Asia Programme, final report for projects 2018-2020

SUMMARY REPORT FOR PUBLICATION

<table>
<thead>
<tr>
<th>Name of the project</th>
<th>Finnish-Japanese double degree Master’s program in Computing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinating Institution</td>
<td>University of Eastern Finland</td>
</tr>
<tr>
<td>Partner institution(s)</td>
<td>Toyohashi University of Technology, Japan</td>
</tr>
</tbody>
</table>

Objectives of the project

- Establishing a new double degree Master’s program between University of Eastern Finland (UEF) and Toyohashi University of Technology (TUT) in the field of Computer Science and Engineering, in which students study one year in Finland and one year in Japan.
- Close collaboration with Finnish and Japanese companies to ensure the relevance of the education for employment, including 3 months internship in a company or in a research laboratory.

Achieved results and outcomes

Double degree program, TUT-UEF DDP, was established in January 2018 and agreements were signed by UEF and TUT on January 5, 2018. The detailed addendum of studies belonging to the program was signed in August 20, 2018 and the first students from UEF Maiju Karjalainen, Janina Karhunen and Ziyad Tareq Nouri were selected to the Master’s program. As a result of their studies, they realized internship in Japanese company (Olympus, Honda and NHK) in summer 2019. Finally, they graduated in October 2020 and for MSc degree from UEF and M. Eng degree from TUT. Also the first 5 TUT-students (Fujii, Tanaka, Ishihara, Mishima, Ito) from Japan started in this program in April 2019 and arrived in Joensuu, Finland, on August 2019. However, because on corona pandemia, they needed to return back to Japan already in March 2020. They will graduate in spring 2021. TUT also selected new 3 students in spring 2020 and UEF selected in spring 2020 new 5 students. In total from year 2018, totally 18 students have been selected to the program and 3 of them have got new double degree. As outcome we have also made several partnerships with companies in Japan and Finland. 2 of TUT students did their internship in Planmeca and Optomed companies. Also as outcome we have now good model for supervising double degree students, in which two supervisors, one from UEF and one from TUT, and in some theses also one from industry are jointly sharing the supervision. For graduation, we also created a model of joint evaluation of the thesis presentation and thesis text grading. Several staff visits were also done during the project, for example, the visit of 5 UEF Professors to TUT in December 2018, visit of 2 UEF Professors and coordinator of the program from UEF in December 2019, visit of TUT Professors to UEF in April 2019, June
2019, October 2019, and February 2020. In addition, we made agreement on TUT-UEF DDDP double degree doctoral program in autumn 2020 and the first students are selected in 2021 to this new program.

Activities carried out during the project

TUT-UEF DDP double degree program was established in 2018. In the same year, the first students were selected to the program. UEF students did their internships in Japanese companies in summer 2019 and they graduated from the program in autumn 2020. Also the first and second cohort of Japanese students started in spring 2019, and spring 2020 respectively. At UEF the second cohort was selected and started their studies in autumn 2020. Company relationships in Japan and UEF were made. The teaching curriculum was developed all the time during the program and changes were made based on good practices learned during the program. During corona pandemia, we realized the internships in distance, so that Japanese students did their internships from Japan to Finland by video meetings. Japanese students participated UEF teaching from Japan in year 2020 by video connections and UEF students joined the teaching at TUT in distance from Finland in autumn 2020.

Future developments, resulting from the project

We continue the development of the TUT-UEF DDP double degree Master’s program. New company relationships will be made. As a future result from this project is the TUT-UEF DDDP Double Degree Doctoral Program, which was prepared during the project and the agreement of this new program was signed in autumn 2020. The first 2 doctoral students at TUT will start their 3 year course in spring 2021 and they will visit one year at UEF. We also aim to industrial collaboration in doctoral program and new relationships will be created.