3.4.4 Innovation Programme

Students are engaged in a semester-long activity on a hands-on basis to create a novel outcome of practical significance. The students choose the subject of interest, under the guidance of a group of faculty members who also serve as mentors. Working sessions and seminars are organised throughout the duration of the programme. The topics of the seminars include problem definition and analysis, method of irritation, idea-generation methods and solutions, creativity and innovation, critical evaluation, intellectual property protection, and commercialisation of ideas and products with real-life case studies. Working sessions allow students to sell their ideas to the whole class and accept and/or defend critical evaluations.

Students propose a problem, the solution of which will improve our quality of life. They then proceed to analyse the problem and find solutions to it. In the working sessions, the students present their problems, ideas and solutions to peers and the group of mentors. The whole class is engaged in active discussion throughout the working sessions and students are continuously assessed during these sessions by the mentors. At the end of the programme, the students are expected to produce a prototype or a demonstrable system and to make a presentation to convince others of the value of the proposed idea, procedure or device. Peers will contribute to the evaluation of the success of the idea and product generated. The mentors will monitor the progress, and facilitate project development.

Students outside the Faculty of Engineering are encouraged to join to form multi-disciplinary teams in the class project. By taking part in the programme, the students are expected to learn that existing forms of schemes and procedures in practice can be challenged, but, at the same time, there are significant merits and strengths in existing schemes and procedures. Students will be able to create something meaningful to improve our quality of life. Assessment will be 100% continuous and there is no final examination.