

Computer Aided Design (CAD) in 3D and 3D Printing

Training Course	Computer Aided Design (CAD) in 3D and 3D Printing
Course Language:	English
Course Duration	Total Number of hours: 21
Course Objectives	End-to-end experience on how to model 3D objects and 3D assembly using CAD program and printing them using 3D printers. ALL of the used Software are under General Public License.
Course Content	Course Key Topic Area Includes: • Session 1: Overview, Setting up FreeCAD, and demonstration of different packages, Drawing first 2D design • Session 2: Using 2D Sketcher • Session 3: Using 2D Sketcher • Session 4: Using 3D Part Modular • Session 5: Using 3D Part Modular • Session 6: Using 3D Printer • Session 7: Full 3D Project (Design and Printing)
Learning Outcomes	At the end of the program the trainees will be able to: • Design 3D objects • Design 3D assembly (many 3D objects together such as complete engine or building) • Print any design using any 3D printer • Customize 3D printing options • Decide about the best 3D printing material for the object

Target Audience • **Any Background (Students, Professional or Academicians)**

**Course Material
/Technology used/
Details Relevant
to the course.**

Presentation Slides
FreeCAD (GNU)
3D Printer

**Instructor Details
& Brief Instructor
Bio**

Name: Dr. Ihab Elaff
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