IDE | Points of improvements in response to the Educational Audit 2018

On the 5th of April 2019, Industrial Design Engineering (BSc and MSc) was visited by an independent audit committee. This committee consisted of experts in the field and was asked by the University of Twente to check the quality of the study programme. Reports were made of the audit and the development dialogue. These reports are important for the academic accreditation of the study programme from the government by the Dutch-Flemish Accreditation Organisation (NVAO) but are also very important for the continuous development and improvement of Industrial Design Engineering (BSc and MSc). The University of Twente works with a bottom-up approach when it comes to quality assurance and improvement of the study programmes. The students themselves have a lot of influence in the development and improvement of their own education. To facilitate students, teachers and anyone who directly contributes to education to participate in improving the quality of Industrial Design Engineering (BSc and MSc), the visitation committee's findings are listed below.

Summary

First of all, the site visit of the bachelor and master programmes went well. The points of attention given by the panel are included in P&C cycles of the degree programmes. The specific points of attention about the assessment system for graduation (such as transparency in this, and clear alignment with attainment targets), and internationalisation have already been included in the improvement plans of the degree programmes. This is running.
In addition, the panel had several concrete points of attention for the curricula (e.g. regarding content). These mainly specific points of attention will be discussed with the Programme Committee, in order to get these points for further development more concrete and defined.

From the so-called development talk, the IDE team concludes that it is advisable to still attempt to develop a more general Domain Specific Framework of Reference (DSFR), jointly with the TUD and TU/2. UT is in favour of a more general, necessarily more abstract DSFR and believes this is possible to develop. However, it will take some time to develop this considering the significant differences between the ID profiles of the three technical universities.

Points for improvement from the visitation report:

Standard 1	Intended learning outcomes
Assessment:	BSc and MSC IDE programmes **meet** the standard
Substantial findings:	Both programmes feature a comprehensive range of clearly formulated and properly differentiated competences and intended learning outcomes (ILO). The ILO are robust because they reflect not only the pro-visions of the domain-specific reference framework, the Academic Competences and Quality Assurance criteria and the Dublin Descriptors, but they also do justice to the specific vision on IDE of the University, Faculty and programmes. Both sets of learning out-comes bring about the UT-distinctive graduate profile of the *T-shaped* and *X-shaped designer*.
Advise:	Include more explicit reference in the ILO to the international dimension of/in the respective programmes
Reaction of the programme:	The plan is to add an ILO that expresses the international orientation of the graduates.

Standard 2	Teaching-learning environment
Assessment:	BSc and MSc IDE programmes **meet** the standard
Substantial findings:	The bachelor programme is set up according to the TOM and integrates learning and application in thematic and interdisciplinary modules. The master programme allows students to tailor their own curriculum around one of three tracks according to their own needs and interests. Both curricula do justice to the educational principles of research-oriented, project-based, self-directed and collaborative learning. Both programmes have sufficient and properly qualified staff at their disposition, which students describe as passionate, accessible and empowering. Most staff, moreover, have an adequate command of the English language. The facilities are relevant.
Advise:	Several advices were gathered from talks with students regarding content of the curricula: • adding in-depth engineering courses • more technical knowledge in projects • career perspectives in the curriculum • and a greater involvement of guest lecturers and industry representatives in the curriculum • a better scheduling of exams and re-sits • English language proficiency for all staff • more workspaces in the Horst building
Reaction of the programme:	The first four points will be dealt with in the Curriculum Committee. The scheduling of exams will be reconsidered and where needed adapted. English proficiency of staff is encouraged by offering courses. Workspaces is the discretion of the faculty board and is beyond our control.
Standard 3	Assessment
Assessment:	BSc and MSc IDE programmes **meet** the standard
Substantial findings:	Student assessment in the IDE programmes at UT is organised adequately. Since the previous accreditation visit, a lot of developments have taken place with regard to student assessment and these changes are for the better. The Examination Board (EB) is functioning well. It is a small team that thrives on the expertise and commitment of the EB secretary. The bachelor and master programme now feature a comprehensive quality assured system for module and course assessments that involves IDE lecturers, educational experts and the EB. The existing assessment system can be further improved by revisiting the thesis evaluation forms, by paying attention to formative assessment and by enhancing the capacity of the Examination Board.
Advise:	• A few points of attention were given regarding the assessment of the graduation phase (theses); • strengthen the capacity of the EB by adding more resources and bringing in additional educational assessment expertise.
Reaction of the programme:	This has been communicated with the EB. The capacity of the EB is adequate now.
Standard 4	Achieved learning outcomes
Assessment:	BSc and MSc IDE programmes **meet** the standard
Substantial findings:	The intended learning outcomes of the IDE programmes are eventually achieved at the end of the bachelor and master curriculum. The sample of re-viewed final bachelor projects fully meets the quality expectations. In almost all master theses, students deployed a solid methodology, coherent argumentation and an awareness of the limitations of their research. Surveys and testimonials from alumni, moreover, demonstrate that IDE students are well qualified to pursue a follow-up study or enter the labour market.
Advise:	raise awareness among industry on what industrial design engineering (at UT) stands for.
General conclusion	Positive

Outcomes of the development dialogue with the panel (BSc and MSc):

The development dialogue was held at the TU/e on January 14th, 2020 and took approx. 30 minutes. The atmosphere of the dialogue was open. The UT thanked the assessment committee for their positive and constructive assessment report of the programme assessment. The UT also acknowledges the recommendations. Therefore, another topic was chosen to discuss during this development dialogue, i.e. the Domain Specific Framework of Reference (DSFR).

A committee composed of several staff members of the IDE programme have started rewriting the DSFR, with a more specific focus of the UT. This draft document was sent to the representatives of the assessment committee to discuss. The UT received several recommendations concerning rewriting the DSFR:

1. To keep a joint DSFR together with TU Delft and TU/e, but to up-date and rewrite the document with the aim to describe the required minimum of what an ID programme in the Netherlands should entail;
2. Leave ample room and freedom so each University can write a complementary document describing their own profile, such as focus, unique selling points and direction;
3. Do not make the joint DSFR too long, 2 or 3 pages should be fine;
4. Use the standards of the accreditation as a framework, especially standard 1 and 2 (for both the joint document and the University-specific document);
5. Integrate an international benchmark into the document;
6. Integrate an outlook towards the character and needs of the labour market into the document.

The UT was very pleased with these recommendations and will discuss these points internally at the UT and will schedule a meeting together with the TU Delft and TU/e in the near future. The assessment committee informed the UT that they would discuss the DSRF with the TU Delft and TU/e as well, so they are up to date about the topic. Everybody expressed the usefulness of having a joint DSRF and the dialogue was wrapped-up with the conclusion that is was a very valuable meeting.

P&C development cycle IDE:

The points for attention given by the panel are included in P&C cycles of the degree programmes. This regards the profile of the programme, the content of the curricula, internationalization, and the assessment system for graduation. Because most of the advice were primarily based on the talks with students, the degree programmes have taken these points of attention up for discussion with the OLC's to gain a more concrete and defined picture for further development of the curricula.

In addition, the IO/IDE has collet thoughts regarding the development of a more abstract DSFR. IO/IDE Twente is in favour of such a -more abstract- description of the profile, but also feels that the development aimed for is a long-term plan considering the different consisting profiles (Eindhoven and Delft).