INTRODUCTION TO DATA MINING

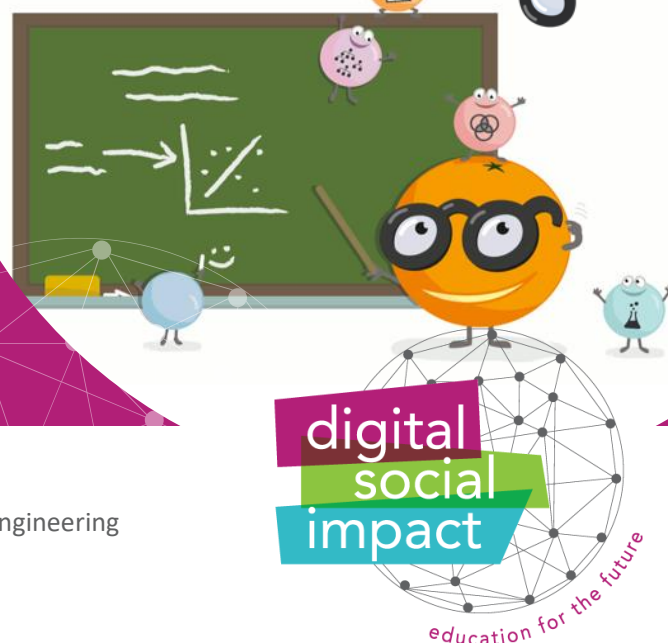**Figure 27**: Illustration of data science classes
Source: UL FRI

AT A GLANCE

STUDY FIELD:	Computer science and engineering
DIGITAL READINESS:	Expert
SOCIAL IMPACT EXPERIENCE:	Medium
LOCATION:	Ljubljana, Slovenia
TARGET GROUP:	Students, academia, industry
PARTNER ORGANIZATION:	Univ. of Ljubljana, Faculty of Computer Science & Engineering
TEACHING METHODS (DURATION):	Workshop (5 hours)
WEBSITE:	LINK

DETAILED DESCRIPTION

FREQUENCY:

One-day 5-hour hands-on course on key approaches of data science.

SOCIAL IMPACT

The Orange tool enables to perform simple data analysis with data visualizations. It helps to explore statistical distributions, box plots and scatter plots. Participants of the course can later dive deeper with decision trees, hierarchical clustering, "heatmaps", MDS and linear projections. The tool is used at schools, universities and in professional training courses across the world. It supports hands-on training and visual illustrations of concepts from data science. There are also widgets that were especially designed for teaching.

STRUCTURE

Participants of the introductory course learn about data visualization and machine learning. After completing the course, they should be able to analyze their own data and use them to develop predictive models.

The course consists of four themes:
1. Data exploration and visualization.
2. Clustering, uncovering of groups in data.
3. Classification and predictive modelling.
4. Analysis of survey data, data from marketing, and voting data.