Name of training | Fundamentals in Automobiles  
Hosting Institute | Toyota Technical Training Institute  
| C/o Toyota Kirloskar Motor Pvt Ltd.,  
Location | Plot No.1, Bidadi Industrial Area,  
| Ramanagar District, Karnataka – 562109  
No. of days and Dates | 10 days from September 13\textsuperscript{th}-23\textsuperscript{rd}, 2021  
Training Co-ordinator | Mr. Kumar Swamy M C  
Faculty in-charge | Mr. Sadashiv Bellubbi  

Submitted by:  
Mr. SADASHIV BELLUBBI  
Assistant Professor  
Department of Mechanical Engineering  
Alva’s Institute of Engineering and Technology, Moodabidri
**Introduction:** This training was developed by the Toyota Technical Training Institute C/o Toyota Kirloskar Motor Pvt Ltd., for final year Mechanical Engineering students of Alva’s Institute of Engineering and Technology, Moodabidri. This program is presented as a framework of enhancing knowledge of final year mechanical students in dismantling and assembly of vehicle engine, applications of limits and fits, hands on experience of welding processes. This training is mainly focused on improving students’ industrial knowledge, skills and professional qualities appropriate to new technology needs of industry scenario.

**Training objectives:**

- Familiarize/Refresh students’ knowledge about the basic concepts, principles, components and approaches to limits, fits and tolerance.
- Highlight the importance of Limits, fits and tolerance and their role in manufacturing.
- Hands on experience of Dismantling and assembly of diesel engine and to know applications of all parts used in engine.
- To know the different tools usage for Dismantling and assembly of automobile systems.
- Hands on experience of various welding processes used in automobile industry.
- To understand the best practices of quality and Toyota Production System involved in Toyota Kirloskar Motor Pvt. Ltd.

**Training Team:** Members involved in training were

Mr. Bhaskar Singh, Officer and Trainer TKM Bengaluru
Mr. Venkatesh Kasi, Coordinator and Trainer TKM Bengaluru
Mr. Kiran Kumar H P, Trainer TKM Bengaluru
Mr. Dinesh A, Trainer TKM Bengaluru
Mr. Ram Prasad, Trainer TKM Bengaluru

**TKM Training Programme**

This programme was opened up with a welcoming all participants and faculty of AIET to Toyota Technical Training Institute. Mr. Bhaskar Singh mentioned about the significance of MOU between TKM and AIET. He also mentioned that students’ learning must fill up the gap between industry and institute learning. He motivated all participants to attend all sessions sincerely to learn basic concepts, principles, components and approaches to limits, fits and tolerance. Hands on experience of Dismantling and assembly of diesel engine and to know applications of all parts used in engine and he
mentioned about the different tools used for dismantling and assembly of automobile systems. Further he requested to have hands on experience of various welding processes used in automobile industry and to understand the best practices of quality and Toyota Production System involved in Toyota Kirloskar Motor Pvt. Ltd. Mr. Bhaskar Pai, vice Principal had described the importance of training and he motivated all participants to actively take part in all sessions and he requested everyone to do not go back with any of the doubts related to this training as well as Toyota company. After the addressing from Bhaskar Pai and Bhaskar Singh, students were engaged with training sessions as per the schedule. In this 10 days of training, total 25 students were participated and benefitted from the TKM training.

In these 10 days of training, students also learnt about how to improve our skills, how to produce quality products in shorter time, how to manage ourself in given time, also learnt about Toyota culture, discipline, morning exercises, the way of respecting people and many more…

As per the schedule, students visited Production Plant no.1 to know about manufacturing of Toyota’s Innova and Fortuner vehicles. Students also visited Toyota Eco Park and learnt about different plants, how raw material can be converted into good product and etc.

On last day of training, conclusion session was conducted, during this session Mr. Bhaskar Pai have appreciated all participants for their sincere learning, discipline maintained in Toyota campus, also he took feedback from all participants regarding training, facilities (Stay, food, transportation) provided by the company. Bhaskar Singh, Trainer had requested all participants to do not stop learning, learning is continuous process. Few participants expressed their feedback about the training. Mr. Sadashiv Bellubbi, Assistant Professor, Department of Mechanical Engineering, AIET thanked all trainers, coordinators, HoD, Principal and management of both TKM and AIET for arranging very informative training to Mechanical final year students.

The programme overall was the feather in the cap and it was a milestone for the students to know about vehicles, it will surely helpful while attending the interviews. The department is always known for giving its quality education and making the students learn through practical sessions.
Mr. Bhaskar Singh, Vice Principal, TTTi addressing participants on inauguration day

Students understanding about Toyota Training Technical Institute (TTTi) Functions

Mr. Bhaskar Singh, Trainer handling Knowledge session on Limits and fits
Mr. Bhaskar Singh and Mr. Dinesh A, Trainers made easy understanding applications of Limits and fits using demo models

Mr. Kiran Kumar, Trainer taken knowledge session on explanation of engine parts
Mr. Kiran Kumar, Trainer given hands on experience of Dismantling and Assembly of Gasoline Engine by participants

Dismantling of Gasoline Engine by participants
Mr. Roshan Singh, Principal, TTTi had addressed to participants at Assembly shop after running the assembled gasoline engine.
Mr. Ram Prasad, Trainer explaining about Safety dresses while performing welding.

Participants practicing Hands on experience of welding processes, other image shows welding joints done by participants.
Mr. Venkatesh Kasi, Trainer, explained about Gurukul Learning for Toyota employees.

Participants understood importance of safety in industry as well as in day-to-day life.

Participants understood Toyota Production System by playing TPS Game at Gurukul.
Participants understood TPS and Conventional method of production

Mr. Bhaskar Singh, Vice Principal, TTTi congratulating participants on successful completion of 10 days Training

Mr. Bhaskar Singh, Vice Principal, taking feedback about training at Toyota and staying at dormitory on completion of 10 days Training
Mr. Bhaskar Pai, Vice Principal, TTTi, distributed certificates to all participants on successful completion of 10 Days Training at TKM Bengaluru

Participants with Trainers and Vice Principal

**Faculty in-charge**
Mr. Sadashiv Bellubbi

**TKM Training coordinator**
Mr. Kumar Swamy M C