

The `uacoursetext` class*

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1 Introduction

This package implements the house style of Universiteit Antwerpen for course texts and master's theses except for the font. Computer Modern Bright is used instead of the non-free Auto1. Using these class files will make it easy for you to make and keep your course texts and master's theses compliant to this version and future versions of the UA house style.

If you think

- there's an error in compliancy w.r.t. the house style,
- there's a feature missing in this class file,
- there's a bug in this class file,

please, contact us through e-mail (walter.daems@uantwerpen.be). We'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 `uacoursetext` and `uamasterthesis` classes are an extension to the standard `LATEX` `book` class. It is intended to be used for writing course texts and master's theses. It provides a title page that is compliant to the UA house style, and it also typesets the rest of your document appropriately.

*This document corresponds to `uacoursetext` 1.2, dated 2014/08/22.

It requires (and uses) the following packages:

- the `ifthen` package
- the `mtarg` package
- the `geometry` package
- the `hyperref` package
- the `cmbright` package
- the `graphicx` package
- the `eso-pic` package
- the `color` package
- the `tikz` package
- the `fancyhdr` package
- the `pst-barcode` package
- the `auto-pst-pdf` package

and optionally

- the `varioref` package.

So make sure these packages are available to your \LaTeX compiler.

3 Portability

This class file should be ready to use with all common \LaTeX compilers (PDF \LaTeX , \LaTeX , Xe \LaTeX ,...) from the major \TeX -distributions (TeXTeX, TexLive, MikTeX). If you experience problems, please inform the authors.

4 Usage

4.1 Basic Usage

4.1.1 `uacoursetext` class

Use the following harness for your \LaTeX course text:

```

\documentclass[a4paper]{uacoursetext}

\usepackage{<include any packages you require here>}

\facultyacronym{<put your faculty's acronym here>}

\title{<put your title here>}
\subtitle{<put your subtitle here>}
\author{<put your name here>}

\courseversion{<put a version identifier here>}
\versionyear{<the publication date of the course here>}

\lecturer{<person teaching the course>}
\programme{<descriptor of first programme>}
\course{<course code>}{<name of the course>}%

\academicyear{<XXXX-YYYY>}

\begin{document}

  \maketitle

  % put your LaTeX code here

  \finalpage

\end{document}

```

4.1.2 uamasterthesis class

Use the following harness for your L^AT_EX master's thesis:

```

\documentclass[a4paper]{uamasterthesis}

\usepackage{<include any packages you require here>}

\facultyacronym{<put your faculty's acronym here>}

\title{<put your title here>}
\author{<put your name here>}
\supervisorI{<put the first supervisor's name(s) here>}
\supervisorII{<put the first supervisor's name(s) here>}
\supervisorIII{<put the first supervisor's name(s) here>}
\supervisorIV{<put the first supervisor's name(s) here>}

% classmarker
\academicyear{<XXXX-YYYY>}

```

```

\begin{document}

\maketitle

% put your LaTeX code here

\finalpage

\end{document}

```

4.2 The class options explained

The class has several options. They are listed below. After every option, it has been indicated to which class the option applies (between square brackets).

copyright [uacoursetext]
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;

filled [uacoursetext / uamasterthesis]
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 `\raggddright` from being issued. However, if you care about the readability of your text, you shouldn't use this option.

titlepagenoartwork [uacoursetext / uamasterthesis]
This option forces the title pages to be typeset without circle graphics and logo. This allows for printing on a pre-printed color sheet that already contains circle graphics and logo;

titlepagetableonly [uacoursetext / uamasterthesis]
This option forces the title-page data to be printed in table form as first page. Some publishers require the manuscript to be delivered in this form. They perform the entire typesetting of the title page.

qr [uacoursetext]
This option allows you to generate a QR code containing the details of the course on the title page (or the table-only) title page. For this option to work, the package `pstricks` is loaded. It will not work with `pdfLATEX` unless you enable shell escape. Read your `pdfLATEX`-package documentation on how to do that.

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) in case the cover is printed on a pre-printed color artwork cover sheet is: `a4paper`, `qr`, `titlepagenoartwork`.
- to make a camera-ready text (for printing) in case the cover is typeset based on table data: `a4paper`, `qr`, `titlepagetableonly`.

4.3 The macros explained

After every macro, it has been indicated to which class the macro applies (between square brackets), and whether it is mandatory or not.

`\facultyacronym` [`uacoursetext` / `uamasterthesis`] (mandatory)
 This macro sets the acronym of the faculty. This macro also sets the faculty name according to the specified acronym. If you're missing an faculty or institute, please ask the authors to complete the list.

The available acronyms are:

Acronym	Faculty name
CPG	Centrum Pieter Gillis
FBD	Faculteit Farmaceutische, Biomedische en Diergeneeskundige Wetenschappen
GGW	Faculteit Geneeskunde en Gezondheidswetenschappen
IOB	Instituut voor Ontwikkelingsbeleid- en beheer
IOIW	Instituut voor Onderwijs- en Informatiewetenschappen
LW	Faculteit Letteren en Wijsbegeerte
OW	Faculteit Ontwerpwetenschappen
PSW	Faculteit Politieke en Sociale Wetenschappen
REC	Faculteit Rechten
TEW	Faculteit Toegepaste Economische Wetenschappen
TI	Faculteit Toegepaste Ingenieurswetenschappen
WET	Faculteit Wetenschappen

`\title` [`uacoursetext` / `uamasterthesis`] (mandatory)
 This macro sets the title of the document. It also sets the `pdftitle` tag of the `hyperref` package, so that the PDF-document meta-information is correct.

`\subtitle` [`uacoursetext`] (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, so that the PDF-document meta-information is correct.

<code>\author</code>	[uacoursetext / uamasterthesis] (mandatory) This macro sets the author of the document. It also sets the <code>pdfauthor</code> tag of the <code>hyperref</code> package, so that the PDF-document meta-information is correct.
<code>\publisher</code>	[uacoursetext] (mandatory) This macro sets the publisher information of the document. It is printed on the front page. It defaults to Universitas printing, one of the standard printing service of Universiteit Antwerpen.
<code>\publishercode</code>	[uacoursetext] (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.
<code>\courseversion</code>	[uacoursetext] (optional) This macro indicates which version of the course this is. You may use your own versioning system that puts things clear for you.
<code>\versionyear</code>	[uacoursetext] (mandatory) This is to be the year in which you published the current version of the course in the form YYYY.
<code>\lecturer</code>	[uacoursetext] (mandatory) This is the name of the person that actually teaches the course (in Dutch: titularis). If there are multiple persons, please, use the macros <code>\lectureri</code> , <code>\lecturerii</code> , <code>\lectureriii</code> , <code>\lectureriv</code> .
<code>\programme</code>	[uacoursetext] (mandatory) This macro takes three arguments: <ul style="list-style-type: none">• the type of the programme: BA, SP, VP or MA• the domain of the programme: IW• the qualifier of the programme: BK, CH, BCH, EM, EI

If you need more programme classes or qualifiers, ask the authors to complete the available codes. Correct usage of the macro will result in error-free descriptions on your title page. You can overrule the standard descriptions, by specifying 'FREE' as first argument and a free text description as second, leaving the third one empty. However, we strongly advise against taking this route. Instead, ask the authors to complete the available codes.

