043, 3051, 3059, 3067, 3075, 3083, 3088, 3098, 3213, 3231, 3250, 3268, 3286, 3304, 3323, 3375, 3524, 3570, 3574, 3578	\phantom	2287, 2288, 2289, 2290
\itshape	2853, 2855	\mc	2497	\phddegree	904, 906
<b>J</b>		\medskip	1927	\phone	1125
\jobname	2094, 2104	\mobile	1165	\place	3595
\jointcosupervisors	805	\mode	2618, 2639, 2652, 2717, 2756, 2860, 2873, 2949, 2962, 2992, 3000, 3003, 3023, 3605	\prepmaketitle	1817, 1827
\jointcosupervisorswithaffiliation	808, 1773	\msg	2017, 2020, 2033, 2036	\ProcessOptions	226, 234, 242, 2607
\jointcourseswithcodes	1003, 1572, 1663	\mycradius	2888, 2894, 2895, 2899, 2905, 2906	\programme	975, 977
\jointdegrees	943, 1592, 1649, 2440	<b>N</b>		\prop	359, 363, 366, 373, 379, 399, 546, 548, 653, 1819
\jointemails	1108, 2287	\newbookcovercomponenttype	2051, 2058, 2065	\protect	660, 761, 878, 906, 907, 909, 926, 957, 977, 978, 980, 987, 988, 990, 991, 1022, 1023, 1025, 1225, 1303
\jointtextsupervisors	830	\newcounter	2458	\ps@uantwerpen@titlepage	3164
\jointtextsupervisorswithaffiliation	833, 1775	\newdimen	3585, 3586, 3587, 3588, 3589, 3590	\publisher	716
\jointfaxes	1148, 2289	\NewEnviron	3100, 3111, 3122, 3133, 3144, 3150	\publishercode	720
\jointjurymembers	895, 1957	\newif	2, 7, 193, 198, 203, 208, 212, 216, 220, 1042, 1044, 1052, 2045, 2046, 2047, 2304, 2601, 2884, 2968, 2970, 2972, 2974, 2976	\put	1423, 1529, 1710, 1735, 1834, 2119, 2137, 2258, 2328, 2529, 2553, 2564
\jointlecturers	735, 1586, 1656, 2434	\newlength	24	\pw	2965, 3183, 3184, 3193, 3194, 3203, 3205, 3206, 3217, 3220, 3235, 3238,

<code>\questionweight</code> .....	2467	<code>\setbeamersize</code> .....	2626	<code>\titel</code> .....	674
<b>R</b>					
<code>\raggedbottom</code> .....	1448	<code>\setbeamertemplate</code> .....	2636, 2637, 2879, 2880,	<code>\title</code> .....	1690, 1802, 2006, 2227
<code>\raggedright</code> .....	1446		2882, 2985, 2986, 2987, 2988,	<code>\titlepageimage</code> .....	1039
<code>\raisebox</code> .....	321, 1362, 1481		3008, 3009, 3010, 3011, 3017,	<code>\tl</code> .....	375, 376, 377, 378, 1055,
<code>\regex</code> .....	387,		3018, 3019, 3020, 3030, 3037,		1056, 1060, 1061, 1062, 1063,
	968, 1064, 1065, 1820, 1821, 1822		3044, 3052, 3060, 3068, 3076,		1066, 1067, 1816, 1818, 1819, 1823
<code>\RequirePackage</code> ..	251, 255, 262,	<code>\setcounter</code> .....	3084, 3089, 3090, 3091, 3092, 3166	<code>\to</code> .....	1187
	266, 267, 270, 271, 272, 278,			<code>\toaddress</code> .....	1195
	279, 280, 281, 282, 285, 286,			<code>\toorganization</code> .....	1191
	287, 288, 289, 290, 292, 293,	<code>\setlength</code> .....	25, 30, 36, 43,	<code>\tstart</code> .....	1257
	297, 301, 304, 354, 2609, 2620,		50, 56, 62, 68, 74, 80, 86, 246,	<b>U</b>	
