Batchelor in technology - innovation and entrepreneurship, a multi-disciplinary program aimed at creating new technological business ventures.

Abstract – This program combines disciplines from technology, economy, entrepreneurship and product development. The program is managed by the engineering department at the Østfold University College, this program being the first of its type in Norway. The program is designed towards students that want to create their own companies and start new business ventures, based on technological skills and knowledge. The program has international partners and 6mnd of the program will take place in USA. The program is also well designed for persons that want to go into managing positions in start-up companies, and small companies with challenging competition and need for new innovations and development. The Batchelor program will give a broad platform, and the ability to study different speciality's later on in the Master program. Engineers have traditionally been trained to be good in mathematics and technological skills. Their work was to be in big engineering companies with resources to train the new employees in what technological skills that was needed. These engineers were in fact protected from the real world, and developed habits that was unsuitable for work in small and start-up companies. These bad habits were reflected in the curriculum of traditional engineering education, where entrepreneurship and product development courses did not exist. Big barriers existed also between different trades in engineering, and the different departments at the universities did not communicate at all. The Norwegian National Business and Industry Confederation did studies that shoved shortage of people with combined skills in electronics, mechanics and power systems. They also wanted engineers educated to cope with problems in a faster moving world, and more engineers that was able to start own prosperous companies. This made the basis for this new program, and a new technological education was to be created that would tear down the walls between university departments. The electronic, mechanic and physics department joined at the Østfold University College to create a new curriculum in mechatronic, suited for the new bachelor program. A totally new department was created inside the campus, manned with motivated professors. This new department was to function like a start-up company, and has become a central part of the development system at the university and also the county! One of the biggest challenges was to change the habits of the students, habits inherited from their surroundings. Innovative skills and entrepreneurship mentality is maybe easy to teach, but hard to adopt because it relies on the psychological mentality inside each student. This program is aimed at creating a new type of engineer with an innovative and entrepreneurship mentality, not joust to teach about it. To reach this goal teaching is based on teamwork, project development and challenges from real life. Some of the courses is planned to be held in English language. The program has adopted the Young Enterprise concept, and in the second grade students will start and run their own real companies for one year. Hopefully several of the students will graduate after three years with their own new companies.