**COURSE 12: ADDITIVE MANUFACTURING FOR INDUSTRY 4.0**

Team: …………………………………………………………………………………………………………………………………………………

Student’s name: …………………………………………………………………………………………………………………………………

**Workshop 1 – Worksheet 1.1**

**Main Task:**

Divide in teams of 2 to 4 students and prepare a pitch presentation on one of the following subjects:

* + S1 - Vat Photopolymerisation
  + S2 - Material Extrusion
  + S3 - Material Jetting
  + S4 – Binder Jetting
  + S5 – Powder Bed Fusion
  + S6 – Direct Energy Deposition
  + S7 – Sheet Lamiantion

A minimum pitch presentation structure must contain the following mandatory topics:

* Functioning principle – Picture and main component identified
* Most common materials
* Precision of manufacturing
* Quality of parts / Mechanical and chemical characteristics
* Advantages/ disadvantages
* Main application areas and product examples
* Post processing steps and necessary equipment/ materials
* Costs: operating, materials, equipment, etc.

For the development of your pitch presentations use your lecture notes, the learning materials provided by your teacher, and the following:

* [www.additively.com](http://www.additively.com)
* [www.manufacturingguide.com](http://www.manufacturingguide.com)
* [www.3dhubs.com](http://www.3dhubs.com)
* [www.sculpteo.com](http://www.sculpteo.com)
* [www.shapeways.com](http://www.shapeways.com)
* [www.3dprint.com](http://www.3dprint.com)
* [www.materialise.com](http://www.materialise.com)
* [www.3dprint.com](http://www.3dprint.com)
* <https://www.3dpbm.com/>
* [www.3dprintingmedia.network/](http://www.3dprintingmedia.network/)
* <https://www.3dprintingbusiness.directory/>
* [www.fablabconnect.com](http://www.fablabconnect.com)
* [www.makerbot.com/](http://www.makerbot.com/)
* [www.protolabs.co.uk/](http://www.protolabs.co.uk/)
* [www.stratasys.com](http://www.stratasys.com)

The minimum requirements regarding the delivery of your pitch presentations are:

* Students must take turn in delivering the pitch presentation
* Each presenting student will answer at least one question from the audience
* Each student from the auditory will ask at least one question to the presenting team
* Students should not read from the slides
* Slides should contain, pictures, graphs, tables, case studies and less text.

Evaluation will be done by the professor and by other teams. When grading a team, you should take into consideration the following criteria:

After all presentations are over and evaluation has completed, discuss with your teacher the strengths and weaknesses of your team, and find ways to improve your performance, research methods and your information synthesis methods. To make thinks clear, based on the discussions with your teacher and other teams, complete the SWAT analysis tool provided below.

