



**ELENCO DEI CORSI DELLA SCUOLA DI DOTTORATO DEL
POLITECNICO DI BARI PER IL VI BANDO
(A. A. 2022-2023)**

4. Space Economy: past, present, future, SSD ING-IND/35, 2 CFU

Syllabus:

The Space Industry

1. The early days of the space industry
 - a. Sputnik
 - b. Apollo and Space Shuttle program
 - i. Deep dive on human spaceflight
2. Today's space industry
 - a. The aerospace band
 - b. International Space Station
 - c. Satellite platforms and satellite services
 - d. Rocket launchers: expendable, refurbishable, reusable
3. Short-term future
 - a. Artemis program for Moon exploration
 - b. Mars robotic exploration
 - c. In-space manufacturing and logistics
4. Long-term future
 - a. Permanent lunar and Martian habitats
 - b. Exploitation of extraterrestrial resources

The Space Economy

1. Domains of operation: civil, commercial, military
 - a. Deep dive on military space
2. Business opportunities in the New Space Economy
3. Space law: diplomacy, treaties, agreements
4. Space and finance: future markets
5. Space in Italy: organization, actors, and peculiarities