	2621, 2622, 2623, 2624, 2654, 2732		1358, 1430, 1436, 1441, 1454,	<code>\uantwerpencallout</code> .....	2917
<code>\returnaddress</code> .....	1182		1526, 1527, 1732, 1733, 1831,	<code>\uantwerpendocsdegree</code> ....	652, 970
<code>\reversevideo</code> ....	1324, 1749, 1750		1832, 2133, 2134, 2312, 2875, 2876	<code>\uantwerpendocsdoctype</code> ...	547, 961
<code>\rfoot</code> ....	1336, 1343, 1353, 1369,	<code>\setmainfont</code> .....	2744	<code>\uantwerpendocsPROOP</code> .....	365, 1901, 1905, 1931, 1934
	1376, 1389, 1396, 1404, 1413, 2451	<code>\setmcsymbol</code> .....	2494	<code>\uantwerpendocsprop</code> .....	362, 740, 743, 786,
<code>\rhead</code> 1333, 1340, 1350, 1366, 1373,		<code>\sfdefault</code> .....	2050		789, 813, 816, 838, 841, 1277,
	1386, 1393, 1401, 1410, 1421, 1426	<code>\shorttitle</code> .....	698		1279, 1334, 1342, 1413, 1414,
<code>\rightmark</code> .....	1331, 1364, 1384	<code>\signature</code> .....	1211		1465, 1466, 1616, 1742, 1890,
<code>\rmfamily</code> .....	2853	<code>\slshape</code> .....	1331,		1924, 1926, 1949, 1950, 1956,
<code>\room</code> .....	1269		1333, 1364, 1366, 1371, 1384, 1386		1966, 1969, 1976, 1977, 2221,
<code>\roomsname</code> .....	1275, 2413	<code>\smalllogo</code>	1361, 1362, 1367, 1369, 1374		2295, 2297, 2356, 2362, 2368,
<code>\rotatebox</code> ...	1423, 2053, 2060, 2564	<code>\smallskip</code> .....	1961, 2215		2377, 2387, 2397, 2404, 2405, 2471
<code>\rule</code> ....	1479, 1493, 1496, 1506, 1508	<code>\square</code> .....	2493	<code>\uantwerpendocspropread</code> ....	370, 408, 411, 415, 416
<b>S</b>					
<code>\s</code> .....	1064, 1065	<code>\stepcounter</code> .....	2462	<code>\uantwerpenicon</code> .....	2940
<code>\savebox</code> .....	1362	<code>\str</code> .	366, 2039, 2040, 2087, 2090, 2102	<code>\uantwerpenleftshape</code>	2887, 2919,
<code>\selectfont</code> .....	1424, 1485, 1488, 1616, 1617,	<code>\stretch</code> .....	1683, 1795		3184, 3205, 3222, 3240, 3295, 3313
	1624, 1632, 1633, 1641, 1649,	<code>\strip@pt</code> .....	2964	<code>\uantwerpenrightshape</code> .....	2898, 3259, 3277
	1656, 1663, 1669, 2054, 2061,	<code>\strut</code> .....	321, 330,		2273
	2338, 2347, 2355, 2361, 2367,		2294, 2296, 2298, 2299, 3574, 3579	<code>\unit</code> .....	1097
	2376, 2386, 2396, 2402, 2412, 2565	<code>\strutbox</code> .....	320	<code>\uppercase</code> .....	90, 2295, 2297
<code>\selectlanguage</code> .....	2479, 2484, 2489, 2512, 2517, 2522	<code>\studentnr</code> .....	1312	<code>\url</code> .....	1073
<code>\sender</code> .....	1090	<code>\subheading</code> .....	2945	<code>\useasboundingbox</code> ....	1836, 2121
