# Life-long learning

Report of the development meeting during the CS programme audit University of Twente, 9 December 2019

This document is a record of the development meeting, held as part of the CS programme audit. The theme was chosen by the programme management, with an eye to gathering advise from the panel members on possibilities for further activities in the area of Life-long-learning.

### Position of the programme management

A summary of the current situation within the CS programme:

### Current activities: Nedap University

Currently Computer Science (CS) offers post-graduate education to selected employees from Nedap (a company in the region) under the banner of *Nedap University*. Academic MSc graduates from technical non-CS programmes participate in (parts of) our Bachelor programme. They follow classes and practicals at the UT, but larger assignments are carried out within Nedap and assessment takes place at Nedap in collaboration with the UT. Once completed, participants (only) receive a 'certificate of participation'. We don't feel authorized issue anything more substantial.

### Motivation to expand

There a lot of interest in the region for further education and training, especially in the area of Computer Science on a university level. We are now looking into options to expand these "life-long-learning" activities beyond Nedap. We feel it is our duty to the region to deliver good Computer Scientists, and also keep high-educated technical professionals in the region, by offering further training.

## Reaction of the audit panel

The reaction of the committee consists of three parts. Summarising:

### Best practices

In Amsterdam they have created a community of students, alumni, companies and other organizations (e.g. the municipality). Instead of organizing specific post-graduate education, knowledge is shared and created by regularly facilitating and organizing network meetings, company presentations, training workshops and working together on assignments. This could be another way to reach similar goals.

#### Pitfalls

The panel also warns for common pitfalls. "Always keep asking yourself if you are doing it for the right reasons". The right reason being, to help develop the region, support keeping highly trained people in Twente and support companies to keep the knowledge of their staff up to date. It should not be about the money. Long term, this would only devaluate your university level education. You don't want the UT to be considered a training company where you can order 'tailor-made' workshops. There already exists an extensive offering of practical / training oriented CS education. So make sure you distinguish and offer CS on an academic level, as you do for your regular Bachelor's and Master's. And keep an eye on the quality assurance, especially while this part of your education grows (as do the regular BSc and MSc programmes).

### Certification and added value

The panel advices to look at more recent international initiatives, like micro credentials from renowned universities like MIT. Being asked what right we (the UT CS programme) have to issue certificates, and what worth such a certificate would have, without formal accreditation, by e.g. the NVAO like with our regular programmes, the panel was very clear. Everyone can issue certificates, the worth is determined by the branch or branch organizations. Though there certainly is a demand for additional training and certification, especially within some subbranches, like security, the current best-known and most used certificates are "miles wide, and only inches deep". Though you can't do without, it doesn't really provide the in-depth, added knowledge employers in the branch are really after. Therefore the panel recommends discussing this with our Advisory Boards, and it's company representatives, to see what they are really after.

From an organizational perspective the panel also recommends taking advantage of the structure that is already there. Instead of re-inventing the wheel, try using the facilities already in place at the UT. The University has a department specifically for Professional Learning and Development (PLD). And while PLD's focus is different from what CS is offering with Nedap University, the panel recommends to at least on some points, seek out the support from PLD with developing our programmes further. While we don't need to fully merge into PLD, we should cooperate and learn from their experience in the area of professional learning.

### Conclusion

Overall the panel is very positive about the current developments and future plans in the area of life-long learning. Nedap University is a great first effort and participants, teachers and Nedap alike seem happy with the current offering. There are still lots of opportunities to explore and the demand for CS training on an academic level will only increase.

The CS management team thanks the panel for their thoughts and recommendations. We are pleased to hear that according to the panel we are on the right track and we feel strengthened by their positive reaction. With this outcome, combined with the demand in the region and the positive experiences with Nedap, we will now start working on the expansion of Nedap University, all the while trying to keep the balance between additional effort and embedding life-long learning into our regular programmes.