<code>\supervisor</code>	[uamasterthesis] (mandatory) This is the name of the person that promotes the thesis. If there are multiple persons, please, use the macros <code>\supervisor i</code> , <code>\supervisor ii</code> , <code>\supervisor iii</code> , <code>\supervisor iv</code> .
--------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

`\course` [uacoursetext] (mandatory)
 Code (first argument) and name (second argument) of the curriculum course this coursematerial belongs to. The code should be of the form: TNNNFFFAAA, 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.

The name should be of the form x-YYYYYYYY with x the number of the semester and YYYYYYYY the official name of the course.

`\course` [uacoursetext] (mandatory)
 In case the course's name contains accented characters, one should also provide a qr version, containing utf8-characters only. The macro for this purpose takes only one argument, i.e. the course's name! This is to avoid inconsistencies in the course codes.

`\academicyear` [uacoursetext / uamasterthesis] (mandatory)
 Use this macro to specify the academicyear in full, i.e. in the form XXXX-YYYY.

`\diploma` [uamasterthesis] (mandatory)
 This must be the official title, in Dutch. To avoid errors, we chose to use specific codes, that will expand to the correct description.

Code	Description (in Dutch!)
MA-IW-BK	Master of Science in de industriële wetenschappen: bouwkunde
MA-IW-BCH	Master of Science in de industriële wetenschappen: biochemie
MA-IW-CH	Master of Science in de industriële wetenschappen: chemie
MA-IW-EI	Master of Science in de industriële wetenschappen: elektronica-ICT
MA-IW-EI-AE	Master of Science in de industriële wetenschappen: elektronica-ICT, afstudeerrichting, Automotive Engineering
MA-IW-EI-ICT	Master of Science in de industriële wetenschappen: elektronica-ICT, afstudeerrichting ICT
MA-IW-EM-AE	Master of Science in de industriële wetenschappen: Elektromechanica, afstudeerrichting Automotive Engineering
MA-IW-EM-AU	Master of Science in de industriële wetenschappen: Elektromechanica, afstudeerrichting Automatisering
MA-IW-EM-EM	Master of Science in de industriële wetenschappen: Elektromechanica, afstudeerrichting Elektromechanica

<code>\defensedate</code>	[uamasterthesis] (mandatory) Date of the defense in Dutch, in the form 'month year', e.g. "juni 2012".
<code>\defenselocation</code>	[uamasterthesis] (optional) Location of the defense. Defaults to "Antwerpen".
<code>\copyrightnotices</code>	[uacoursetext] (optional) Use this macro to specify additional copyright notice messages to appear in het copyright notice on the bottom of page 2 of your course text.

4.4 Examples

4.4.1 uacoursetext

```

<*ct-example>
\documentclass[a4paper,11pt,oneside,openright,english,qr]{uacoursetext}

\usepackage[english,dutch]{babel}
\selectlanguage{english}

\title{Z\'agen, zoeken en zuchten}
\qrtitle{Zgen, zoeken en zuchten}
\subtitle{Cursusnota's}
\author{Walter Daems en Paul Levrie}

\courseversion{1.3}
\versionyear{2013}

\lectureri{Zoltan Zoekers}

```

```

\qrlectureri{Zoltan Zokers}
\lecturerii{Siana Sigh}
\lectureriii{Zeger de Zager}
\qrlectureriiii{Zeger de Zger}

\facultyacronym{TI}
\programme{MA}{IW}{EI}
\coursei{2023FTIZZZ}{5-Zoekmachines in een zaagperspectief}
\courseii{2045FTIIII}{6-Zaagmachines in \e'en zuchtperspectief}
\qrcourseii{6-Zaagmachines in n zuchtperspectief}

\academicyear{2012-2013}

\publisher{Cursusdienst\UNIVERSITAS\
Prinsesstraat 16\
2000 Antwerpen\
T +32 3 233 23 72\
F +32 3 233 65 81\
E info@cursusdienst.be\
W www.universitas.be}

\publishercode{C11111102}

\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}
\selectlanguage{dutch} % or english if your text is in English

\maketitle

\frontmatter

\tableofcontents

\mainmatter
\chapter*{Inleiding}
Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do
eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad
minim veniam, quis nostrud exercitation ullamco laboris nisi ut
aliquip ex ea commodo consequat. Duis aute irure dolor in
reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla
pariatur. Excepteur sint occaecat cupidatat non proident, sunt in
culpa qui officia deserunt mollit anim id est laborum.

\chapter{Onzin voor dummies}

```

`\section{Een beetje Cicero}`

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla pariatur?

`\begin{equation}`

$$e^{-j\pi} + 1 = 0$$

`\end{equation}`

At vero eos et accusamus et iusto odio dignissimos ducimus qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolores et quas molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi, id est laborum et dolorum fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam libero tempore, cum soluta nobis est eligendi optio cumque nihil impedit quo minus id quod maxime placeat facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum hic tenetur a sapiente delectus, ut aut reiciendis voluptatibus maiores alias consequatur aut perferendis doloribus asperiores repellat.

`\section{En waartoe het geleid heeft}`

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

`\subsection{Herhaling}`

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui

dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla pariatur?

`\subsection{Begint vervelend te worden}`

At vero eos et accusamus et iusto odio dignissimos ducimus qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolores et quas molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi, id est laborum et dolorum fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam libero tempore, cum soluta nobis est eligendi optio cumque nihil impedit quo minus id quod maxime placeat facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum hic tenetur a sapiente delectus, ut aut reiciendis voluptatibus maiores alias consequatur aut perferendis doloribus asperiores repellat.

`\newpage`

`\subsection{Begint echt vervelend te worden}`

At vero eos et accusamus et iusto odio dignissimos ducimus qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolores et quas molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi, id est laborum et dolorum fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam libero tempore, cum soluta nobis est eligendi optio cumque nihil impedit quo minus id quod maxime placeat facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum hic tenetur a sapiente delectus, ut aut reiciendis voluptatibus maiores alias consequatur aut perferendis doloribus asperiores repellat.

`\chapter{Besluit}`

`\backmatter`

`\appendix`

`\chapter{Symbolen}`

`\chapter{Romeinse sprekers}`

`\chapter{Referentielijst}`

```
\makefinalpage

\end{document}
</ct-example>
```

4.4.2 uamasterthesis

```
<*mt-example>
\documentclass[a4paper,11pt,twoside,openright,english]{uamasterthesis}

\usepackage[english,dutch]{babel}

\selectlanguage{english}

\title{Minimax optimisatie voor performantieruimtemodellering}
\author{Bert Bibber}

\supervisorI{Prof. dr. ir. Kumulus (Universiteit Antwerpen)}
\supervisorII{Prof. dr. Hilarius Warwinkel (TNT-Bang, N.V.)}
\supervisorIII{ing. Piet Pienter (POM)}

\facultyacronym{TI}
\academicyear{2012-2013}
\diploma{MA-IW-EI-ICT}
\defenselocation{Antwerpen}
\defensedate{juni 2012}

\begin{document}
\selectlanguage{dutch} % or english if your text is in English

\maketitle

\frontmatter

\tableofcontents

\mainmatter
\chapter*{Inleiding}
Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do
eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad
minim veniam, quis nostrud exercitation ullamco laboris nisi ut
aliquip ex ea commodo consequat. Duis aute irure dolor in
reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla
pariatur. Excepteur sint occaecat cupidatat non proident, sunt in
culpa qui officia deserunt mollit anim id est laborum.

\chapter{Onderzoeksvraag}
```

`\section{Een beetje Cicero}`

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla pariatur?

