

# Senior Design Project Description for SPRING 2017 Project Title: Cloud Manufacturing: An Approach for Designing New Manufacturing Facilities (UNCC\_MFG)

Supporter: UNC Charlotte
Supporter: UNC Charlotte
Supporter Technical Representative: ASSIGNED
Faculty Mentor: <u>X</u> ASSIGNED \_\_\_\_ TBD (check one)
Single Team <u>X</u> Dual Team \_\_\_\_ (check one)
Personnel (EN/ET): \_\_\_\_ E, \_\_\_ Cp, \_\_\_ Cv, \_\_\_ M, \_5 SE
(Complete if the number of students required is known)
Expected person-hours: (250 per student)

## **Description of Project:**

This project includes the investigation of current practices in cloud manufacturing, the requirements for implementation of cloud manufacturing approach for new manufacturing facilities in the U.S, the manufacturing systems design process involving cloud manufacturing.

## Initial Project Requirements (e.g. weight, size, etc.):

Current practices must be investigated. After the investigation, the project team will need to design a transparent manufacturing plant in two options, with cloud manufacturing approach and without cloud manufacturing approach. VW's transparent plant in Dresden, Germany will be the example of the transparent factory.

## **Expected Deliverables/Results:**

A report listing the results of the investigation and including the design of the two options.

## List here any specific skills or knowledge needed or suggested (If none please state none):

Data analysis, computing, manufacturing, statistical process control