**Improving the quality and relevance of higher education, including through**

**cooperation between HEIs and the labour market**: Projects under this priority shall

support activities that help attune curricula to current and emerging labour market demands

and offer employability and transversal skills including entrepreneurship, developing active

cooperation between HEI and partners from outside academia: enterprises, professional

organisations, chambers of commerce, social partners, local/regional bodies etc; and that

recognise and incentivise the role of excellent teachers in student success.

**Abstract Community Service Engineer**

This proposal aims to focus on engineering as being a social undertaking and not a pure technical undertaking. Engineering is a process that starts with understanding people’s and/or organizational needs and ends with actually bringing products and services to these people/organisations.

The social sector is in need for technology. Technology can bring solutions to better the lives of “vulnerable groups” in society (target public of diverse social organisations) and can lead to efficient management and organisation of social organisations.

A multi-campus blended learning environment will offer engineers an innovative curriculum with a strong mix of **theory** and **practice** in life settings. The profile of Community Service Engineer (postgraduate course initially) will be added to their engineering profile.

The **theory** will give engineers a thorough background in developing technology for and implementing technology in the social sector. Important topics of study will be:

* Insights into the social profit sector (European scale)
* Insights into physical and mental disabilities and vulnerable groups in society (e.g. poverty, elderly)
* Expert thinking as an engineer and its effects (miscommunication/misconception of technology)
* Engineering philosophy & deontology
* Assistive technology
* User Centered Design & implementation and Design For All
* Organisational challenges in the social profit sector
* From technological idea (creativity) to the market (valorization/exploitation)
* Open innovation for creating and profiting from technology

For **practise** all partners will set up a structural partnership with a social profit organisations body and/or a group of social profit organisations. Problems/situations with a need for technology will be listed up on a yearly basis. Engineering students will select a problem, listen to the needs of the social organisation (and those of their target public), translate them into technological questions and solutions, advise to implement the technology and evaluate market potential and possible channels to the market. Associated partners (enterprises, chambers of commerce and local regional bodies, …) will be involved as a link to the market. These associated partners will open up their communication channels. Via these channels students can look for existing technology and translate it for use within the social sector (answer to the formulated needs). Compendia of project results will be presented in the final project stage through the communications channels of the associated partners. Newly developed technology (via the projects) is offered in this way to the market.

**Confrontation** between students from social work, economics and engineering is an essential part of the project work (collaboration between fields of study). The aim is to share viewpoints and insights for the development, implementation issues and market potential.

**Mobility** (physical and virtual) will be set up for the project work. In case of physical mobility reciprocal peer assisted learning and related assignments will guarantee that international-intercultural-competences can be acquired by all actors and projects can be carried out in a non native speaker setting (language issues).

The curriculum will be offered initially as a postgraduate joint degree. All partners will examine the option to **translate the course content into the curricula** as an option/minor for an undergraduate engineer.

**Teachers** will have an important role in the selection of the projects and the guidance in the carrying out of the projects.

Labour markets in European countries are **in need for engineers**. It is proven that by emphasizing the social added value of technology the younger generation and female students in particular are attracted towards the profession.

All university partners are committed to continue the course after project termination. The project and quality management are in experienced hands. The partnership builds on existing relations and complementary expertise.