

Report development dialogue master programme Biomedical Engineering of Delft University of Technology

Thursday 18 November 2018

Process

Before the site visit, the programme provided the panel with three topics for to discuss during the site visit. The panel discussed these topics throughout the day with the programme management, teachers, students, alumni and professional field. At the end of the site visit, the panel chair shared the panel's suggestions on these topics with the programme.

Topic 1: Teachers from various faculties offer courses and projects within the programme. How can we strengthen the multidisciplinary of the programme and courses?

The teachers in the programme felt that multidisciplinary was inherent to the field of biomedical engineering. To quote one of the teachers, multidisciplinary is 'part of the DNA' of both research and teaching activities of the staff involved in the programme. The students were satisfied with the integration of courses, such as the attention to include biomedical content into the more technical courses. As a result, the panel thinks that the multidisciplinary of the programme doesn't need much strengthening at the moment, and the programme could focus on other topics.

In regard to the final project, the programme could consider to strengthen the multidisciplinary to include at least one member with an engineering background and one member with a medical background in every assessment committee.

Topic 2: The programme has a wide variety of backgrounds from both students and staff. What does the panel think of this diversity: should the programme facilitate the intake of students with a wide variety of bachelor degrees?

Part of the intended changes in the curriculum is the inclusion of premasters of 30-60 EC for students with technical master degrees that are further removed from biomedical engineering, such as industrial design and building sciences. The panel thinks that this is a good idea and that, if executed well, the premasters can facilitate a broad intake of qualified students. The students and alumni of the programme see the diversity of students as a positive point: they learn from each other's expertise, and engage in peer assisted learning.

To recruit students from other bachelor programmes, the programme could consider constructing a minor programme consisting of several courses from the premaster, and proactively offer this in other bachelor's programmes. This could lead to more visibility of the programme, and at the same time allow students to finish (part of) the premaster during their bachelor's programme.

Topic 3: The programme includes both technical and medical courses and projects. What does the panel think of the balance between those two?

As discussed under topic 1, the panel thinks that the multidisciplinary of the programme is well-executed, both within the courses and the programme as a whole. The profile of the programme is more oriented towards the engineering side of biomedical engineering, due to its origin within the mechanical engineering faculty of the university. However both alumni and professional field do consider the graduates of the programme as balanced biomedical engineers, with sufficient knowledge and skills for the medical sector and no considerable differences between cohorts. As a result, the panel thinks the technical and medical side of the programme are in balance.