Teaching Statistics in Quality Science using the R-Package qualityTools

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A key role in the education of engineers is the teaching of statistical methodology used in Quality Science. Among the many requirements of an engineer is the competence to plan and conduct data collections in a technical environment as well as to analyze the obtained data with respect to quality.

Over the last two years the Department of Quality Science of the TU Berlin successfully held an obligatory course for undergraduates with the title "Data Analysis and Problem Solving" using the statistical software R and the **qualityTools** package. In the following is a brief illustration of the topics covered in this R-Course, a presentation of the developed R-Package **qualityTools** its concept and methods as well as a resume of the challenge to teach the Six Sigma Quality Management methodology to undergraduates with no statistical background using the **qualityTools** package and the statistical software R in general.

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