

IDENTIFICATION

Course code : E3AG5PR2
ECTS : 2

DURATION

Lectures : 6
Tutorial classes : 24
Labs : 0
Total : 30

Project :
Personnal work :

ASSESSMENT

The course is assessed through continuous assessments (CC) including written and oral exams, group evaluations (group work : integrating the APP approach, practical work) and individual evaluations. Group deliverables are required. The final grade combines the grades from each activity with respective coefficients : FG =

TEACHING MATERIALS

The course includes theoretical lectures, tutorials, practical work based on case studies and individual assignments. The course is supported by teaching materials (PPT, handouts, tables, nomograms, etc.) provided by the instructors.

LANGUAGE

English

CONTACT

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UE : UE5-PROD

COURSE : Advanced Mathematics

SCOPE OF THE COURSE

OBJECTIVES

Review and revision of the mathematical tools necessary for a successful start to the agri-food engineering program

COMPETENCE AND SKILLS

The skills targeted through the learning activities in this module are to : - master the fundamentals of theory and mathematical tools applied to the field of process engineering (agri-food, biological), - introduce modeling and problem-solving for simple and complex scientific problems (to be confirmed or replaced by case studies in Multi-criteria Optimization in processes), - be able to analyze datasets (linear or non-linear modeling methods, model validation, etc.)

PROGRAM

Specialty Agri-Food (to differentiate from other specialties) : Common functions, differentiation and integration. Differential equations (basic review). Linear algebra, matrix algebra.

BIBLIOGRAPHY

REQUIREMENTS