<code>\setbeamercolor</code> .....	2657, 2658, 2659, 2660, 2662,	<code>\subject</code> .....	1199	<code>\usebeamerfont</code>	3525, 3571, 3573, 3577
	2663, 2664, 2665, 2667, 2668,	<code>\subtitel</code> .....	692	<code>\usecolortheme</code> .....	2631
	2669, 2670, 2672, 2673, 2674,	<code>\subtitle</code> .....	681	<code>\usefonttheme</code> .....	2632, 2742
	2675, 2676, 2677, 2679, 2680,	<code>\supervisor</code> .....	775	<code>\useinnertheme</code> .....	2633
	2681, 2682, 2683, 2684, 2686,	<code>\supervisorsname</code> .....	784, 1770, 1882, 1944, 1953	<code>\useoutertheme</code> .....	2634
	2687, 2688, 2689, 2691, 2692,	<b>T</b>			
	2693, 2694, 2695, 2696, 2697,	<code>\tat</code> .....	236, 1103	<code>\usepackage</code>	2049, 2741, 2743, 2751, 2754
	2698, 2700, 2701, 2703, 2704,	<code>\tehpape</code> .....	1403	<code>\usetikzlibrary</code> .....	291, 2729
	2705, 2706, 2708, 2709, 2710,	<code>\tend</code> .....	1261	<b>V</b>	
	2711, 2713, 2714, 2715, 2716, 3165	<code>\textcolor</code> .....	327,	<code>\versionyear</code> .....	708
<code>\setbeamerfont</code> .....	2758, 2759, 2760, 2762, 2763,		328, 1367, 1369, 1376, 1411,	<code>\vfill</code>	1917, 1920, 1923, 1929, 1937,
	2765, 2766, 2767, 2769, 2771,		1413, 1414, 1423, 1479, 1493,		1959, 1965, 1967, 1970, 1974,
	2773, 2774, 2775, 2777, 2778,	<code>\textheight</code> .....	3034, 3042,		1980, 1990, 1992, 1994, 1997,
	2779, 2781, 2782, 2784, 2785,		3050, 3058, 3066, 3074, 3082, 3560		1999, 2056, 2059, 2066, 2202,
	2787, 2788, 2789, 2790, 2791,	<code>\textit</code> .....	1950, 1953, 1956		2205, 2208, 2210, 2213, 2219, 2222
	2794, 2795, 2797, 2798, 2799,	<code>\thanks</code> .....	1687, 1799, 2003, 2224	<code>\vphantom</code> .....	2054, 2061
	2800, 2802, 2803, 2804, 2805,	<code>\thechapter</code> .....	1485, 1488, 1514	<b>W</b>	
	2807, 2808, 2810, 2812, 2814,	<code>\thepage</code> .....	1331, 1333, 1340,	<code>\wd</code> .....	316
	2815, 2817, 2819, 2820, 2821,		1352, 1367, 1369, 1376, 1384,	<b>X</b>	
	2822, 2823, 2824, 2826, 2827,		1386, 1393, 1403, 1413, 1414, 1419	<code>\x</code> .....	340, 341, 2930, 2931
	2828, 2830, 2831, 2832, 2834,	<code>\thequestion</code> .....	2460, 2463		
	2835, 2836, 2838, 2839, 2840,	<code>\theta</code> .....	1483, 1484		
	2842, 2843, 2844, 2846, 2848,	<code>\thispagestyle</code> .....	1379, 1695, 1703, 1707,		
	2850, 2851, 2853, 2855, 2856, 2858		1807, 1985, 2012, 2114, 2117,		
			2232, 2239, 2242, 2256, 3332, 3399		
		<code>\tikz</code> .....	315		

			<b>Y</b>				<b>Z</b>	
\xcurrent	.....	3589, 3593	\ycurrent	.....	3590, 3593	\ztopages	.....	1413
\xlleft	.....	3585, 3591, 3601	\ylleft	.....	3586, 3591, 3601	\ztotpages	.....	1414, 1419, 2027
\xupright	.....	3587, 3592, 3601	\yupright	.....	3588, 3592, 3601			