

Non destructive testing – English



ECTS
4 crédits



Hourly volume
20h

Introducing

Objectives

Module 1 : Non Destructive testing (NDT)

Students have to know the main nondestructive testing methods with advantages/drawbacks and how to apply them to practical industrial cases. They must be able to choose the most appropriate method to solve specific industrial issues.

Module 2 : Metallic alloys for high temperature applications & Creep behaviour

Analysis of the physics occurring during creep and of the parameters which affect creep resistance.

How to apply basic theoretical models to calculate rupture life expectancy.

Knowledge of the main metallic alloys withstanding creep at high temperatures.

Module 3 : English

Students must be able to organize their scientific speech and writing logically, to use proper English in a concise and appropriate style while meeting genre conventions; master technical terms; resort to appropriate registers (specialized/non specialized audiences/readers) and quote scientific sources according to international citation standards.

Module 1: Nondestructive testing (NDT)

L1, 2 and 3 courses or equivalent: knowledge of fundamental principles in physics i.e. electricity, electromagnetism, optics, atomic structure and Materials Science.

Module 2 : Metallic alloys for high temperature applications & Creep behaviour

Mechanics of Materials: defects in metallic materials and plastic deformation mechanisms; behaviour of materials

Module 3 : English

Students must master general English and know how to write and talk about general scientific elements in a rigorous way (1st, 2nd, 3rd & 4th year English courses).

Practical info

Location(s)

 Toulouse

Necessary prerequisites
