

IDENTIFICATION

Course code : E2CP3MT2
ECTS : 1.5

DURATION

Lectures : 6
Tutorial classes : 10
Labs : 0
Total : 16

Project :
Personnal work :

ASSESSMENT

2 Written exams (2h/2h)

TEACHING MATERIALS

LANGUAGE

English

CONTACT

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UE : MATHEMATIQUES

COURSE : Mathematics for Engineers III-b

SCOPE OF THE COURSE

OBJECTIVES

Master the Laplace transform and its applications in an engineering problem

COMPETENCE AND SKILLS

- Know how to use the Laplace transform to solve a system
- Know how to define the Laplace transform

PROGRAM

— Laplace Transform

- Definition
- Heaviside function
- Causal function
- Fundamental properties : linearity, damping, delay, scaling
- Laplace transform of the derivative
- Laplace transform of higher-order derivatives
- Laplace transform of a primitive
- Laplace transform of a convolution product
- Inverse Laplace transform
- Common Laplace transforms
- Solving linear differential equations using the Laplace transform

BIBLIOGRAPHY

REQUIREMENTS