



7TH INTER IIT TECH MEET 2018
IIT BOMBAY



BETiC Medical Innovation Challenge

7th Inter IIT Tech Meet, IIT Bombay

Preamble

An engineer is one who solves the problem by trying various approaches and confronting the problem with a fresh and brand new perspective. Engineers can take an idea from imagination and transform it to become a reality. A reality that can impact the lives of many. In this era where we are surrounded with the large number of healthcare issues, applying the engineering knowledge and skills into the medical science can help bring changes in the lives of many patients. So, this is the right time for engineers to come forward and showcase their talents of problem-solving, creativity, and determination.

Problem Statements

Team has to select one of the following problems and propose working prototype for that particular problem:

Problem Statement 1: A non invasive device for rapid screening of diabetic patient.

The test for diabetes is cumbersome and invasive because of the needles, the cost of the needle replacement is also involved. Blood glucose Monitoring becomes a skilled activity for elderly patients and not all can find it easy to manually puncture the finger using lancet in single attempt. The lives of millions of diabetic patients around the world would be improved if they will be able to measure the blood glucose levels without pricking their finger. Pain free measurement will encourage the patients to check their sugar levels regularly, leading to better management of diabetes.

The teams are supposed to build a device that can measure the glucose concentration non-invasively. The device should be user friendly, portable and provide accurate results.