Mondragon Unibertsitatea

Bachelor's degree
Business Data Analytics

Subject

Economics and Business Management II

Year: 2 **Credits**: 6 ECTS **Language**: Spanish

Competencies

Core competences:

CB1. Students have demonstrated knowledge and understanding in an area of study that builds on the foundation of general secondary education and is usually at a level that, while relying on advanced textbooks, also includes certain elements involving cutting-edge knowledge in their field of study

CB3. Students are able to gather and interpret relevant data (normally within their field of study) in order to make judgements, considering important matters of a social, scientific and ethical nature.

General competences:

CG5. Awareness and commitment

Specific competences:

CE5. Have and demonstrate a very deep insight into the areas of organisational management, thereby understanding the implications of data management in the various organisational domains.

CE6. Have an entrepreneurial and transformative vocation, in terms of attitudes, skills and tools to develop entrepreneurial and intra-entrepreneurial projects that go beyond improving efficiency.

Learning outcomes

RA5. The ability to know oneself and to identify one's own strengths and weaknesses when interacting with others and within the given situation.

RA12. Have and demonstrate a very deep insight into the areas of organisational management, thereby understanding the implications of data management in the various organisational domains.

RA13. Have an entrepreneurial and transformative vocation, in terms of attitudes, skills and tools to develop entrepreneurial and intra-entrepreneurial projects that go beyond improving efficiency.

Syllabus

Economics

- Macroeconomic indicators for economic analysis
- Reference information sources for macroeconomic information
- Sectoral analysis
- Economic impact studies
- Macroeconomic forecasts

Finance

- Financial mathematics
- Investment decisions

Industry

- Data analytics in Industry 4.0: current status and future prospects
- Data analytics and optimisation in the industrial sector

Ethics

- Ethics in action: the Data Ethic Canvas model.
- Systematics in the ethical approach to data science and artificial intelligence.
- Data sources: limitations
- Data sharing and communication
- Context: codes of ethics and legislation
- Rights to be considered with regard to sources
- Data use objectives
- Communicating the objective
- Effects on people: positive and negative
- Commitments of the people involved
- Openness and transparency
- Project work system
- Iterative evaluations
- Subsequent actions

Law

- Marketing and data processing
- Data processing in work environments
- Legalities in entrepreneurship and the special situation of startups
- Industry, marketing and data processing

Training activities

The training activities planned for this module are the following:

- Challenge-based learning (3 ECTS)
- Teamwork (1.5 ECTS)
- Workshops (1 ECTS)
- Individual work (0.5 ECTS)

Assessment system

Assessment will be by means of the continuous assessment system, providing constant feedback to both teachers and students on the learning process throughout the academic period:

- Learning activities involving the presentation of knowledge and individual study may be assessed by means of oral and/or written tests, which will account for a maximum of 60% of the final mark.
- The training activities aimed at acquiring the practical skills of the subjects will be assessed through the completion of various activities (assignments, case studies, challenges, etc.) accounting for at least 40% of the final mark.

Details of the assessment and marking will be made explicit in the annual academic planning of the subjects, in accordance with the teachers responsible and the determining factors of each course.

Bibliography

- Aguado García, D. (2018). HR Ana lytics: Teoría y práctica para una ana lítica de recurs os humanos con impacto. ESIC Editorial.
- Ariza Montes, J. A., Morales Gutiérrez, A. C., Morales Fernández, E., José Antonio Ariza Montes, A. C., & Morales Gutiérrez, E. M. F. (2004). Dirección y Administración Integrada de Personas: fundamentos, procesos y técnicas en práctica. McGraw-Hill.
- Delgado, C., Palomero, J. (1995). Matemática Financiera. Logroño. Palomero Delgado.
- Cahill, J. (2020, July). Embedding Ethics in Human Factors Design and Evaluation Methodologies. In International Conference on Human-Computer Interaction (pp. 217- 227). Springer, Cham.
- Floridi, L., & Taddeo, M. (2016). What is data ethics? Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences, 374(2083),

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- Mayer-Schönberger, V.; Ramge, T. (2019). La reinvención de la economía: El capitalismo en la era del big data. Madrid: Turner.
- Morozov, E. (2015). La locura del soluciónismo tecnológico (Vol. 5010). Katz Editores y Capital Intelectual.
- Open Data Institute (2019). Data Ethics Canvas.