

## Power transmission case study



ECTS

9 crédits



Hourly volume

107h

## Introducing

### Description

### Objectives

At the end of this module, the students will be able to analyse technical requirements related to the design of a gear reducer, create a design with the associated sizing calculations, present their solution by means of both a draft and a CAD model.

### Necessary prerequisites

Fundamentals of mechanical design:

- basics of manufacturing (welding, machining)
- common clamping technology (key, splines, screws, etc.)
- pivot joints (rolling bearings joint design and sizing)
- basics of technical drawing
- calculating forces in a mechanical system (equilibrium laws)
- calculating stresses (torsion and bending of beams)

### Évaluation

L'évaluation des acquis d'apprentissage est réalisée en continu tout le long du semestre. En fonction des enseignements, elle peut prendre différentes formes : examen écrit, oral, compte-rendu, rapport écrit, évaluation par les pairs...

### Practical info

### Location(s)

Toulouse