

Mathematics

Maths S1 SHNO

IDENTIFICATION

CODE : PC-S1-MA-H
ECTS : 4.0

HOURS

Lectures : 18.0 h
Seminars : 35.0 h
Laboratory : 0.0 h
Project : 0.0 h
Teacher-student
contact : 53.0 h
Personal work : 60.0 h
Total : 113.0 h

ASSESSMENT METHOD

2 tests of 1h30 [named IE1 and IE2] and a test of 3h [names DS], and 4 to 5 mini tests of 15 minutes maximum, the average of these tests is named MT.

Coefficient of the 1h30 tests : 2
Coefficient of the 3h test : 4
Coefficient of MT : 1.

Averaging with consideration of excused absences for illness, per semestre :
[2*IE1+2*IE2+4*DS+MT]/9.

The excused absences for sportive reasons will systematically lead to a substitutional test, the teacher will decide what kind.

TEACHING AIDS

TEACHING LANGUAGE

French

CONTACT

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AIMS

The 1st Semester is entirely dedicated to the study of functions of a real variable started in High School.

It contributes to the following abilities in Engineer School :

- C1 - analyse a system or issue
- C2 - Exploit a Real or Virtual system Model
- C6 - Communicate an analysis, a scientific path, in an argued and logical discussion

In this frame, the student will work and be tested on the following abilities :

- C11 - Break down a problem into a set of interacting sub-parts
- C15 - Identify issues or action objectives.
- C16 - Build a proof.
- C25 - Use algebraic and numerical computation techniques.
- C54 - Results interpretation
- C55 - Make a synthesis of intermediate results in response to questioning.
- C62 - Make a reasoned solution respecting a balance between everyday language and symbolic language.

CONTENT

One real variable calculus.

BIBLIOGRAPHY

- (i) Azoulay-Avignat : Mathématiques [Ediscience]
- (ii) Guinin-Aubonnet-Joppin : Précis de Mathématiques [Bréal]
- (iii) S. Balac, F. Sturm, Algèbre et Analyse, Cours de Mathématiques de première année avec exercices corrigés, Presses Polytechniques et Universitaires Romandes [collection des Sciences Appliquées de l'INSA de Lyon]

PRE-REQUISITE

The French Terminale S high-school program.

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