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

At vero eos et accusamus et iusto odio dignissimos ducimus qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolores et quas molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi, id est laborum et dolorum fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam libero tempore, cum soluta nobis est eligendi optio cumque nihil impedit quo minus id quod maxime placeat facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum hic tenetur a sapiente delectus, ut aut reiciendis voluptatibus maiores alias consequatur aut perferendis doloribus asperiores repellat.

`\chapter{Literatuurstudie}`

`\chapter{Theoretische achtergrond}`

`\chapter{Eigen realisatie}`

`\chapter{Besluit}`

`\backmatter`

`\appendix`

`\chapter{Symbolen}`

`\chapter{Referentielijst}`

`\makefinalpage`

`\end{document}`

</mt-example>

5 Implementation

5.1 Class inheritance

For convenience, we'll derive everything from the standard `book` class.

Before loading the class, we provide the extra options.

```
1 <*ct>
2 \newif\if@copyright
3 \DeclareOption{copyright}{\@copyrighttrue}
4 \newif\if@qr
5 \DeclareOption{qr}{\@qrtrue}
6 </ct>

7 <*ct | mt>
8 \newif\if@titlepagenoartwork
9 \DeclareOption{titlepagenoartwork}{\@titlepagenoartworktrue}
10 \newif\if@titlepagetableonly
11 \DeclareOption{titlepagetableonly}{\@titlepagetableonlytrue}
12 \newif\if@filled
13 \DeclareOption{filled}{\@filledtrue}
14 </ct | mt>
```

We execute some standard options: We load the `book` class.

```
15 <*ct | mt>
16 \ExecuteOptions{a4paper,11pt,final,oneside,openright}
17 \ProcessOptions
18 \LoadClassWithOptions{book}
19 </ct | mt>
```

5.2 Modern typesetting

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

```
20 <*ct | mt>
21 \setlength{\parindent}{0pt}
22 \addtolength{\parskip}{0.75\baselineskip}
23 \setcounter{secnumdepth}{3}
24 </ct | mt>
```

5.3 Auxiliary packages

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

5.3.1 Geometry

Let's reduce the margins to 1 inch each.

```
25 <*ct | mt>
26 \RequirePackage[top=1in, bottom=1in, left=1in, right=1in]{geometry}
27 </ct | mt>
```

5.3.2 Font packages

The utf8 stuff has been disabled because of the barcode package that screws up on that encoding.

```
28 <*ct | mt>
29 \RequirePackage{lmodern}
30 \RequirePackage{cmbright}
31 \RequirePackage{ifluatex}
32 \RequirePackage{ifxetex}
33 \ifluatex
34 \RequirePackage{fontspec}
35 %\setmainfont{Calibri}
36 %\setsansfont{Calibri}
37 \else
38 \ifxetex
39 \RequirePackage{fontspec}
40 %\setmainfont{Calibri}
41 %\setsansfont{Calibri}
42 \else
43 \usepackage[final,expansion=true,protrusion=true,spacing=true,kerning=true]{microtype}
44 \fi
45 \fi
46 </ct | mt>
```

5.3.3 Boilerplate packages

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

```
47 <*ct | mt>
48 \RequirePackage{ifthen}
49 %\RequirePackage{ifmtarg}
50 \newcommand{\@emptymacro}{}
51 </ct | mt>
```

5.3.4 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 masterthesis:

```
52 <*ct | mt>
53 \RequirePackage{graphicx}
54 \RequirePackage{eso-pic}
55 \RequirePackage{color}
56 \RequirePackage{tikz}
57 </ct | mt>
```

In uacoursetext we also want to generate a qr code. Therefore we load the `pst-barcode` and `auto-pst-pdf` package.

```
58 <*ct>
59 \if@qr
60 \RequirePackage{pst-barcode}
61 \RequirePackage{auto-pst-pdf}
62 \fi
63 </ct>
```

5.3.5 Header/Footer

The de-facto standard for headers and footers:

```
64 <*ct | mt>
65 \RequirePackage{fancyhdr}
66 </ct | mt>
```

5.4 Colors

```
67 <*ct | mt>
68 \definecolor{uacorpbord}{cmyk}{0.00,1.00,0.60,0.37}
69 \definecolor{uacorpblue}{cmyk}{1.00,0.25,0.00,0.50}
70 \definecolor{uacorpflightblue}{cmyk}{1.00,0.00,0.08,0.13}
71 \definecolor{uacorporange}{cmyk}{0.00,0.32,1.00,0.09}
72 \definecolor{uaftifresh}{cmyk}{0.34,1.00,0.00,0.00}
73 \definecolor{uaftisober}{cmyk}{0.10,1.00,0.00,0.49}
74 \definecolor{lightgray}{cmyk}{0.00,0.00,0.00,0.05}
75 </ct | mt>
```

5.5 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.

```
76 <*ct | mt>
77 \newcommand{\@facultyacronym}{}
78 \newcommand{\@faculty}{}
79 \newcommand{\@qrfaculty}{}
80 \newcommand{\facultyacronym}[1]{
81   \renewcommand{\@facultyacronym}{#1}
82   \ifthenelse{equal{#1}{CPG}}{\renewcommand\@faculty{Centrum
83     Pieter Gillis}}{
84   \ifthenelse{equal{#1}{FBD}}{\renewcommand\@faculty{Faculteit
85     Farmaceutische, Biomedische en Diergeneeskundige Wetenschappen}}{
86   \ifthenelse{equal{#1}{GGW}}{\renewcommand\@faculty{Faculteit
87     Geneeskunde en Gezondheidswetenschappen}}{
88   \ifthenelse{equal{#1}{IOB}}{\renewcommand\@faculty{Instituut
89     voor Ontwikkelingsbeleid- en beheer}}{
90   \ifthenelse{equal{#1}{IOIW}}{\renewcommand\@faculty{Instituut
91     voor Onderwijs- en Informatiewetenschappen}}{
92   \ifthenelse{equal{#1}{LW}}{\renewcommand\@faculty{Faculteit
93     Letteren en Wijsbegeerte}}{
94   \ifthenelse{equal{#1}{OW}}{\renewcommand\@faculty{Faculteit
95     Ontwerpwetenschappen}}{
96   \ifthenelse{equal{#1}{PSW}}{\renewcommand\@faculty{Faculteit
97     Politieke en Sociale Wetenschappen}}{
98   \ifthenelse{equal{#1}{REC}}{\renewcommand\@faculty{Faculteit
99     Rechten}}{
100  \ifthenelse{equal{#1}{TEW}}{\renewcommand\@faculty{Faculteit
101    Toegepaste Economische Wetenschappen}}{
102  \ifthenelse{equal{#1}{TI}}{\renewcommand\@faculty{Faculteit
103    Toegepaste Ingenieurswetenschappen}}{
104  \ifthenelse{equal{#1}{WET}}{\renewcommand\@faculty{Faculteit
105    Wetenschappen}}{
106    \errmessage{Error: wrong faculty acronym; choose one of FBD, GGW,
107      LW, OW, PSW, REC, TEW, TI, WET}}}}}}}}}}}}}}}}}}}}}}
108 </ct | mt>
```

