Welcome to the Graduate School!

This booklet contains everything you need to know about the track Structural Engineering and Design (SED).

TRACK SED

The track Structural Engineering and Design (SED) of the master program ABP prepares you for a profession such as a structural engineer, researcher or construction manager.

The two-year track consists of multiple components for a total of 120 credits (ECTS). The core courses of the SED track focus on knowledge and application of structural materials as well as several methods to solve mechanical problems. By choosing courses, design- and research projects in the elective space, you can acquire individual knowledge and competences within the specific fields.

Core courses 25 credits
Specialization electives 30 credits
Electives 20 credits
Graduation project 45 credits

See the next page for an overview of the program’s contents.

SPECIALIZATION AND GRADUATION

To complete your education you must do a Graduation Project (45 ECTS). You can graduate on a topic of your interest, following the specialization courses you chose. Contact one of the professors to discuss the possibilities and to create a graduation plan.

Research topic | Professor(s)
--- | ---
Aluminum structures | J. Maljaars
Applied mechanics | A.S.J. Suiker, H. Hofmeyer*
Concrete structures | T.A.M. Salet, S.N.M. Wijte
Glass structures | J.L.I.F. Belis
Innovative structural design | P.M. Teuffel
Masonry structures | A.T. Vermeltfoort*
Steel structures | H.H. Snijder
Structural Design | S.P.G. Moonen*

* Associate professor

Good to know:
- Check the Education Guide (educationguide.tue.nl/gs/abp) for the complete ABP-CME course overview, including all elective courses.
- In the space for elective courses, you may choose courses from other tracks.
- You can follow one of the certificate programs if you are interested in the subjects of Construction Technology, Building Design & Technology and/or Circular Design in the Built Environment.
- Graduation projects start every quartile and normally take 3 quartiles to complete.
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PROGRAM

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Quarter</th>
<th>ECTS</th>
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</thead>
<tbody>
<tr>
<td>7KP3M0</td>
<td>Advanced steel and aluminum structures</td>
<td>2</td>
<td>5</td>
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<tr>
<td>7KP4M0</td>
<td>Advanced concrete structures</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>7PP5M0</td>
<td>Resource Efficient Structural Design</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>7KP6M0</td>
<td>Energy and finite element methods</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>7KP7M0</td>
<td>Stability of Structures</td>
<td>4</td>
<td>5</td>
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Choose 30 ECTS out of 52.5 ECTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Quarter</th>
<th>ECTS</th>
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</thead>
<tbody>
<tr>
<td>7KP1M0</td>
<td>Research project</td>
<td>1-2 / 3-4</td>
<td>10</td>
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<tr>
<td>7KP2M0</td>
<td>Design project Large Span Structures</td>
<td>1-2 / 3-4</td>
<td>10</td>
</tr>
<tr>
<td>7KS2M0</td>
<td>Design project High Rise Building</td>
<td>3-4</td>
<td>10</td>
</tr>
<tr>
<td>7KT1M0</td>
<td>Geotechnics, Soil Mechanics and Seismic structural design</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>7KT2M0</td>
<td>Structural design, capita selecta</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>7KT3M0</td>
<td>Structural design with glass and other materials</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7PP3M0</td>
<td>Timber Structures</td>
<td>1</td>
<td>2.5</td>
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<tr>
<td>7PP5M0</td>
<td>Masonry structures</td>
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<td>2.5</td>
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Electives 20

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<th>Course Code</th>
<th>Course Title</th>
<th>Quarter</th>
<th>ECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7KP4M0</td>
<td>Graduation Project SED</td>
<td></td>
<td>45</td>
</tr>
</tbody>
</table>

Total: 120

Good to know:

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- In the space for elective courses, you may choose courses from other tracks.
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INTERNATIONAL EXPERIENCE?

We recommend you to go abroad for a study semester or a 15 ECTS research internship. Check the Education Guide or contact Henny Houben (VRT 2.12, H.a.m.Houben@tue.nl).

INTERNALS

You can also do an internship in the Netherlands in the space for electives. Depending on the internship you can earn 5 ECTS (relevant work experience) or 15 ECTS (academic research).

Handy! Cut this folded page and use the calendar on the back side as a bookmark for your agenda.
COACHING AND ADVICE
As a TU/e student, you are responsible for your own study progress and we expect a pro-active attitude. Of course, we will help you when needed.

During the master you can discuss your personal study plan, career possibilities and elective choices with your mentor. Please contact the coordinator of the unit SED (Faas Moonen, s.p.g.moonen@tue.nl), who will assign a mentor to you.

Should you have questions regarding the curriculum, your study progress, or any personal circumstances, please visit the Education & Student Affairs Office. Here you can also make an appointment with the academic advisor.

TO-DO LIST
Start of well and check this list!

☐ Familiarize yourself with the ABP-CME course overview in the Education Guide to find out which electives, possibly belonging to other tracks, you would like to follow.

☐ Seek out possibilities for a study semester or internship abroad. Check the Education Guide or contact Henny Houben (VRT 2.12, h.a.m.houben@tue.nl).

☐ Make your personal study plan (PSP). This plan is the basis for your master and consists of all your courses and projects, as well as your planning. Deliver the PSP to the Education & Student Affairs Office.

☐ Take the Diagnostic Test of Professional Skills (sent to you by email) and create your skills development plan.

MORE INFORMATION
Education & Student Affairs Office
(Built Environment)
Vertigo 2.12 (12:00-13:30)
esa.be@tue.nl

And check out these webpages:

- Education Guide for information about the curriculum, regulations (PER!) and more (educationguide.tue.nl/gs/abp)
- OSIRIS for a complete course catalogue, your exam results and your study progress (via MyTU/e or osiris.tue.nl)
- CANVAS here you can find the study guide with the planning and assignments for your courses (via MyTU/e or canvas.tue.nl)
- Intranet for information about the department and facilities such as the student workshop (intranet.tue.nl/BE)

Suggestions for improvements and complaints
In order to improve our education we need your help! Please fill in our course evaluations and send suggestions for improvements and complaints to the Master coordinator Koos Blankestijn (j.blankestijn@tue.nl).

Complaints on examinations can be sent to the Examination Committee (ec.be@tue.nl)