

## Automobile Workshop by Team Turbocrafters

The Team Turbocrafters coming under SAE Collegiate club undertake Automobile workshops for school students. The main motive behind this is to impart the knowledge of ATVs to all the petrolheads out there who are seeking for opportunities to learn more. The students are taught about every aspect of designing and fabrication of an ATV by the team members. They are also



made familiar with all kinds of softwares and machines that are used to fabricate the vehicle. The workshop is generally conducted on weekends. The workshop is of two days tightly packed with fun and knowledge. Since the beginning of this academic year, the team has conducted two workshops, each containing about ten to fifteen school students from different schools.

The first day begins with the introduction of the workshop and brief description of the ATV. Then the day is followed by detailed explanation of different departments included in an automobile. First day included Brakes, Suspension and Chassis department description, where the students explored the depth of these departments and understood how each of the components of these departments works. They were explained how these components are manufactured.

The students were also explained about the working of CNC machines and basic lathe operations.

Both TIG welding and arc welding were demonstrated to them and they were explained the concepts behind welding.



The second day consisted of detailed explanation about the departments Steering, Drivetrain and Wheel Assembly. Various parts and working of these systems were explained.

Metal cutting and grinding processes used in fabrication were demonstrated. The students were introduced to new CAD softwares like AutoCAD and Solidworks. They were explained how these softwares are used in designing of the Vehicle.



The workshop was concluded with a fun activity in which the students had to make scale model of the ATV chassis using PVC pipes.

