

**FACULTY: Electronics, Telecommunications and Information Technologies**

**COMPETENCES OF UPT GRADUATE IN:**

**The fundamental field: Engineering Sciences**

**Bachelor's degree program:**

**DATA ENGINEERING**

**(Bachelor's degree field: Electronics, Telecommunications and Information Technologies Engineering)**

No.	Competences
C1	Design of computer system architectures for the acquisition, storage and use of data at an organization level.
C2	Administer all types of data resources through their lifecycle, data processing to limit redundancy, reduce dependency, and increase consistency.
C3	Collect and evaluate numerical data in large quantities, especially for the purpose of identifying patterns between the data.
C4	Use models and techniques for statistical analysis and ICT tools to analyse data, uncover correlations and forecast trends.
C5	Apply quality analysis, validation and verification techniques on data to check data quality integrity.
C6	Create a customised software for processing data by selecting and using the appropriate computer programming language in order for an ICT system to produce demanded output based on expected input.
C7	Produce research documents or give presentations to report the results of a conducted research and analysis project, indicating the analysis procedures and methods which led to the results, as well as potential interpretations of the results.
C8	Create visual representations of data such as charts or diagrams for easier understanding.
CT1	Developing analytical, synthetic, comparative and critical thinking, adaptability and communication in new situations and conditions.
CT2	Developing organizational and management responsibilities, innovative capacities and research, as well as initiative and skills to identify their own learning needs and lifelong learning.
CT3	Methodological analysis of the problems encountered in the activity, identifying the elements for which there are established solutions, thus ensuring the fulfillment of the professional tasks.