

Mechanical Engineering 2



SCHOOL

Polytech Graduate School of
Engineering



CAMPUS

Belle-Beille



LEVEL

Engineering 3rd year



OPEN TO EXCHANGE STUDENTS

Yes



SEMESTER

Spring (S2)

> **Degree course:** Quality, Innovation and Reliability Engineering

> **Teaching unit:** Engineering Science

> **Course language:** English

> **Duration (hours):** 32

> **ECTS:** 1

> **Teacher(s):** Mohamed Ibrahim

> Assessment:

Continuous assessment

Final exam

> Teaching methods:

Lecture course 4 hours

Tutorial course hours

Practical work 28 hours

Case study

Project

COURSE DESCRIPTION

Study of the degree of static indeterminacy of a mechanical system

Study and design of rotary guide elements

Study and design of power transmission:

- Energy principles and efficiency
- Kinematic simulation
- Digital model

OBJECTIVES

Students will know how to:

- calculate the degree of static indeterminacy of a mechanism
- choose component adapted to solicitations

PREREQUISITES

Mechanical Engineering 1

SELECTIVE BIBLIOGRAPHY

« Système mécanique : Théorie et dimensionnement », M. Aublin et co, Edition DUNOD « Guide des sciences et technologies industrielles », JL. Fanchon,
Site WEB : <http://www.aae.ens-cachan.fr/>
Tutoriels Solidworks, disponibles à partir du logiciel