`\title` The title tag is native to L^AT_EX. It sets the `\@title` tag that will be used on the title page. However, in view of the qr trouble, we fiddle a little with it. In case the title contains accented characters, you also need to provide a qr version in full unicode (so without the traditional L^AT_EX accented characters).

```
109 <*ct>
110 \newcommand{\@qrtitle}{}
111 \renewcommand{\title}[1]{%
112   \renewcommand\@title{#1}
113   \ifx\@qrtitle\@emptymacro
114     \renewcommand\@qrtitle{#1}
115   \fi
116 }
```

```

117 \newcommand{\qrtitle}[1]{%
118   \renewcommand\@qrtitle{#1}
119 }
120 </ct>

```

`\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.

```

121 <*ct>
122 \newcommand{\@subtitle}{}
123 \newcommand{\qrsuubtitle}{}
124 \newcommand{\subtitle}[1]{%
125   \renewcommand\@subtitle{#1}
126   \ifx\@qrsuubtitle\@emptymacro
127     \renewcommand\@qrsuubtitle{#1}
128   \fi
129 }
130 \newcommand{\qrsuubtitle}[1]{%
131   \renewcommand\@qrsuubtitle{#1}
132 }
133 </ct>

```

`\author` The `author` tag is native to \LaTeX . It sets the `\@author` tag that will be used on the title page. However, in view of the `qr` trouble, we fiddle a little with it. In case the title contains accented characters, you also need to provide a `qr` version in full unicode (so without the traditional \LaTeX accented characters).

```

134 <*ct>
135 \newcommand{\@qrauthor}{}
136 \renewcommand{\author}[1]{%
137   \renewcommand\@author{#1}
138   \ifx\@qrauthor\@emptymacro
139     \renewcommand\@qrauthor{#1}
140   \fi
141 }
142 \newcommand{\qrauthor}[1]{%
143   \renewcommand\@qrauthor{#1}
144 }
145 </ct>

```

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

```

146 <*ct>
147 \newcommand{\@courseversion}{}
148 \newcommand{\courseversion}[1]{\renewcommand{\@courseversion}{#1}}
149 </ct>

```

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

```
150 <*ct>
151 \newcommand{\@versionyear}{}
152 \newcommand{\versionyear}[1]{\renewcommand{\@versionyear}{#1}}
153 </ct>
```

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

```
154 <*ct>
155 \newcommand{\@publisher}{Cursusdienst\
156 UNIVERSITAS\
157 Prinsesstraat 16\
158 2000 Antwerpen\
159 T +32 3 233 23 72\
160 F + 32 3 233 65 81\
161 E info@cursusdienst.be\
162 W www.cursusdienst.be}
163 \newcommand{\publisher}[1]{\renewcommand{\@publisher}{#1}}
164 </ct>
```

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

```
165 <*ct>
166 \newcommand{\@publishercode}{}
167 \newcommand{\publishercode}[1]{\renewcommand{\@publishercode}{#1}}
168 </ct>
```

`\lecturer` This macro sets many `\@lecturer` tags (max. 4) that later will be used on the title page. If there is only one teaching lecturer one can use the convenient shorthand without counter. In case the lecturer's name contains accented characters, you also need to provide a qr version in full unicode (so without the traditional L^AT_EX accented characters).

```
169 <*ct>
170 \newcommand{\@lectureri}{}
171 \newcommand{\@lecturerii}{}
172 \newcommand{\@lectureriii}{}
173 \newcommand{\@lectureriv}{}
174 \newcommand{\@qrlectureri}{}
175 \newcommand{\@qrlecturerii}{}
176 \newcommand{\@qrlectureriii}{}
177 \newcommand{\@qrlectureriv}{}
178 \newcommand{\lecturer}[1]{
179   \renewcommand{\@lectureri}{#1}
180   \ifx\@qrlectureri\@emptymacro
181     \renewcommand{\@qrlectureri}{#1}
182   \fi
```

```

183 }
184 \newcommand{\qrlecturer}[1]{
185   \renewcommand\@qrlectureri{#1}
186 }
187 \newcommand{\lectureri}[1]{
188   \renewcommand{\@lectureri}{#1}
189   \ifx\@qrlectureri\@emptymacro
190     \renewcommand\@qrlectureri{#1}
191   \fi
192 }
193 \newcommand{\qrlecturerii}[1]{
194   \renewcommand\@qrlecturerii{#1}
195 }
196 \newcommand{\lecturerii}[1]{
197   \renewcommand{\@lecturerii}{#1}
198   \ifx\@qrlecturerii\@emptymacro
199     \renewcommand\@qrlecturerii{#1}
200   \fi
201 }
202 \newcommand{\qrlectureriii}[1]{
203   \renewcommand\@qrlectureriii{#1}
204 }
205 \newcommand{\lectureriii}[1]{
206   \renewcommand{\@lectureriii}{#1}
207   \ifx\@qrlectureriii\@emptymacro
208     \renewcommand\@qrlectureriii{#1}
209   \fi
210 }
211 \newcommand{\qrlectureriiii}[1]{
212   \renewcommand\@qrlectureriiii{#1}
213 }
214 \newcommand{\lectureriv}[1]{
215   \renewcommand{\@lectureriv}{#1}
216   \ifx\@qrlectureriv\@emptymacro
217     \renewcommand\@qrlectureriv{#1}
218   \fi
219 }
220 \newcommand{\qrlectureriv}[1]{
221   \renewcommand\@qrlectureriv{#1}
222 }
223 </ct>

```

\supervisor This macro sets many \@supervisor tags (max. 4) that later will be used on the title page. If there is only one supervisor one can use the convenient shorthand without counter.

```

224 <*mt>
225 \newcommand{\@supervisorI}{}
226 \newcommand{\@supervisorII}{}
227 \newcommand{\@supervisorIII}{}

```

```

228 \newcommand{\@supervisoriv}{}
229 \newcommand{\supervisor}[1]{\renewcommand{\@supervisorI}{#1}}
230 \newcommand{\supervisorI}[1]{\renewcommand{\@supervisorI}{#1}}
231 \newcommand{\supervisorII}[1]{\renewcommand{\@supervisorII}{#1}}
232 \newcommand{\supervisorIII}[1]{\renewcommand{\@supervisorIII}{#1}}
233 \newcommand{\supervisoriv}[1]{\renewcommand{\@supervisoriv}{#1}}
234 </mt>

