Considering the fact that the TU/e Bachelor College Guideline must be replaced due to several changes within the Bachelor College,

the Executive Board of Eindhoven University of Technology (TU/e)

hereby decides on April 28, 2016 to withdraw the Bachelor College Guideline adopted on April 30, 2015 and replace it with the

TU/e Bachelor College Guideline 2016

(1) Structure of Bachelor’s degree programs

• The revised Bachelor’s degree programs commenced in September 2012. In 2012-2013, the first year of the Bachelor’s programs was offered for the first time. The second year of the revised Bachelor’s programs was offered in 2013-2014, and the third year of the revised Bachelor’s programs was offered for the first time in 2014-2015.

• Learning outcomes have been formulated for all majors by the departments offering them and have been included in the Program and Examination Regulations (OER).

• For coherent elective packages learning outcomes have been formulated by the responsible departments and have been included in the course information (course guides) of the responsible departments and the study guides for the relevant study components.

• Each major represents 90 credits’ worth of study components, in which the three key elements of ‘gaining knowledge’, ‘practising knowledge,’ and ‘applying knowledge’ are covered adequately. Each study component is worth 5 credits and is scheduled within 1 quartile. The exception to this is the Bachelor’s final project, which is worth 10 credits. Each study component constitutes an integrated whole. No parts of a study component shall be completed and awarded credits separately.

• A quartile nominally consists of three study components worth 5 credits, which is equivalent to a nominal study load of 15 credits per quartile.

• A quartile consists of ten weeks. Within each quartile, eight weeks are reserved for teaching, and two weeks for final tests. The content of the study component must be completed within the specified time. The eighth week should be used to revise the material and give feedback. Activating education methods are employed in all study components. A study guide for each study component is available to students. This study guide is made available before the study component in question commences and must always indicate when the interim tests will take place. No changes may be made to the study guide after the study component commences, unless they have been discussed and agreed with the Dean of the Bachelor College.

• The applicable rules for each coherent package of electives must be stated (e.g., whether students are required to participate in all study components or whether there is one compulsory study component and a number of elective study components).

• For every study component, a test plan is available setting out what will be tested and how. The test plan is made available before the study component commences.

• Education is arranged in such a way that
  o Students receive feedback on and insight into their progress during a study component.
  o Students gain insight into the requirements they need to meet for the final test during the study component (in other words, there is proper preparation for the final test).
  o Students are stimulated to actively contribute during the study component.

• Each basic study component, as well as the major, elective and USE components that are part of the propaedeutical phase, concludes with an examination, consisting of at least...
two quantitative interim tests and a final test. If desirable, second-year and third-year study components’ final grade can be partly determined by one or more quantitative or qualitative interim tests.

- Within a study component, as well as within the major, elective and USE study components that are part of the propaedeutical phase, compensatory testing is mandatory, so that a minimum of 50% and a maximum of 70% of the final grade for a study component is determined by the final test. To pass a study component, a student must achieve a score of at least 5.0 on the final test and a score of at least 6 on the examination. No minimum requirements are specified regarding the pass grade for interim tests, with the following exception: when the final test in a study component is a practical exercise that is divided into an individual and a group-work part and it is specified that the student must obtain a pass grade (at least 6.0) for each of these parts, then the individual part shall comprise at least one interim test and the group-work part shall comprise at least one interim test.

- The interim tests are designed to activate the students, to serve as preparation for the final test, and to provide feedback. Interim tests must be held within the designated time slot and in the scheduled room, unless determined otherwise in consultation with the Dean of the Bachelor College.

- The term of validity for interim tests, professional skills tests, and final tests is specified in the OER.

- It is not possible to retake an interim test in the academic year in which the study component is followed, unless the Examinations Committee decides otherwise. The first interim test of the basic study component Calculus forms an exception to this rule: this test may be retaken in the first quartile. Interim tests and final tests are valid in the academic year in which they are taken. Students may retake final tests, provided they have taken the first final test in that academic year.

- The examination and assessment of students shall take place according to clear criteria that are available to students at the start of the study component, the minimum requirement being that they are made available to them in the study guide. The assessments (including the substantiation thereof) serve as feedback for the students.

- The Program Director and the Dean of the Bachelor College shall jointly ensure that - interim tests and final tests within a study component/program are structured according to the intentions of interim tests and final tests, as established in document outlining the vision on testing within the Bachelor College¹, and - the testing load within a given quartile is acceptable.

- In any case, the Bachelor’s final project will be assessed individually.

- There is no maximum for the number of students allowed to participate in a study component. The Program Director may impose a maximum for specific reasons. The Dean of the Bachelor College shall determine whether the students’ freedom of choice has been sufficiently ensured.

- Level 1, 2, or 3 is allocated to study components within the Bachelor College.

- Rules of thumb for the allocation of levels are drawn up by the Program Directors together with the Dean.

