

**Production Management (ME-419)**  
**Module 2: Demand Management**  
**Assignment 4: Forecasting Steps (Step 3)**

**1. Objectives:** The goal of this assignment is to practice the third step of forecasting and perform data analysis of the historical data (shipment/sales data) of your company (refer to forum of your group on Moodle).

**Tasks:** The tasks to complete and the results to obtain are as follows

1. Identification of the demand typology for each product family (constant, cyclic, seasonal, with trend).
2. Select a preliminary forecast model on the basis of the identified demand typology and justify your choice /Compute possible initial trend components/Compute possible initial seasonal components).
3. Perform an autocorrelation analysis on data (aggregated per product family)

**Your submission:**

1. File: Your slides
2. Time: The latest by **Friday, Oct 11<sup>th</sup> before 11:55 AM.**
3. Quality of the content:
  - a. We do expect to receive a professional work, similar to what you will hand over to your line manager in industry.
  - b. If necessary, use graphics to illustrate your content.
  - c. Cite others' work, websites, videos, ... when you use any content and submit your assignment.
  - d. Don't forget the executive summary and conclusion sections in your report.
4. **Please ensure that you have to upload related files,**
  - a. Class exercise
  - b. Your Slides
  - c. Excel file related to your assignment
  - d. Provide your Excel files in clearly documented worksheets, including goal, assumptions, ....
5. **This is a group assignment**, and there will be a group presentation for this assignment. Each presentation will have 7 minutes with 8 minutes of feedback.
6. Assignment is due on the scheduled date. Submission delay will have a negative score.
7. Connect, bond, and establish regular contact with your coach.
8. Connect and bond with your group members, define a proper group strategy for handling the workload and reach an agreement on the time to meet up during the week.
9. Upload your files (and the supporting files if applicable) in *Moodle's* appropriate location.