

### Multivariate Statistical Methods for Engineering and Management (MEMEG, 1<sup>st</sup> Semester, 2022/2023)

Handed out on 2 of January, 2023.

To be handed back on 20 January, 2023.

#### Group 6:

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Consider for the **data(banknote)**, available in R **library(mclust)**, the subset with observations **90 to 120**.

- Explore/describe the data using the methods taught in this course, in particular description of multivariate data, plotting and the following statistical methodology: principal components and cluster analysis.
- Write a report detailing the analysis and the relevant findings. The report (without appendices) must have no more than 20 pages and shall be divided into sections: Introduction, Description of the data, Methods, Results, Conclusions and References.
- The R code and the report must be sent by email to: [irodrig@math.tecnico.ulisboa.pt](mailto:irodrig@math.tecnico.ulisboa.pt).