

# DPT GENIE ENERGETIQUE ET ENVIRONNEMENT ENERGETICS AND ENVIRONMENTAL ENGINEERING

INSA Campus LyonTech - 9 rue de la Physique Batiment Sadi Carnot - 69621 VILLEURBANNE Phone 0472438430 E-mail : qen-s@insa-lyon.fr

# Internship

Research internship

#### **IDENTIFICATION**

CODE: GEN-4-S2-EC-STA ECTS: 19.0

#### **HOURS**

Lectures: 0.0 h
Seminars: 2.0 h
Laboratory: 0.0 h
Project: 0.0 h

Teacher-student

contact : 2.0 h Personal work : 700.0 h Total : 702.0 h

### **ASSESSMENT METHOD**

Written report of laboratory work: 50 pages maximum Oral presentation: 20mn Evaluation form filled in by the supervisor

## **TEACHING AIDS**

Presentation of the SIRD objectives in English
Bibliographic resources in the college library

## **TEACHING LANGUAGE**

English

## CONTACT

M. LEFEVRE Frédéric frederic.lefevre@insa-lyon.fr

## AIMS

During this internship which is an initiation to Research and Development Methods (at least 20 weeks long) students are expected to be confronted with scientific problems which must be apprehended with an experimental and/or a numerical approach. The internship proposal may be diversified, but it must fall within the scope of hard science. This internship is a considerable part of the training program and aims at validating the student ability to face a real problem by calling upon tools and know-how acquired during the course of study: from fundamental knowledge on scientific fields to project management. Its purpose is also to develop the sense of industrial relations.

#### CONTENT

To various extents, depending on the development stage of the subject and its scientific field, the SIRD objectives are:

- to learn how to use scientific documents (articles, books, technical reports, Master or PhD thesis¿),
- to lead a project by performing the scientific knowledge acquired and by showing creativity,
- to choose the appropriate devices in technical documentation to design experimental setups,
- to build experimental set-up when needed, to run it and to improve it,
- to obtain and analyze experimental data,
- to use the compatible hardware and software,
- to experience teamwork,
- to further develop a scientific issue,
- to learn how to summarize and analyze the results in a written report intended for non-experienced scientists,
- to improve the communicated information with an oral presentation involving audiovisual means.

#### PRE-REQUISITE

Courses of 3rd and 4th year in departement

### **INSA LYON**

# Campus LyonTech La Doua

20, avenue Albert Einstein - 69621 Villeurbanne cedex - France Phone +33 (0)4 72 43 83 83 - Fax +33 (0)4 72 43 85 00 www.insa-lyon.fr

Last modification date: June 16, 2021