Pre-Master Kick-off 2019-2020

HBO Bachelors, university Bachelors and HBO-TOP students 2 September 2019

Harald van den Meerendonk, Academic advisor pre-Master’s and Master’s students Electrical Engineering
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Pre-Master Kick-off 2019-2020
Department of Electrical Engineering

Huug de Waardt
• Graduate Program Director

Harald van den Meerendonk
• Academic advisor Master’s, pre-Master’s and HBO-TOP students Electrical Engineering
Department of Electrical Engineering

- Department of Electrical Engineering since 1957
- Education and research
- 1125 Bachelor and Master students
- 381 employees
- Intense cooperation with high-tech industry and research institutes (Philips, ASML, NXP, OCE, TNO)

Pre-Master Kick-off 2019-2020
Three main research themes

• The Connected World

• Smart and Sustainable Society

• Care and Cure
## Research groups

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Research group</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS</td>
<td>Control Systems</td>
</tr>
<tr>
<td>ECO</td>
<td>Electro-Optical Communication</td>
</tr>
<tr>
<td>EES</td>
<td>Electrical Energy Systems</td>
</tr>
<tr>
<td>EM</td>
<td>Electromagnetics</td>
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<tr>
<td>EPE</td>
<td>Electromechanics and Power Electronics</td>
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<tr>
<td>ES</td>
<td>Electronic Systems</td>
</tr>
<tr>
<td>IC</td>
<td>Integrated Circuits</td>
</tr>
<tr>
<td>Phi</td>
<td>Photonic Integration</td>
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<tr>
<td>SPS</td>
<td>Signal Processing Systems</td>
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</table>
Bachelor’s and Master’s programs

- Bachelor Electrical Engineering (EE)
- Bachelor Automotive Technology (AT)
- Master Electrical Engineering (EE)
  - Special Master’s track Connected World Technologies (CWT)
  - Special Master’s track Care and Cure (C&C)
Students starting in 2019-2020

• Bachelor’s students: 240 (150 EE/ 90 AT)
• Master’s students EE: 130

• Pre-Master’s students hbo (new): 22
• Pre-Master’s students hbo (re-enrollment): 3
• Pre-Master’s students university: 1

• HBO-TOP students (new): 7
• HBO-TOP students (re-enrollment): 7
Pre-Master’s programs

• Hbo graduates follow the pre-Master’s program for hbo Bachelors.

• HBO-TOP students follow the pre-Master’s program for hbo Bachelors.

• Pre-Master’s students from university (TU/e and other) follow an individual pre-Master’s program

• All pre-Master’s programs max. 30 EC
Program for HBO Bachelors

- Pre-Master’s program for HBO Bachelors: 30 EC
  (8 of 11 deficiency courses)

- Master’s program for HBO Bachelors: 120 EC
  (including remaining 3 of 11 deficiency courses)
# Program for HBO Bachelors

<table>
<thead>
<tr>
<th>Year</th>
<th>Course Description</th>
<th>EC</th>
</tr>
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<tbody>
<tr>
<td>First year</td>
<td>Pre-Master’s program</td>
<td>30</td>
</tr>
<tr>
<td>Second year</td>
<td>Homologation courses</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Core courses</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Specialization courses</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Professional Development</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Elective courses</td>
<td>20</td>
</tr>
<tr>
<td>Third year</td>
<td>Internship</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Graduation project</td>
<td>45</td>
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# Pre-Master’s program for HBO Bachelor's

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>EC</th>
<th>Quarter</th>
</tr>
</thead>
<tbody>
<tr>
<td>5PRE01</td>
<td>Refresher’s English for pre-Master’s students</td>
<td>0</td>
<td>1</td>
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<tr>
<td>2WBB0</td>
<td>Calculus variant 2</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>2DL60</td>
<td>Linear Algebra</td>
<td>2,5</td>
<td>1</td>
</tr>
<tr>
<td>5ESD0</td>
<td>Control Systems</td>
<td>5</td>
<td>1</td>
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<tr>
<td>2DL40</td>
<td>Advanced Calculus I</td>
<td>2,5</td>
<td>2</td>
</tr>
<tr>
<td>2DL70</td>
<td>Probability and Statistics</td>
<td>2,5</td>
<td>2</td>
</tr>
<tr>
<td>5EWB0</td>
<td>Electrical Power Engineering</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>2DL50</td>
<td>Advanced Calculus II</td>
<td>2,5</td>
<td>3</td>
</tr>
<tr>
<td>5ETA0</td>
<td>Introduction Telecommunication</td>
<td>5</td>
<td>3</td>
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</tbody>
</table>

