Schedule For "3D Printer (Design & Print)" course

Session	Day – 1	Day – 2	Day – 3
Morning	*Introduction and theory* Additive Manufacturing approach. 3D Printing technology definition and specific terms, Advantages and limitations, 3D Printing technology steps with Examples, 3D Printing applications fields with Examples, 3D Printing equipment, 3D Printing approach to build parts and assemblies, STL file format	*Demo Session:* Import the STL file in 3D printer software, scale and position object within building envelope, set process parameters, slice the model 3D Printing process steps for 3D printing an object Post-processing operations for 3D printed objects	*Discussion on opportunities***:** Skills required for the field Opportunities for freelancers *Hands-on Session:* Opportunity to design and print self-developed design
Afternoon	*About the instrument* Knowledge on 3D printer software How to design a STL file Knowledge on how to access STL models repositories on internet download the desired model (theoretical and practical skills) How to use automated software tools/commands for checking STL file	*Hands-on Session:* 3D Printing an object using 3D printer based on filament deposition: process steps, parameters, building orientation Opportunity to design and print self-developed design	*Evaluation*

Instructors: Dr. Ashutosh Singh, Mr. Rahul M, Ms. Savitha

Detail about the instrument is provided on the following link:

http://crf.cens.res.in/facilities/TS-3DPrinter/

http://crf.cens.res.in/facilities/TS-3DPrinter/