DPT GENIE ENERGETIQUE ET ENVIRONNEMENT
ENERGETICS AND ENVIRONMENTAL ENGINEERING
INSA Campus LyonTech - 9 rue de la Physique
Batiment Sadi Carnot - 69621 VILLEURBANNE
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Environment

Pinch analysis, Carbon balance, Life Cycle Assessment, GIS

IDENTIFICATION

CODE : GEN-5-S1-EC-METH
ECTS : 2.0

HOURS

Lectures :	2.0 h
Seminars :	17.0 h
Laboratory :	0.0 h
Project :	0.0 h
Teacher-student contact :	19.0 h
Personal work :	0.0 h
Total :	19.0 h

ASSESSMENT METHOD

Validation on attendance

TEACHING AIDS

TEACHING LANGUAGE

French

CONTACT

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AIMS

COMPETENCIES :
This CE falls under the teaching unit Tools and methods for energy and environmental analysis (GEN-5-ue-ENV) and contributes to the following competences:

A1 Analyse a real or virtual system (or problem) (level 2)
C5 Use management systems and analysis tools within the framework of a Sustainable Development and Corporate Social Responsibility approach: normative, socio-economic, financial and technical aspects (level 2)
B5 Act responsibly in a complex world (level 2)

In addition, it requires the mobilisation of the following skills

C1 Design, size, manage and optimise energy systems in complex and varied contexts (city, industry, transport)
C2 Design, size and optimise process engineering installations

By allowing the student to work and be assessed on the following knowledge:

- To know the main principles of the method and the carbon balance tool
- Knowledge of the main principles of LCA and the SimaPro tool
- Know the main principles of GIS and the QGIS tool

By allowing the student to work and be assessed on the following abilities:
- To be able to use the ADEME's Bilan Carbone method at the beginner level
- Be able to use the SimaPro tool at a beginner's level
- Be able to use the QGIS tool at a beginner level

CONTENT

6 hours of practical training on the SimaPro tool and LCA
4 hours of tutorial on the Bilan Carbone tool
4 hours of tutorial on the QGIS tool