Pre-Master Kick-off 2019-2020
Pre-Master’s program for hbo Bachelors

- Still remaining 3 of 11 deficiency courses for 15 EC (3 EE)
- To be resolved in the Master’s program for hbo Bachelors, Homologation part

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<tr>
<td>5EPA0</td>
<td>Electromagnetics I</td>
<td>5</td>
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<tr>
<td>5ESC0</td>
<td>Signals II</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>5ECC0</td>
<td>Electronic Circuits II</td>
<td>5</td>
<td>2</td>
</tr>
</tbody>
</table>

- Note: 5EPA0 and 5ESC0 are in the same time slot!
Program for university Bachelors

• Pre-Master’s program individual: 30 EC

• Master’s program for EE Bachelors: 120 EC
# Program for university Bachelors

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Pre-Master Kick-off 2019-2020
Study Progress Requirement

The pre-Master’s program has to be completed within the first year (max. 2 semesters)
Study Progress Requirement

• If pre-Master’s program completed within one year, continue as a Master’s student with the Master’s program for hbo Bachelors

• If pre-Master’s program not completed within one year, then not allowed to continue with the Master’s program for hbo Bachelors. Also not allowed to be enrolled in the pre-Master’s program for a period of three years

• No binding study progress requirement is given if withdrawn from the pre-Master’s program before March 1 and not re-registered for another pre-Master’s program at TU/e

• If withdrawn, no credits lost
Study Progress Requirement

• After Q2, a preliminary study progress advice is given based on the results of Q1, either the first exam or the second exam (re-sit)

• After Q4, a binding study progress decision is given: positive or negative

• After Q1, the academic advisor will check your study progress by sending an email

• When the pre-Master’s program is finished (after Q3 or Q4), a binding study progress decision is given (positive) and your program will be marked as completed. Continue as a Master’s student the next month
Study Progress Requirement

• PER 2019-2020 Master’s program EE, Article 2, paragraph 6

“If students cannot complete the pre-Master’s program within six months of the start of the program and ... and have obtained a minimum of 15 credits at that time, the student may submit a request to the Examination Committee to expand the program with a maximum of 15 EC worth of Master’s study components”

• If approved, follow master courses and exams for Q3 and Q4, but: pre-Master’s program still needs to be finished

• You have to pay for extra courses
Refresher’s course English for pre-Master’s students

- Pre-Master’s students and HBO-TOP students follow Refresher’s English for pre-Master’s students (5PRE01)
- Intake by writing an essay on Friday 6 September 2019
- Check MyTimetable for more information on the date, time and location
Refresher’s course English for pre-Master’s students

• If sufficient, you do not need to follow the course and do the exam

• If insufficient, follow the course and do the exam

• The lecturer decides on sufficient/insufficient

• You are allowed to use your notebook to write the essay

• Pre-Master’s students do not get credits, HBO-TOP students do get credits (3 EC)
HBO-TOP/minor

- HBO-TOP students and students doing a minor at TU/e follow the pre-Master’s program for hbo Bachelors

- Idea: Finish the pre-Master’s program as an hbo Bachelor student, directly enter the master after graduation from hbo.