- Program Directors shall allocate levels in accordance with the agreed rules of thumb.

- Program Directors shall ensure that Examination Committees find the allocated levels acceptable. The rule of thumb may be departed from if there are sufficient grounds and only after consultation.

- At least 45 credits of the total Bachelor’s program must be at Level 3. These study components may be divided across a major and elective study components.

¹ ‘Future-proof and student-oriented Bachelor’s programs at the TU/e’, May 2011 (in Dutch) and ‘Interim report Project Group 2.1 measures to make studying manageable’ (in Dutch).
Within the part of the program reserved for electives minimally 30 credits must be at Level 2 or 3.
When selecting study components, students must not select any ‘overlapping’ study components.
Upon approval by the Dean of the Bachelor College, the Program Director may put forward major study components that are not available to other students as elective study components.

(2) Decision-making rules

- New Bachelor's programs and new majors and/or substantial modifications to majors require the approval of the Executive Board.
- If a student wishes to select cross-departmental elective study components or a coherent packages of electives for the free elective component, this requires the approval of the Executive Board.
- The Executive Board shall decide which USE study components and/or learning paths will be offered.
- The timetabling principles for Bachelor's programs require the approval of the Dean of the TU/e Bachelor College.

(3) Components of Bachelor’s programs

- Each Bachelor's program has four components; the types of study component are as follows:
  - a major (M) worth 90 credits, comprising 16 study components worth 5 credits and a concluding Bachelor's Final Project (BEP) worth 10 credits (see (4));
  - a foundation (B) worth 30 credits, comprising 5 study components worth 5 credits and 5 study components of professional skills that are embedded in the major (see (5)). The major and professional skills together are 95 credits;
  - a USE component (U) worth 15 credits, comprising 3 study components worth 5 credits (see (6));
  - free electives (K) worth 45 credits, comprising 9 study components worth 5 credits (see 7)).

This gives a total of 35 study components, accounting for 34 x 5 + 1 x 10 (BEP) = 180 credits.

(4) Major (M)

- The core of each Bachelor's program is the major, which is worth 90 credits.
- A Bachelor's program (with CROHO accreditation) comprises one or more majors, each of which prepare for specific Master’s programs.
- On completion of the Bachelor’s program, a major gives the student unconditional admission to at least one of the Master’s programs of the relevant department.

(5) Basic subject (B)

- Each Bachelor's program includes the following six basic study components:
  - Calculus
  - Applied Physical Sciences
  - Introduction to Modeling
  - Design
  - USE Basics
  - Professional Skills
• The elements of the Professional Skills study component are embedded in the
components of the major (see Section 8, Professional Skills).
• The remaining five basic study components (25 credits) are common courses offered in
all programs and/or program clusters. Each basic study component has a maximum of
three variants, unless agreed otherwise with the Dean of the Bachelor College. The
timetabling of the basic study components is centralized:
  o Calculus in quartile 1 of the first year
  o Applied Physical Sciences in quartile 2 of the first year
  o USE Basics in quartile 4 of the first year
  o Modeling in quartile 3 of the first year
  o Design in quartile 1 of the second year

(6) USE (User, Society and Enterprise)
• In addition to the USE Basics study component, each Bachelor's program includes a USE
learning trajectory worth 15 credits and a minimum of 5 Studium Generale activities.
Students are free to choose from several variants of this learning trajectory.
• The USE learning trajectory has so many variants that each major has a discipline-based
connection with at least one USE learning-trajectory variant.
• The Executive Board shall decide, on the basis of the recommendation of the Dean of the
TU/e Bachelor College, which USE components and/or learning paths will be offered and
in which language.

(7) Electives (K)
• Each Bachelor's program has an elective component worth 45 credits.
• Departments offer several coherent packages of electives, both for students of the
department's own programs and for students of other programs. A coherent package of
electives is worth a maximum of 15 credits. The electives component also provides for
stand-alone study components worth 5 credits.
Students can choose from study components and coherent elective packages that are
offered by their own or other departments or that are interdisciplinary.

(8) Professional skills
• The basic study component Professional Skills (5 credits) is embedded in the study
components of the major.
• To this end, each program has formulated major-specific learning outcomes for each
professional skill.
• The assessment of professional skills is a component of the test plans and study guides of
the relevant study components.
• This study component comprises the following professional learning trajectories:

<table>
<thead>
<tr>
<th>Professional skill</th>
<th>Average number of hours per professional skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Written communication</td>
<td>28</td>
</tr>
<tr>
<td>2 Presenting</td>
<td>21</td>
</tr>
<tr>
<td>3 Cooperating</td>
<td>35</td>
</tr>
<tr>
<td>4 Planning and organizing</td>
<td>28</td>
</tr>
<tr>
<td>5 Reflecting</td>
<td>14</td>
</tr>
<tr>
<td>6 Dealing with (scientific) information</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
</tr>
</tbody>
</table>
• The total number of hours for each professional skills learning trajectory is spread over the study components of the major, giving students three opportunities to develop the relevant professional skill.

