



**053-MPT**

## Fabrication of 3D Printer

*Additive manufacturing, often referred to as 3D printing, is a new way of making products and components from a digital model. Like an office printer that puts 2D digital files on a piece of paper, a 3D printer creates components by depositing thin layers of material one after another, only where required, using a digital blueprint until the exact component has been created.*

*By eliminating production steps and using substantially less material, 'additive' processes could be able to reduce waste and save more than 50% of energy compared to today's 'subtractive' manufacturing processes, and reduce material costs by up to 90%. The use of additive manufacturing can potentially benefit a wide range of industries including defence, aerospace, automotive, biomedical, consumer products, and metals manufacturing. The aim of the project is to fabricate an indigenous low cost 3D Printer to introduce this modern aspect of manufacturing technology at Yanbu Industrial College as a tool for Project Based Learning in Classroom environment.*