ICT2303 TECHNOLOGY OF TRANSPORTATION MODES

Credits and contact hours: 10 UC credits / 10 hours (3 h. Lectures; 1,5 h. Assistantship; 5,5 h. Independent learning experiences)

Instructor’s name: Alberto Bendek / Francisco Godoy

Course coordinator’s name: Alberto Bendek / Francisco Godoy


Course Catalog Description: We live in a globalized world where moving to different geographical locations is increasingly commonplace. This has led to an increased need for cargo and passenger transportation from one place to another.

Over the years, humans have developed vehicles capable of transporting cargo and passengers effectively and efficiently. In the last centuries, transportation vehicles have become increasingly more complex and specialised in order to increase their comfort and reliability, while reducing costs, travel times and environmental impacts.

Prerequisite Courses: 220 credits

Co-requisite Courses: None

Status in the Curriculum: Required

Course Learning Outcomes:
1. Identify and know the technologies used in different modes of transport.
2. Understand the advantages and disadvantages of using different technologies in each mode of transport.
3. Know and understand the historical and current use of different modes of transport in the world.
4. Solve and calculate equations related to design and operation of different vehicles.

Relation of Course to ABET Criteria:
b. Design and conduct experiments: analyze and interpret data
c. Design a system, component, or process
e. Identify, formulate, and solve engineering problems
### Topics covered:

1. Engines and Motors for Vehicles
2. Road Transport
3. Water Transport
4. Rail Transport
5. Air Transport