2.3.1. Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Among various pedagogic methods, student centric methodologies are central to outcome based education system. While some of the courses in the curriculum are based upon student centric methods like experiential and participative learning, a wider exposure is given through several co-curricular activities which enhance their understanding of the concepts. After adopting OBE in 2014, the faculty has integrated several student centric teaching – learning processes into their regular course delivery in order to improve the attainment of course outcomes, program outcomes and programme specific outcomes. Brief descriptions of the various student centric methods in vogue at MJ College are presented below:

- 1. Internships: Presently, students are required to undergo 2 weeks of internship as a part of the curriculum. Earlier to this also, the practice of sending students to industry for internships was rigorously encouraged. The students acquire first-hand experience of working on a real time problem during their internship. They get an opportunity to experience the applicability of the theoretical concepts in solving field problems.
- 2. Field Trips/ Industrial visits: In order to strengthen engineering concepts it is essential to expose the students to prototype structures. With this in view, the curriculum of core engineering courses had industrial visit as a in-built mechanism under which students were taken to prominent industries and projects in order to acquaint them with their processes. Even though revised curriculum has done away with industrial visits as a course, the institution is still scheduling field visits in order to enrich the student learning experience.
- 3. Live Projects: Students are encouraged to take up real time or field projects in association with industry/ R and D organizations for their final year project course as well as mini projects. This helps them enhance their analytical and problem solving skills and makes them industry ready.
- 4. Service learning projects: Students are encouraged to take up local community projects by identifying the need and requirement of the institutions like schools, slums, NGO's etc. Under this students have successfully executed in Erramanzil government school, Rasoolpura slum area, Kasturba Memorial Trust etc.
- 5. SAE BAJA, Robocon and similar design & fabrication competitions provide an excellent opportunity of experiential learning during their academic life. The teams

- have ample opportunity to not only hone their technical skills (theoretical and practical), but also learn team work and leadership skills.
- 6. R & D projects: Students are provided seed funds/ project funding for undertaking innovative R & D projects involving application of emerging technologies to solve engineering and social problems. The funds are provided to the students yearly, based upon their shortlisting through the constituted R & D committee. The students have one year time to implement their projects. Patent applications are filed for selective innovative projects.
- 7. Hands on experience: Wherever warranted, the theory courses are augmented with laboratory exercises in order to provide hands on experience in both programming and non-programming laboratories. Technical workshops with hands on sessions in collaboration with industry leaders are offered to the students.