



*IIC strive to manifest a change in mindset of future engineers – Creating Innovativeness*

## **PIEP IIC – Individual Innovation Capability**

### *Project team:*

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### *Why*

The importance of innovative individuals capable of creative thinking is considered fundamental to innovation. The field of innovation has yet not been able to thoroughly explain how individuals' innovative capability can be fostered and improved. In different disciplines elements of innovation such as creativity has been dealt but without a clear link to engineering design and engineering design education. Thus, this research project has a strong education emphasis as it investigates possibilities to better understand and ultimately improve engineering students' capability to innovate.

### *What*

Based on the purpose of exploring innovation capability of individuals, the project aims to enhance the prerequisites for the learning of engineering students. New knowledge is looked for regarding the prerequisites of clustering relevant aspects such as creativity, motivation, personal skills/abilities, business opportunities and market awareness.

### *How*

Action research in combination of both qualitative and quantitative approaches including observations, interviews and surveys are used to address individual innovative capability amongst engineering students and meritocratic predispositions by industry. The research is conducted in cooperation with partners in academy (i.e. hot team/cross-disciplinary innovation and entrepreneurship researchers) and industry (i.e. IT, MedTech and Manufacturing).

### *Deliverables*

Overall, the research project addresses the basic principles in academia; improvement of learning methods and course design. The project has an important role in better identify and understand engineers' skill sets, as those are key indicators to students' graduated market attractiveness. The project aim to have implications on engineering design didactics and course designs. Current research will be summarized in a doctoral thesis on Individual Innovation Capability that will include a range of published conference and journal submitted publications. Currently several of publications are in process of being written and reworked into journal publications.