

Study trip to 3D Printing Workshop with Architecture students Year 1 – For ARD1207 Architectural Workshop course:

Activity Coordinators:

Dr. Mitra Hedman

Ms. Khadija Saeed

Venue: Micro CAD Services- Intragulf Company

Date: Monday 11th April 9:30 – 11:30

Architectural Workshop course is about teaching students how to build 3D models of their design projects. Although we teach students to build 3D models manually, it was necessary to take them to the 3D printing workshop where Printers build a 3D models of a scanned design.

The students visited Micro Cad Services – Intragulf Company where Mr Dean Phelan made a presentation about the 3D printing technologies, machines and material used to print a 3D model:

3D laser scanning is the first stage in most 3D data capture projects in the process of conversion of 3D data into a usable model.

Usually 3D printers are used to print objects about the size of a basketball but engineering services firm Micro CADD Services (MCS) has produced a 1:10,000-scale model of the entire island of Bahrain.

The geographical model that features landmark buildings and homes in parts of Manama in addition to accurately mapping the landscape of Bahrain from coast to coast.

The 3D printed map is one of the world's largest models of an entire country measuring 5.4 metres long by 2.2 metres wide, and was made possible through the use of Micor Technologies' Matrix 300+.

To create the roads, they 3D printed out strips of grey paper, which were then glued onto the model - this allowed for the roadways to be raised slightly, like on real terrain.

Students enjoyed this visit and were impressed by the map of Bahrain and the method used for printing colour models that was demonstrated by Mr Phelan.