```

`\programme` This macro sets the `\@programme` tags that later will be used on the title page. The involved way of repeatedly calling the `renewcommand` to set the tags is required for inclusion of the data as QR data.

```

235 <*ct>
236 \newcommand{\@programmet}{} % type
237 \newcommand{\@programmec}{} % class
238 \newcommand{\@programmecqr}{} % class for qr code
239 \newcommand{\@programmes}{} % class
240 \newcommand{\@programmeq}{} % qualifier
241 \newcommand{\programme}[3]{%
242   \ifthenelse{\equal{#1}{BA}}{%
243     {\renewcommand{\@programmet}{Bachelor of Science in de }}{%
244     \ifthenelse{\equal{#1}{MA}}{%
245       {\renewcommand{\@programmet}{Master of Science in de }}{%
246       \ifthenelse{\equal{#1}{VP}}{%
247         {\renewcommand{\@programmet}{Voorbereidingsprogramma voor Master of Science in de }}{%
248         \ifthenelse{\equal{#1}{SP}}{%
249           {\renewcommand{\@programmet}{Schakelprogramma voor Master of Science in de }}{%
250           \ifthenelse{\equal{#1}{FREE}}{%
251             {}{
252             \errmessage{Error in 1st arg of macro programme[3]: invalid
253               programme type!}}}}}}}%
254           %
255           \ifthenelse{\equal{#2}{IW}}{%
256             {\renewcommand{\@programmec}{industri\ "ele wetenschappen}
257             \renewcommand{\@programmecqr}{industriële wetenschappen}}{
258             \ifthenelse{\equal{#2}{}}{%
259               {}{
260               \errmessage{{Error in 2nd arg of macro programme[3]: invalid
261                 programme class! }}}}}}%
262             %
263             \ifthenelse{\equal{#3}{BK}}{%
264               {\renewcommand{\@programmeq}{bouwkunde}}{%
265               \ifthenelse{\equal{#3}{CH}}{%
266                 {\renewcommand{\@programmeq}{chemie}}{%
267                 \ifthenelse{\equal{#3}{BCH}}{%
268                   {\renewcommand{\@programmeq}{biochemie}}{%
269                   \ifthenelse{\equal{#3}{EM}}{%
270                     {\renewcommand{\@programmeq}{elektromechanica}}{%
271                     \ifthenelse{\equal{#3}{EI}}{%

```

```

272   {\renewcommand{\@programmeq}{elektronika-ICT}}{%
273   \ifthenelse{\equal{#3}{}}%
274   {}{%
275   \ifthenelse{\equal{#1}{FREE}}
276   {\renewcommand{\@programmeq}{#3}}{
277   \errmessage{Error in 3rd arg to macro programme[3]: invalid
278   programme qualifier}}}}}}}%
279   %
280   \ifthenelse{\equal{#2}{IW}\and\not\equal{#3}{}}
281   {\renewcommand{\@programmes}{: }}{}
282 }
283 </ct>

```

`\course` This macro sets many `\@coursecode` and `\@course` tags (max. 4) that later will be used on the title page. If there is only one course code one can use the convenient shorthand without counter.

```

284 <*ct>
285 \newcommand{\@coursecodei}{}
286 \newcommand{\@coursecodeii}{}
287 \newcommand{\@coursecodeiii}{}
288 \newcommand{\@coursecodeiv}{}
289 \newcommand{\@coursei}{}
290 \newcommand{\@courseii}{}
291 \newcommand{\@courseiii}{}
292 \newcommand{\@courseiv}{}
293 \newcommand{\@qrcoursei}{}
294 \newcommand{\@qrcourseii}{}
295 \newcommand{\@qrcourseiii}{}
296 \newcommand{\@qrcourseiv}{}
297 \newcommand{\course}[2]{
298   \renewcommand{\@coursecodei}{#1}
299   \renewcommand{\@coursei}{#2}
300   \ifx\@qrcoursei\@emptymacro
301   \renewcommand{\@qrcoursei}{#2}
302   \fi
303 }
304 \newcommand{\qrcourse}[1]{
305   \renewcommand{\@qrcoursei}{#1}
306 }
307 \newcommand{\course}[2]{
308   \renewcommand{\@coursecodei}{#1}
309   \renewcommand{\@coursei}{#2}
310   \ifx\@qrcoursei\@emptymacro
311   \renewcommand{\@qrcoursei}{#2}
312   \fi
313 }
314 \newcommand{\qrcoursei}[1]{
315   \renewcommand{\@qrcoursei}{#1}
316 }

```

```

317 \newcommand{\courseii}[2]{
318   \renewcommand{\@coursecodeii}{#1}
319   \renewcommand{\@courseii}{#2}
320   \ifx\@qrcourseii\@emptymacro
321     \renewcommand{\@qrcourseii}{#2}
322   \fi
323 }
324 \newcommand{\qrcourseii}[1]{
325   \renewcommand{\@qrcourseii}{#1}
326 }
327 \newcommand{\courseiii}[2]{
328   \renewcommand{\@coursecodeiii}{#1}
329   \renewcommand{\@courseiii}{#2}
330   \ifx\@qrcourseiii\@emptymacro
331     \renewcommand{\@qrcourseiii}{#2}
332   \fi
333 }
334 \newcommand{\qrcourseiii}[1]{
335   \renewcommand{\@qrcourseiii}{#1}
336 }
337 \newcommand{\courseiv}[2]{
338   \renewcommand{\@coursecodeiv}{#1}
339   \renewcommand{\@courseiv}{#2}
340   \ifx\@qrcourseiv\@emptymacro
341     \renewcommand{\@qrcourseiv}{#2}
342   \fi
343 }
344 \newcommand{\qrcourseiv}[1]{
345   \renewcommand{\@qrcourseiv}{#1}
346 }
347 </ct>

```

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

```

348 <*mt>
349 \newcommand{\@diploma}{ERROR}
350 \newcommand{\diploma}[1]{
351   \newcommand{\MoSIW}{Master of Science in de industri"ele wetenschappen}
352   \renewcommand{\@diploma}{
353     \ifthenelse{\equal{#1}{MA-IW-BK}}{
354       {\MoSIW: bouwkunde}{
355     \ifthenelse{\equal{#1}{MA-IW-BCH}}{
356       {\MoSIW: biochemie}{
357     \ifthenelse{\equal{#1}{MA-IW-CH}}{
358       {\MoSIW: chemie}{
359     \ifthenelse{\equal{#1}{MA-IW-EI}}{
360       {\MoSIW: elektronica-ICT}{
361     \ifthenelse{\equal{#1}{MA-IW-EI-AE}}{
362       {\MoSIW:\\elektronica-ICT, afstudeerrichting automotive engineering}{
363     \ifthenelse{\equal{#1}{MA-IW-EI-ICT}}

```

```

364             {\MoSIW:\\elektronica-ICT, afstudeerrichting ICT}{
365 \ifthenelse{\equal{#1}{MA-IW-EM-AE}}
366             {\MoSIW:\\elektromechanica, afstudeerrichting automotive engineering}
367 \ifthenelse{\equal{#1}{MA-IW-EM-AU}}
368             {\MoSIW\\elektromechanica, afstudeerrichting automatisering}{
369 \ifthenelse{\equal{#1}{MA-IW-EM-EM}}
370             {\MoSIW\\elektromechanica, afstudeerrichting elektromechanica}
371 {\errmessage{Error in argument to macro diploma: must be one of MA-IW-XXX with XXX one of B
372 }
373 }
374 \
```

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

```

375 \*mt
376 \newcommand{\@defensedate}{ERROR}
377 \newcommand{\defensedate}[1]{\renewcommand{\@defensedate}{#1}}
378 \
```

