

Format of Best Practices

1. Title of the Practice

Ready Engineer Program by TATA Technologies for Third Year Mechanical Engineering Students

2. Objectives of the Practice

The purpose of the Ready Engineer programme is to bridge the engineering industry talent gap by educating and mentoring aspiring young engineers. The aim is to be a catalyst in reducing the academia-industry gap and ensure that the future engineers are ready for the industry. The Ready engineer program is the initiative of Tata Technologies which aims to bridge the industry-academia gap and make engineering students ready by providing them real world, hands on exposure on CATIA and Computer Aided Design on Tata Technology learning tool iGetIt weblink www.myigetit.com. The program also consists of soft skills training, employability assessment and NPTEL Courses to meet future opportunities of Industry 4.0. Total 50 students of mechanical engineering department got the opportunity to be part of this programme in academic year 2019-20 and this collaboration will grow many folds in coming academic years.

3. The Context

The students are given a platform for learning soft skills and technical aptitude which are required for development of professional ethics in the Industrial Environment. Department of Mechanical Engineering produces budding future ready engineers for the industry so that they spent less time in training at the industry. Salient key features of the best practices conducted for Industry and Institute are listed below:

Industry

- Fit to work engineer
- Less time & money on training
- Innovative inputs from fresher
- Explore new product development

Institute

- Improves employability
- Industry interaction
- New techniques and technology
- Certification from TATA Tech.

4. **The Practice**

The best practice is conducted for selected 50 students from the Third Year Mechanical Engineering from the Department. The students list along with login ID and password is sent to the Department from TATA Technologies, Pune. These login credentials are useful for the students to undergo with online learning through Website link www.myigetit.com. Students develop their soft skills as well as technical aptitude through online video lectures by Industry experts having more than 15 years of experience. This makes students learn soft skills required for professional ethics to be followed by an engineer at the Industry. The Industry experiences shared through online video lectures makes the students aware of various technical aspects of advanced automobile design and limitations.

The hands on training of the CATIA v5 software is conducted at CAD/CAM Laboratory of the Department of Mechanical Engineering. The uniqueness of this best practice conducted by the Dept. of Mechanical Engineering for the students is not only enhance skills but also make them ready for the Industry, hence the name Ready Engineer Program in association with TATA Technologies, Pune. Here, students learn from the industry expert as well as earn certification from one of the renowned industry TATA Technologies, Pune.

5. **Evidence of Success**

Mechanical engineering ready engineer program 50 students undergo assessment through online test conducted by TATA Technologies, Pune at Computer Centre at our Institute. This is online MCQ based test which test the students understanding on core concepts including automobile design, design basics, mechanics, kinematics, thermodynamics, material science, structural analysis, etc. It requires a candidate to apply the principles of physics and material science for analysis, design, manufacturing and maintenance of mechanical systems. For any job profile in core mechanical sector, a student is required to have basics of these learning aspects.

6. **Problems Encountered and Resources Required**

The hands on training session require Computer Laboratory (CAD/CAM Laboratory) and CATIA v5 software which is installed at the CAD/CAM Laboratory of Dept of Mechanical Engineering.