

# Petroleum and Gas Economics

**Calendar:** 6<sup>th</sup> day semester

**Contact Hours:** TP 60,0h; OT 7,5h

**Scientific Area:** Chemical Industrial Engineering

**Intended learning outcomes (knowledge, skills and competences to be developed by the students):**

Introduce the key concepts of supply and demand economy and how companies, organizations and governments can seek to influence them, in the context of the oil industry. Historical perspective on the evolution of the oil market and the current context. Introduction to the study of investment projects, risk assessment.

## **Syllabus:**

- 1 Basic Concepts in Market economy
  - 1.1 Supply and demand
- 2 The oil culture
  - 2.1 Historical Perspective
  - 2.2 The Seven Sisters
  - 2.3 Reserves. Estimation and fluctuations
- 3 Market Crude
  - 3.1 Global Market
  - 3.2 Consumption and global demand
  - 3.3 The Market and refining
- 4 Supply Chain Oil
  - 4.1 Technological Factors
  - 4.2 Economic Factors
  - 4.3 Geopolitical factors
- 5 Investing in oil projects

5.1 Methods of assessment

5.2 Value of Money temporary inflation, rate of return, risk

5.3 Parameters decision

5.4 Risk Management

6 Future Prospects

6.1 Estimation of oil and gas

6.2 Alternative sources of energy

**Evidence of the syllabus coherence with the curricular unit's intended learning outcomes:**

With this UC is intended that the student acquires knowledge about the market and the oil market economy as well as a background perspective on the market and the oil industry in order to contextualize the current situation. The syllabus ensure adequate training to achieve the objectives, covering all subjects needed.

**References:**

James G. Speight, "An Introduction to Petroleum Technology, Economics, and Politics" Wiley 2011.

Ken Arnold "Standard handbook of petroleum and natural gas engineering "Butterworth-Heinemann 1996.