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

```

379 \*mt
380 \newcommand{\@defenselocation}{Antwerpen}
381 \newcommand{\defenselocation}[1]{\renewcommand{\@defenselocation}{#1}}
382 \
```

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

```

383 \*ct | mt
384 \newcommand{\@academicyear}{XXX-YYYY}
385 \newcommand{\academicyear}[1]{\renewcommand{\@academicyear}{#1}}
386 \
```

`\copyrightnotices`

```

387 \*ct
388 \newcommand{\@copyrightnotices}{}
389 \newcommand{\copyrightnotices}[1]{\renewcommand{\@copyrightnotices}{#1}}
390 \
```

5.6 Header and Footer

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

```

391 \*ct
392 \if@twoside
```

```

393 \lhead[\thepage]{\slshape\rightmark}
394 \chead[]{}
395 \rhead[\slshape\leftmark]{\thepage}
396 \lfoot[Universiteit Antwerpen -- \@facultyacronym]{\@courseversion}
397 \cfoot[]{}
398 \rfoot[]{\@title}\ifmtarg{\@subtitle}{}{ --- \@subtitle}}
399 \else
400 \lhead[]{\leftmark}
401 \chead[]{}
402 \rhead[]{\thepage}
403 \lfoot[]{\@courseversion}
404 \cfoot[]{UA--\@facultyacronym}
405 \rfoot[]{\@title}}
406 \fi
407 </ct>

```

The header and footer of the `uamasterthesis` package are defined to be:

```

408 <*mt>
409 \if@twoside
410 \lhead[\thepage]{\slshape\rightmark}
411 \chead[]{}
412 \rhead[\slshape\leftmark]{\thepage}
413 \lfoot[Universiteit Antwerpen -- \@facultyacronym]{}
414 \cfoot[]{}
415 \rfoot[]{\@title}}
416 \else
417 \lhead[]{\leftmark}
418 \chead[]{}
419 \rhead[]{\thepage}
420 \lfoot[]{}
421 \cfoot[]{UA--\@facultyacronym}
422 \rfoot[]{\@title}}
423 \fi
424 </mt>

```

Some common code remains:

```

425 <*ct | mt>
426 \setlength{\headheight}{13.7pt}
427 \renewcommand{\headrulewidth}{1pt}
428 \renewcommand{\footrulewidth}{1pt}
429 \pagestyle{fancy}
430 \if@filleled\else
431 \raggedright
432 \fi
433 \raggedbottom
434 \pagenumbering{arabic}
435 \onecolumn
436 </ct | mt>

```

5.7 Copyright notice

`\@crnotice`

```
437 <*ct>
438 \newcommand{\@crnotice}{
439   This document has been typeset using \LaTeX{} and the
440   \texttt{uacoursetext} class.\@
441   \@copyrightnotices
442
443   \@courseversion
444
445   CONFIDENTIAL AND PROPRIETARY.
446
447   \copyright{} \@versionyear{} Universiteit Antwerpen, All rights reserved.
448 }
449 </ct>
```

5.8 Title page

`\maketitle` 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.

The UA house style works with large-radius circles. We need some math in order to calculate center points and radiuses

Header circle: the blue header-circle on top of the page. We calculate the center point and the radius based on:

- the fact that the center point is above the page's left edge;
- the distance of the intersection points at the left and right edge of the page with respect to the top of the page, X and Y respectively;
- the width of the page W .

Some simple trigonometry leads to the elevation of the center point above the top of the page Q and the radius R :

$$R = \frac{W^2 + (X - Y)^2}{2(X - Y)} \quad (1)$$

$$Q = R - X \quad (2)$$

We labeled the variables in the code below with a prefix `ua@` and a suffix `h` (from 'header'). We also took the paperheight into account (the page's coordinate system origins at the left bottom). Therefore:

```

450 <*ct | mt>
451 \pgfmathsetmacro{\ua@Wh}{\paperwidth}
452 \pgfmathsetmacro{\ua@Xh}{0.2\paperheight}
453 \pgfmathsetmacro{\ua@Yh}{0.125\paperheight}
454 \pgfmathsetmacro{\ua@XMYh}{\ua@Xh-\ua@Yh}
455 \pgfmathsetmacro{\ua@Rh}{0.5*\ua@Wh/\ua@XMYh*\ua@Wh+0.5*\ua@XMYh}
456 \pgfmathsetmacro{\ua@Qh}{\ua@Rh-\ua@Xh+\paperheight}
457 </ct | mt>

```

Bottom circle A: the bottom circle with the largest radius. We calculate the center point and the radius based on:

- the fact that the center point is at a distance of $3/5$ page width from the right page edge. We denote that distance as W ;
- the fact that the horizontal bottom tangent line of the circle is at a specific height above the bottom page edge, labeled S ;
- the distance of the intersection points at the right edge of the page with respect to the horizontal bottom tangent line of the circle, denoted as $X - Y$.

Given these definitions, almost the same equations as for the header circle hold:

$$R = \frac{W^2 + (X - Y)^2}{2(X - Y)} \quad (3)$$

$$Q = R + S \quad (4)$$

with R the circle's radius, and Q the elevation of the center point above the page's bottom.

We labeled the variables in the code below with a prefix `ua@` and a suffix `ba` (from 'bottom a'). Therefore:

```

458 <*ct | mt>
459 \pgfmathsetmacro{\ua@Wba}{0.4*\paperwidth}
460 \pgfmathsetmacro{\ua@Sba}{0.125*\paperheight}
461 \pgfmathsetmacro{\ua@XMYba}{0.02\paperheight}
462 \pgfmathsetmacro{\ua@Rba}{0.5*\ua@Wba/\ua@XMYba*\ua@Wba+0.5*\ua@XMYba}
463 \pgfmathsetmacro{\ua@Qba}{\ua@Rba+\ua@Sba}
464 </ct | mt>

```

Bottom circle B: the bottom circle with the smallest radius. The same reasoning leads to:

```

465 <*ct | mt>
466 \pgfmathsetmacro{\ua@Wbb}{0.65*\paperwidth}
467 \pgfmathsetmacro{\ua@Sbb}{0.14*\paperheight}

```

```

468 \pgfmathsetmacro{\ua@XMYbb}{0.06\paperheight}
469 \pgfmathsetmacro{\ua@Rbb}{0.5*\ua@Wbb/\ua@XMYbb*\ua@Wbb+0.5*\ua@XMYbb}
470 \pgfmathsetmacro{\ua@Qbb}{\ua@Rbb+\ua@Sbb}
471 </ct | mt>

```

Text alignment’: The text is aligned around an imaginary vertical line around 2/5 page width distance from the left edge.

```

472 <*ct | mt>
473 \pgfmathsetmacro{\ua@l1}{0.15*\paperwidth}
474 \pgfmathsetmacro{\ua@l}{0.4*\paperwidth}
475 \pgfmathsetmacro{\ua@d}{0.1in}
476 \pgfmathsetmacro{\ua@rr}{0.85*\paperwidth}
477 </ct | mt>