• For each professional skill, students shall be assessed individually in at least three separate instances. Students who fail particular assessments shall be given the opportunity to retake them in the same academic year. Students attain a professional skill once they have successfully completed it. The principle of compensation therefore does not apply within or between professional learning trajectories.

• Each skill is assessed according to a professional skills test. Passing the professional skills test is a condition for the successful completion of the study component in which the professional skill is embedded. If the professional skills test is evaluated with a grade, the assessment of the professional skill shall count toward the assignment of the final grade for the study component in which it is embedded.

• In cases where a professional skill is taught by means of a training course, students will not be required to participate in the training course if they have already completed it in their Bachelor's program. Professional skills training courses in which students participate in teams form an exception to this rule.

• The assessment of the student for the professional skills consists of two parts: aggregate assessment and individual feedback.

• Teachers together with the program management decide how they wish to provide feedback. The study guide shall contain information indicating how this feedback shall be provided.

• As far as professional skills are concerned, the assessment of the student is twofold: individual written feedback and a grade. The credits for professional skills are not awarded separately. They are an integral part of the credits for the study component in which the relevant skill is embedded.

• At the request of the Program Director, the Dean may grant exemptions for the conditions listed in italics under Section 8 once he has received advice from the Central Committee for Quality Care in Education (CCKO).

(9) Distribution of the components in the Bachelor's program
The overview below shows the distribution of study components that applies to all Bachelor's programs:

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Quartile 1</th>
<th>Quartile 2</th>
<th>Quartile 3</th>
<th>Quartile 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study component 1</td>
<td>B1 (Mathematics)</td>
<td>B2 (Applied Phys.)</td>
<td>B3 (Modeling)</td>
<td>B4 (USE)</td>
</tr>
<tr>
<td>Study component 2</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Study component 3</td>
<td>M</td>
<td>K</td>
<td>M</td>
<td>K</td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study component 1</td>
<td>B5 (Design)</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Study component 2</td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>M</td>
</tr>
<tr>
<td>Study component 3</td>
<td>K-U</td>
<td>K-U</td>
<td>K-U</td>
<td>K-U</td>
</tr>
<tr>
<td><strong>Year 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>M</td>
<td>M</td>
<td>K</td>
<td>M (BEP)</td>
</tr>
<tr>
<td>Component 1</td>
<td>M</td>
<td>M</td>
<td>K-M (BEP)</td>
<td>K-M (BEP)</td>
</tr>
<tr>
<td>--------------</td>
<td>---</td>
<td>---</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Study Component 2</td>
<td>K-U</td>
<td>K-U</td>
<td>K-U</td>
<td>K-U</td>
</tr>
</tbody>
</table>

Explanatory notes to the table:
- Years 2 and 3 show 8x K-USE. This means that the student must choose between an elective study component or a USE study component. The requirement is that, in study years 2 and 3, a total of 3 USE study components and 7 electives must be completed.
- Quartiles 3 and 4 of year 3 show 2x K-M (BEP). This means that the FBP (Final Bachelor’s Project) can be either spread over these two quartiles or completed as one block in quartile 4. Depending on which of these applies, there may be room for an elective in quartile 3 or 4. The BEP is worth 10 credits in total. Any departures from this must be agreed with the Program Manager.
- The study components of the major are worth a total of 90 credits. A portion of the basic study component Professional Skills (5 credits) is embedded in the major. Together they account for 95 credits.

The student has a choice of a minimum of ten USE learning trajectories of which some start in quartile 1 and some in quartile 2.

(10) Coaching by teaching staff and guidance from student mentors
- Throughout their Bachelor’s program individual students will receive coaching from their personal study coaches on the development of their professional identity and the corresponding options available to them. These options include choosing elective study components worth 45 credits, choosing a USE learning trajectory, and choosing a Master’s program.
- A study coach is a member of the teaching staff who teaches one of the subjects in the major of the study program that the student is following.
- The role of study coach cannot be combined with that of academic advisor or that of program director.
- A student has a right to four coaching sessions per year, in which the study program shall actively offer this to students in the first year.
- The study coach shall hold at least four coaching sessions per year with each student. The study coach shall conduct the coaching sessions outside the three time slots in which the courses are scheduled of the programs the students in question are enrolled in.
- The hours that a teacher devotes to coaching shall count as teaching hours.
- Each first-year student shall in any case receive guidance from a student mentor during the first semester of the program. A student mentor is a student from a higher year of the same program.
- Responsibility for the quality of the coaching shall rest with the department.
- The Dean of the Bachelor College is responsible for monitoring the quality of coaching.

