

## **Development dialogue master programme Artificial Intelligence**

To guarantee the quality of the programmes at VU University Amsterdam, the programmes are assessed once every six years by a panel of external experts. The final assessment of the programme is conducted by the Dutch Flemish Accreditation Organization (NVAO). In addition to the assessment, the panel of experts conducts a discussion with the programme in which possible developments and improvements are discussed. The programmes were recently reviewed and the final assessment is positive.

The increasing influx of students and student profiles (including the diverse intake in the master) were discussed during the assessment days in discussions with the assessment panel. The topics of diversity and relationship of the Artificial Intelligence programmes in relation to other disciplines were discussed during the development meeting between the programmes and the assessment panel.

### *Diversity*

In the past, the programme has been very successful in attracting female students. Now that the bachelor programme has been renamed, the programme is more closely associated with science, and the programme has noticed some decline. The programmes have the ambition to continue to attract female students. The programmes share posters aimed at female role models and a female teacher is always present during information talks. 'Artificial Intelligence' attracts fewer women than 'Lifestyle Informatics', but the aim is a healthy balance between women and men. The difficulty of Artificial Intelligence is that it is very broad. The courses can promote that Artificial Intelligence is a connector. That is precisely a force that can be used to recruit more women. It is important that the courses are not colored pink, but that projects are found within courses that appeal to both women and men. There is no need to tailor anything specifically to men or women (for example, building shopping or soccer simulations). The programme director of the bachelor indicates that this happens during the Social Robotics course; this is an interesting course for men and women without any specific tailoring.

The assessment panel also asks the programmes whether they are on the information market for prospective students next to the Computer Science programme. If Artificial Intelligence wants to recruit women, then it must be ensured that Artificial Intelligence is presented alongside programmes such as Chemistry, Biology, Psychology and Health & Life Sciences.

At the start of the programme it is important that both the level of difficulty of the courses and the type of courses are representative. It is possible to look at how a programme can be built up in the first six months in which the student carefully considers whether or not it suits him or her. As a faculty, it can be examined whether a student can transfer to another programme without too much delay. The bachelor programme now starts with psychology, followed by programming. The second period of the first year is now difficult and technical and the first period a bit too easy. The bachelor programme will think about the structure of the first six months of the programme in the coming year.

The assessment panel indicates that learning to program in a period of eight weeks, as is the case at VU Amsterdam, is quite a challenge. The panel asks whether it would be possible to schedule two programming courses in a row or to extend one course so students have more time to master programming. The units of weeks are clearly defined within the VU, but several programming courses

consecutively (part 1 and part 2) could be realized. Three courses of 4 ECTS per period, such as at Maastricht University, also appear to work well for students.

The Artificial Intelligence programmes indicate that they offer a great deal of education to other study programmes. Among other things, there is a lot of interest in Machine Learning. The programmes do not have the staff capacity and they also wonder whether they should invest in Artificial Intelligence In Health for example, because there is a lot of demand for this. For example, a strong minor can be formed that can also serve as a premaster. With a strong minor, student will also consider if they find the subject interesting enough to study. The programme director of the bachelor indicates that the programme is talking with both the Faculty of Social Sciences and Arts (Faculty of Humanities) to collaborate on possible minors. Not only the minor Digital Humanities, but also other minors in the social sciences or, for example, Chemistry.

In terms of specializations, the programme directors also wonder if an extra master Artificial Intelligence in Health would be a good idea. Artificial Intelligence and Health can mean many different things; Social Robotics, Data Science. The panel recommends looking at the interdisciplinary collaborations within the current master programme. TU Delft can be taken as an example in this respect, where an interdisciplinary collaboration has started for 15 ECTS and students from different faculties work together. In the aforementioned example of Health, for example, you can tackle issues arising from the VUmc together. The panel recommends interdisciplinary collaborations in this way. Because Artificial Intelligence is very broad, it must be ensured that the questions with a project are such that not one student can do all the work but that the students need each other. The panel recommends not making an extra master's programme for every discipline.

Finally, the panel discussed the "Alumni in the Spotlight" events with the programme directors. Per event, around 30 student and employees are present. The programme directors indicate that this is one of the benefits from investing in support staff; organizing these events would not have been possible two years ago.