```

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

```

478 <*ct>
479 \newcommand\sprtr{ / }
480 \newcommand\myqrdata{
481 I: Universiteit Antwerpen\string\n
482 F: \@qrfaculty\string\n
483 P: \@programmet \@programmeqr \@programmeq\string\n
484 C: \@coursecodei \@qrcoursei
485 \sprtr
486 \@coursecodeii \@qrcourseii
487 \sprtr
488 \@coursecodeiii \@qrcourseiii
489 \sprtr
490 \@coursecodeiv \@cqrourseiv
491 \string\n
492 Y: \@academicyear\string\n
493 T: \@qrtitle\string\n
494 S: \@qrsubtitle\string\n
495 A: \@qrauthor\string\n
496 L: \@qrlectureri
497 \sprtr
498 \@qrlecturerii
499 \sprtr
500 \@qrlectureriii
501 \sprtr
502 \@qrlectureriv}
503 \newsavebox{\myqrcode}
504 \renewcommand\maketitle{%
505 \pagestyle{empty}
506 \begin{titlepage}
507 \if@qr
508 \savebox{\myqrcode}[2.7in][t]{
509 \begin{pspicture}(2.7in,2.7in)

```

```

510     \psbarcode{\myqrdata}{version=22 encoding=byte elevel=M}{qrcode}
511     \end{pspicture}
512 }
513 \else
514 \savebox{\myqrcode}[2.7in][t]{}
515 \fi
516 \if@titlepagetableonly
517 Dit is een cursustekst van Universiteit Antwerpen.\
518 Het titelblad dient opgemaakt te worden met de volgende gegevens:
519 \begin{center}
520     \begin{tabular}{|l|l|}
521         \hline
522         \bfseries I & Universiteit Antwerpen \\ \hline
523         \bfseries F & \@faculty \\ \hline
524         \bfseries P & \parbox[t]{14cm}{\@programmet
525             \@programmec\@programmes \@programmeq} \\ \hline
526         \bfseries C & \parbox[t]{14cm}{
527             \texttt{\@coursecodei} \@coursei\\
528             \texttt{\@coursecodeii} \@courseii\\
529             \texttt{\@coursecodeiii} \@courseiii\\
530             \texttt{\@coursecodeiv} \@courseiv} \\ \hline
531         \bfseries Y & \@academicyear \\ \hline
532         \bfseries T & \parbox[t]{14cm}{\@title} \\ \hline
533         \bfseries S & \parbox[t]{14cm}{\@subtitle} \\ \hline
534         \bfseries A & \parbox[t]{14cm}{\@author} \\ \hline
535         \bfseries L & \parbox[t]{14cm}{\@lectureri\\
536             \@lecturerii\\
537             \@lectureriii\\
538             \@lectureriv} \\ \hline
539     \end{tabular}
540 \end{center}
541 ~\
542 Waarbij: I = instelleng, F = faculteit, P = programma, C =
543 cursusmodule, T = titel, S = subtitel, A = auteur(s), L =
544 lesgever(s)\
545 Deze informatie is ook gecodeerd in de onderstaande QR-code.\
546 \if@qr
547 \vspace*{1cm}
548 \usebox{\myqrcode}
549 \fi
550 \else
551 \AddToShipoutPicture*{%
552     \setlength{\unitlength}{1cm}
553     \put(0,0){%
554         \begin{tikzpicture}[inner sep=0pt]
555             \clip (0,0) rectangle(\paperwidth,\paperheight);
556             \if@titlepagenoartwork\else
557             \filldraw [uacorpbord] (0.55\paperwidth,\ua@Qba pt) circle (\ua@Rba pt);
558             \filldraw [white] (0.35\paperwidth,\ua@Qbb pt) circle (\ua@Rbb pt);
559             \filldraw [uacorpblue] (0,\ua@Qh pt) circle (\ua@Rh pt);

```

```

560     \path
561     (0.95\paperwidth,0.1\paperheight)
562     node [anchor=north east] {
563         \includegraphics[width=0.25\paperwidth]{ua_color}};
564     \fi
565     \path
566     (\ua@l pt -\ua@d pt,0.77\paperheight)
567     node [anchor=north east, text width=0.35\paperwidth] {
568         \begin{flushright}
569             UNIVERSITEIT ANTWERPEN\~\
570             Academiejaar \@academicyear
571         \end{flushright}}
572     (\ua@l pt +\ua@d pt,0.65\paperheight)
573     node [anchor = north west, text width = 0.55\paperwidth] {
574         {\large \@faculty{}}\}[0.05\paperheight]
575         {\huge \bf \@title{}}\}[2ex]
576         {\Large \bf \@subtitle{}}\}[3ex]
577         {\Large \bf \@author{}}}
578     (\ua@l pt +\ua@d pt,0.45\paperheight)
579     node [anchor = north west, text width = 0.55\paperwidth] {
580         \@lectureri~\
581         \@lecturerii~\
582         \@lectureriii~\
583         \@lectureriv}
584     (\ua@l pt +\ua@d pt,0.35\paperheight)
585     node [anchor = north west, text width = 0.55\paperwidth] {
586         {\bf \@programmet \ \@programmec\@programmes \@programmeq}}
587     (\ua@l pt +\ua@d pt,0.30\paperheight)
588     node [anchor = north west, text width = 0.55\paperwidth] {
589         \texttt{\@publishercode}\~\~\
590         \texttt{\@coursecodei{}} \@coursei~\
591         \texttt{\@coursecodeii{}} \@courseii~\
592         \texttt{\@coursecodeiii{}} \@courseiii~\
593         \texttt{\@coursecodeiv{}} \@courseiv}
594     (\ua@l pt - 2\ua@d pt, 0.368\paperheight)
595     node [anchor = north east, text width = 0.35\paperwidth] {
596         {\normalsize\begin{flushright}
597             \@publisher{
598             \end{flushright}}};
599     \end{tikzpicture}
600 }
601 }%
602 \phantom{Do not remove: this causes an empty title page to be
603 generated}
604 \fi
605 \end{titlepage}%
606 \clearpage
607 \if@copyright
608 \AddToShipoutPicture{
609     \put(0,0){%

```

```

610     \begin{tikzpicture}[inner sep=0pt]
611         \clip (0,0) rectangle(\paperwidth,\paperheight);
612         \path
613             (0.5\paperwidth,0.5\paperheight)
614             node [anchor=center, rotate=55, color=lightgray] {
615                 \Huge Copyright Universiteit Antwerpen, All Rights Reserved
616             };
617     \end{tikzpicture}
618 }
619 }
620 \fi
621 \vspace*{\stretch{1}}
622 \@crnotice
623 \clearpage
624 \setcounter{footnote}{0}%
625 \global\let\thanks\relax
626 \global\let\maketitle\relax
627 \global\let\@thanks\@empty
628 \global\let\title\relax
629 \global\let\author\relax
630 \global\let\date\relax
631 \global\let\and\relax
632 \pagestyle{fancy}
633 \thispagestyle{empty}
634 }
635 </ct>

```

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

```

636 <*ct>
637 \newcommand\makefinalpage{
638     \if@titlepagetableonly
639     \else
640     \if@qr
641     \savebox{\myqrcode}{
642         \begin{pspicture}(2.7in,2.7in)
643             \psbarcode{\myqrdata}{version=22 encoding=byte elevel=M}{qrcode}
644         \end{pspicture}
645     }
646     \else
647     \savebox{\myqrcode}[2.7in][t]{
648     \fi
649     \cleardoublepage
650     \thispagestyle{empty}
651     \AddToShipoutPicture*{%
652         \setlength{\unitlength}{1cm}
653         \put(0,0){%
654             \begin{tikzpicture}[inner sep=0pt]
655                 \clip (0,0) rectangle(\paperwidth,\paperheight);
656                 \if@titlepagenoartwork\else