- Duration minor (Q1-Q2) < duration pre-Master’s program (Q1-Q3)

HBO-TOP/minor students who finished only part of the pre-Master’s program, become pre-Master’s students after graduation from hbo. They continue with the remaining courses from the pre-Master’s program or the other deficiency courses until 30 EC is obtained
HBO-TOP/minor

• Only pay for the remaining courses as well as other courses

• HBO-TOP/minor students who passed the course 2DL00 as part of their entrance requirements, do not need to do the entrance test of 2WBB0 Calculus variant 2

• HBO-TOP/minor students who passed the course 2DL00: the result counts for approximately 60% for the exam of 2WBB0 Calculus variant 2. The 60% is determined by the teacher of the course
Transitional arrangements

• Changes in the Mathematics courses

• All 3 EC Mathematics courses have changed to 2.5 EC

• 2DL03 Basiswiskunde -> 2WBB0 Calculus variant 2
  2DL04 Calculus A -> 2DL40 Advanced Calculus I
  2DL05 Calculus B -> 2DL50 Advanced Calculus II
  2DL06 Lineaire Algebra -> 2DL60 Linear Algebra
  2DL07 Statistiek -> 2DL70 Probability and Statistics

• Courses are offered in English
Transitional arrangements

- Courses are offered once per academic year from September
- No entrance moment in February anymore
- Students who need to do one or more 3 EC Mathematics courses, can do the equivalent 2.5 EC courses
- The pre-Master’s program is finished when all courses (3 EC or 2.5 EC) are done, regardless of the number of obtained credits (28-30 EC)
- Students who still need to pass 2DL03 can take a part of the exam of 2WBB0. Check with the teacher
Students from SMU via Hogeschool Zeeland

• Students from HZ/SMU may get exemptions for 4 Math courses

• Examination Committee decides based on the advice of the responsible teacher and on transcripts from SMU

• No tuition fee for exemptions, except when following extra courses -> pay per extra credit

• Students from HZ/SMU follow remaining deficiency courses instead

• But: Electromagnetics I and Signals II in same time slot!!!
Registration for courses

• All courses from the pre-Master’s program are Bachelor courses

• Rules of the Bachelor College apply

• Register in time for a course before the deadline (check emails)

• Automatically registered for the exam

• Automatically registered for 2WBB0 due to the huge number of students
Registration for courses

- After the deadline, Administrative Costs Regulation (ACR) holds: pay €20 per course to be registered to the course under conditions

- Final exams are always in the same quarter as the courses; re-sits are always in the next quarter

- You have to be present at the first exam in order to be allowed to do the re-sit of the exam

- Deadlines for registration can be found on the Digital Education Guide
Health and Safety Risk Management Training

• Training of Health and Safety Risk Management (“ARBO-training”)

• One-off training for 30 minutes

• Presence is mandatory -> attendance list

• Last name starts with A-M: Wednesday 4 September 2019
  Last name starts with N-Z: Friday 6 September 2019

• During the lunch break in lecture hall Flux 1.02 from 12:45h till 13:15h
Digital Education Guide

All information presented here can be found on the Digital Education Guide:

- Curriculum
- Examination Committee: Program and Examination Regulations (PER/OER) from both Bachelor and Master, transitional arrangements
- Program Committee
- Forms: exemption form
- Quality Assurance
- A to Z

https://educationguide.tue.nl/programs/pre-masters-programs/electrical-engineering/
Academic advisor

Academic advisor:

• Advices and helps to improve study progress (practical questions about the pre-Master’s program, study-related questions and problems, study progress, study skills, planning, personal circumstances)

• Problems related to study, stress, study management -> referal to study choice advisor, student counsellor, study management advisor, student psychologist, confidential counsellor

• Meetings and correspondence are always confidential (AVG/GDPR)

• Study progress check after Q1, just to check how you are doing after the first quarter

• Second kick-off meeting in Q3W1D1
Academic advisor

If you have any questions, come and visit me in Flux 0.120 or send me an email:

**Academic.Advisor.MEE@tue.nl**
A diverse community requires inclusiveness

- The TU/e is built on inclusiveness
- Diversity is key in gender, origin, religion, sexual orientation
- If you see something, say something. Doing nothing is a signal of silent condonement
- Do not be the one who gives a silent okay
- Or else contact your academic advisor
StudentBody

Pre-Master council:
• Group of 10-15 people
• Evaluating quality of courses
• Direct contact with teachers, academic advisor and program director
• Providing feedback to the Program Committee

Side activities:
• Dinner with the Dean (Bart Smolders)
• Education awards

Interested? Mail to: studentbody@tue.nl
Questions