

University of Twente
Bachelor Electrical Engineering, Master Electrical Engineering
Development dialogue on Friday, 18 November 2022
Notes, Wim Vercouteren

Programme management brought forward the subject of the desirability of specialisation tracks in the Bachelor programme. Assessment panel members and programme management discussed this subject and exchanged the following observations.

- The panel feels the priority in the Bachelor programme should be to lay the groundwork in the electrical engineering domain. In the panel's view, the Bachelor programme should foremost be broad, the Bachelor graduation project providing room for some specialisation.
- The panel emphasises the importance of teaching the fundamentals (mathematics, physics) in the Bachelor programme. Without having been taught these fundamentals in-depth, students may experience serious obstacles in their careers. In Germany, programmes are considering removing internships to make room for more fundamentals' teaching.
- At the RWTH University in Aachen, Germany, Bachelor students only specialise in their third year, allowing them to continue their studies in various Master programmes.

Programme management put forward the subject of Bachelor graduates directly entering the labour market. Panel members and programme management discussed this subject and exchanged the following observations.

- Bachelor graduates entering the labour market risk becoming *super-nerds* instead of being promoted to higher, management positions.
- The panel is of the opinion the minor in the Bachelor programme should not be spent on internships.
- In the United States and in the United Kingdom, Bachelor graduates do enter the labour market, but then also return to university to complete Master programmes. Thinking this model through, the University may consider offering Master courses online.
- The Bachelor programmes in the United States may take four years, three years of coursework and the fourth year for internships and career preparation activities.

Other findings of the panel

- These programmes are considered by the panel to be very strong on the personal touch. The panel advises not to lose this personal touch.
- Strengthening the subdomain of power electronics both in the Bachelor and Master programmes would be seen by the panel as positive.
- In the panel's view, the network of the programmes and the high schools in the (wider) region could be reinforced. When high schools are approached, representatives of these programmes should go themselves and not leave these visits to general university representatives. Student assistants may be good ambassadors of the programmes, visiting high schools and contacting prospective students.
- The panel advises to adopt more explicit approaches to gender-specific aspects. This may lead to further growth in student numbers as well.
- The panel is positive about the honours programme.