```

```

657     \filldraw [uacorpblue] (\paperwidth,\ua@Qh pt) circle (\ua@Rh pt);
658     \fi
659     \path
660     (0.1\paperwidth,0.1\paperheight)
661     node [anchor = south west, text width = 0.6\paperwidth] {
662         CONFIDENTIAL AND PROPRIETARY\~\
663         \copyright{} \@versionyear{} Universiteit Antwerpen,
664         All rights reserved.}
665     (0.9\paperwidth,0.1\paperheight)
666     node [anchor = south east] {
667         \if@qr
668         \usebox{\myqrcode}
669         \fi
670     };
671     \end{tikzpicture}
672 }
673 }
674 \phantom{Do not remove: this causes an empty final page to be
675 generated}
676 \fi
677 }
678 </ct>

```

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

```

679 <*mt>
680 \renewcommand\maketitle{%
681     \pagestyle{empty}
682     \begin{titlepage}
683         \AddToShipoutPicture*{%
684             \setlength{\unitlength}{1cm}
685             \put(0,0){%
686                 \begin{tikzpicture}[inner sep=0pt]
687                     \clip (0,0) rectangle(\paperwidth,\paperheight);
688                     \if@titlepagenoartwork\else
689                     \filldraw [lightgray] (0.55\paperwidth,\ua@Qba pt) circle (\ua@Rba pt);
690                     \filldraw [white] (0.35\paperwidth,\ua@Qbb pt) circle (\ua@Rbb pt);
691                     \filldraw [lightgray] (0,\ua@Qh pt) circle (\ua@Rh pt);
692                     \path
693                     (0.95\paperwidth,0.1\paperheight)
694                     node [anchor=north east] {
695                         \includegraphics[width=0.25\paperwidth]{ua_color}};
696                     \fi
697                     \path
698                     (\ua@ll pt,0.77\paperheight)
699                     node [anchor=north west, text width=0.7\paperwidth] {
700                         UNIVERSITEIT ANTWERPEN\~\
701                         Academiejaar \@academicyear\~\
702                         {\large \@faculty}}\~\
703                         Masterproef\|[0.05\paperheight]

```

```

704         {\Large \bf \@title{}}
705         (\ua@11 pt,0.55\paperheight)
706         node [anchor = north west, text width = 0.7\paperwidth] {
707             {\large \bf \@author{}}\~\~\~\~\
708             \begin{tabular}{@{}p{2.5cm}p{11cm}}
709                 \textbf{Promotoren:}
710                 & \@supervisor1 \
711                 & \@supervisor2 \
712                 & \@supervisor3 \
713                 & \@supervisor4
714             \end{tabular}
715         }
716         (\ua@11 pt,0.3\paperheight) node [anchor=north west, text width = 0.7\paperwidth]{%
717             Proefschrift tot het behalen van de graad van\
718             \@diploma\
719             \@defenselocation, \@defensedate
720         };
721         \end{tikzpicture}
722     }
723 }%
724 \phantom{Do not remove: this causes an empty title page to be
725 generated}
726 \end{titlepage}%
727 \clearpage
728 \setcounter{footnote}{0}%
729 \global\let\thanks\relax
730 \global\let\maketitle\relax
731 \global\let\@thanks\@empty
732 \global\let\title\relax
733 \global\let\author\relax
734 \global\let\date\relax
735 \global\let\and\relax
736 \pagestyle{fancy}
737 \thispagestyle{empty}
738 % \end{tikzpicture}
739 % }
740 % }%
741 % \phantom{Do not remove: this causes an empty title page to be generated}
742 % \end{titlepage}%
743 % \if@twoside
744 % \cleardoublepage
745 % \else
746 % \clearpage
747 % \fi
748 % \setcounter{footnote}{0}%
749 % \global\let\thanks\relax
750 % \global\let\maketitle\relax
751 % \global\let\@thanks\@empty
752 % \global\let\title\relax
753 % \global\let\author\relax

```

```

754 % \global\let\date\relax
755 % \global\let\and\relax
756 % \pagestyle{fancy}
757 % \thispagestyle{empty}
758 }
759 </mt>

```

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

```

760 <*mt>
761 \newcommand\makefinalpage{
762   \cleardoublepage
763   \thispagestyle{empty}
764   \AddToShipoutPicture*{%
765     \setlength{\unitlength}{1cm}
766     \put(0,0){%
767       \begin{tikzpicture}[inner sep=0pt]
768         \clip (0,0) rectangle(\paperwidth,\paperheight);
769         \if@titlepagenoartwork\else
770         \filldraw [lightgray] (\paperwidth,\ua@Qh pt) circle (\ua@Rh pt);
771         \fi
772       \end{tikzpicture}
773     }
774   }
775   \phantom{Do not remove: this causes an empty final page to be
776     generated}
777 }
778 </mt>

```

5.9 References

```

779 <*ct | mt>
780 \IfFileExists{varioref.sty}{\RequirePackage{varioref}}{}
781 </ct | mt>
782 %
783 <*ct>
784 \IfFileExists{hyperref.sty}{
785   \RequirePackage{hyperref}
786   \hypersetup{
787     backref=true,
788     breaklinks=true,
789     colorlinks=true,
790     citecolor=black,
791     filecolor=black,
792     hyperindex=true,
793     linkcolor=black,
794     pageanchor=true,
795     pagebackref=true,
796     pagecolor=black,

```

```

797     pdfpagemode=UseOutlines,
798     urlcolor=black
799   }
800   \AtBeginDocument{
801     \hypersetup{
802       pdftitle={\@title},
803       pdfsubject={\@subtitle},
804       pdfauthor={\@author}
805     }
806   }
807 }{}
808 </ct>
809 %
810 %
811 <*mt>
812 \IfFileExists{hyperref.sty}{
813   \RequirePackage{hyperref}
814   \hypersetup{
815     backref=true,
816     breaklinks=true,
817     colorlinks=true,
818     citecolor=black,
819     filecolor=black,
820     hyperindex=true,
821     linkcolor=black,
822     pageanchor=true,
823     pagebackref=true,
824     pagecolor=black,
825     pdfpagemode=UseOutlines,
826     urlcolor=black
827   }
828   \AtBeginDocument{
829     \hypersetup{
830       pdftitle={\@title},
831       pdfsubject={Master's Thesis},
832       pdfauthor={\@author}
833     }
834   }
835 }{}
836 </mt>

```

Change History

v1.0		Added option titlepagenoart-
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class	1	
Added option qr	14	Added option titlepagetableonly 14

v1.1		gramme's name (e-umlaut) . . . 23
General: Small bugfixes and 'filled'	v1.2	General: Added lmodern package
option 1		and increased headheight to
Added option user documenta-		13.7pt to please Fancyhdr 1
tion 4		Added lmodern package to please
Made raggedright conditional on		MikTeX 15
option 'filled', because it can't		Increased headheight to please
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