

Elasticity Plasticity



Component
École Nationale
Supérieure
d'Électrotechnique
d'Électronique

In brief

- **plugin.odf-inp:PLUGINS_ODF_COURSE_NBHOURS_TXT:** 46
- **Ametys Code:** N7AM02A
- **Open to exchange students:** No

Presentation

Objectives

Study and modeling of the elastic mechanical behavior of solid materials

Description

Constitutive law of an isotropic homogeneous linear elastic solid.
Demonstration of the Navier-Lamé and Beltrami equations
Case of plane deformations and plane stress - Airy function
Study of the typical cases of elasticity: traction, shear, bending, torsion.
introduction to plasticity
2 Practical Work

Pre-requisites

Continuous mechanics