# Information Visualization

# CHECKPOINT I: Visualization Proposal

G08

**1. Domain**

- Our domain for the project is the **employment/unemployment** of higher education courses from all the public and private universities of Portugal.

**2. Dataset**

* + - 1. - We will use a set of documents (excel format) provided by DGEEC (“Direção-Geral de Estatísticas da Educação e Ciência”) with the information about all the courses and the respective year.
    1. - The data mentioned above is in the DGEEC website, available at http://www.dgeec.mec.pt/np4/92/
       1. **3. Tasks to be supported**

- Task 1: Query->Compare - Compare the unemployment (%) of different courses (regardless of course conclusion year of the graduates)

- Task 2: Analyze->Consume->Present – Present the information about unemployment (%) from a specific course graduates across time

- Task 3: Query->Identify – Identify the university with more unemployment (%)

- Task 4: Consume->Present – Relation between minimum entry grade and unemployment (%)

-Task 5: Query->Summarize – Summarize the employment by graduation areas

* + - 1. **4. Example Questions**
      2. - Does Computer Science graduates in IST have more unemployment, in 2015, than Computer Science in ISEL? And in 2007? (Task 1)
      3. - Is Computer Science in IST having less unemployed graduates in last years? (Task 2)
    1. - What was the year which had less unemployed people from Computer Science in IST? (Task 2)
    2. - What is the university with more unemployment? (Task 3)
    3. - Where the unemployment will be higher? In a course with 14 minimum entry grade or one with 17? (Task 4)
    4. - What is the graduation area with less unemployment? (Task 5)
       1. **5. Data Sample**

(from “Unemployment2014.csv”)

University; Course; Degree; Total Unemployed; Total Graduates

IST; Engenharia Informática e de Computadores; Licenciatura; 20; 800;

ISEL; Engenharia Informática e de Computadores; Licenciatura; 30; 500;

(from “Unemployment2015.csv”)

University; Course; Degree; Total Unemployed; Total Graduates;

IST; Engenharia Informática e de Computadores; Licenciatura; 15; 870;

ISEL; Engenharia Informática e de Computadores; Licenciatura; 40; 650;

(from “MinimumEntrygGrades2016.csv”)

University; Course; Degree; MinimumEntryGrade;

IST; Engenharia Informática e de Computadores; Licenciatura; 16.7