(11) Program choice check 2014-2015 Intake
- Rules concerning the program choice check shall be recorded in the Regulations for Registration, Program Choice Check, Enrollment and Termination of Enrollment.
(12) **Honors program in the Bachelor's phase**
The structure and content of the Bachelor’s Honors Tracks will be determined by the academic
director of the TU/e Honors Academy, in consultation with the Dean of the Bachelor College. The
regulations pertaining to the Honors Tracks are included in the Model Program and Examination
Regulations (OER).

(13) **Timetabling in time slots**
- A central timetable committee shall designate one time slot for each study component.
- The time slots are fixed and apply to all study components.
- Of the 10 hours in a time slot, no more than 8 hours per week can be timetabled. Timetabling outside the designated time slot is not possible.
- In each quartile, a minimum of 12 and a maximum of 24 contact hours per week
  must be scheduled for each student.
- Interim tests must be held within the designated time slot for the relevant study
  component.
- In the event that teaching sessions are missed due to public holidays and open days,
  these can only be rescheduled within the relevant time slot.

The distribution of time slots is shown below:

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
</tr>
</thead>
<tbody>
<tr>
<td>1+2</td>
<td>A1</td>
<td>C1</td>
<td>B1</td>
<td>E1</td>
<td>D1</td>
</tr>
<tr>
<td>3+4</td>
<td>A2</td>
<td>C2</td>
<td>B2</td>
<td>E2</td>
<td>D2</td>
</tr>
<tr>
<td>5+6</td>
<td>B1</td>
<td>E1</td>
<td>D1</td>
<td>A1</td>
<td>C1</td>
</tr>
<tr>
<td>7+8</td>
<td>B2</td>
<td>E2</td>
<td>D2</td>
<td>A2</td>
<td>C2</td>
</tr>
<tr>
<td>9+10</td>
<td>E3</td>
<td>B3</td>
<td>A3</td>
<td>D3</td>
<td>C3</td>
</tr>
</tbody>
</table>

All time slots will be 4 (2x2) + 4 (2x2) + 2 hours, in which the final two hours shall in each case
be the 9th and 10th hours. These time slots will be allocated to the study components per
quartile, and distributed in the following way:

<table>
<thead>
<tr>
<th></th>
<th>1.1.</th>
<th>1.2</th>
<th>1.3</th>
<th>1.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Basic/Major</td>
<td>Basic/Major</td>
<td>Basic</td>
<td>Basic</td>
</tr>
<tr>
<td>B</td>
<td>Basic/Major</td>
<td>Basic/Major</td>
<td>Major</td>
<td>Major</td>
</tr>
<tr>
<td>C</td>
<td>Major</td>
<td>Major</td>
<td>Major</td>
<td>Major</td>
</tr>
<tr>
<td>D</td>
<td>Major</td>
<td>Elective</td>
<td>Major</td>
<td>Elective</td>
</tr>
<tr>
<td>E</td>
<td>Major</td>
<td>Elective</td>
<td>Major</td>
<td>Elective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2.1</th>
<th>2.2</th>
<th>2.3</th>
<th>2.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>USE/Elective</td>
<td>USE/Elective</td>
<td>USE/Elective</td>
<td>USE/Elective</td>
</tr>
<tr>
<td>B</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
<td>Elective</td>
</tr>
</tbody>
</table>
The deadlines for the timetabling process are as follows:

1. Academic agenda approved (Executive Board): **December 1**
2. Curricula ready (Program Directors): **February 1**
3. Allocation of time slots (core timetabling group): **March 1**
4. Course guide complete (person responsible for guide): **April 1**
5. Information on study components complete: **May 1**
6. Timetables ready (departmental timetable coordinator): **June 1**
7. Room schedule ready (DIZ): **August 1**

- The deadlines for submitting timetabling information must be strictly observed. The timetabling process begins when the deadline has passed.
- If more than one time slot is requested for a study component, this shall be carefully considered and submitted to the Dean of the Bachelor College, who will then make a decision. The decision shall mean a maximum allocation of 2 time slots. In that case the student shall use only one of the two time slots. This must not restrict the student’s freedom of choice. Neither must it exceed the maximum of 8 timetabled hours per study component per week.
- For each 2 consecutive hours within a time slot, the teacher can indicate what type of room is required for a study component. This is fixed once and cannot vary from week to week.
- Extra facilities must be requested from the departmental timetable coordinator no later than two weeks before the beginning of the quartile.
- No extra facilities, such as a room or an invigilator, are provided for interim tests.
- Subject codes for the basic study components shall be generated by the department responsible.

(15) **Final provision**

Deviation from the above guidelines is subject to the approval of the Dean of the Bachelor College. The elements in these guidelines also apply to competency-centered learning. They have been elaborated further in the Model OER for Bachelor’s programs.