

10.0 credits

30.0 h

Teacher(s) :	Oestges Claude ;
Language :	Français
Place of the course	Louvain-la-Neuve
Inline resources:	iCampus
Prerequisites :	Master 1 courses are advised.
Main themes :	Industrial internships are offered to engineering master students to discover and experiment several aspects of the engineer role within the industry. Industrial internships usually take place during the second semester of master 2, or between master 1 and master 2. Internships should have a minimum duration of 9 weeks or 2 months or 45 work days.
Aims :	<p>a. Contribution de l'activité au référentiel AA (AA du programme) Axes 1 to 6</p> <p>b. Formulation spécifique pour cette activité des AA du programme</p> <p>1. The internship</p> <p>At the end of the internship, the student will be able to :</p> <ul style="list-style-type: none"> - Soft and managerial skills ' Understand the company's issue and environment ' Adapt to the rules and directives ' Organize, plan the tasks ' Work in a team ' Formulate and summarize ideas in a written report ' Argue, negotiate and convince (leadership) - Technical skills ' Grasp and model an industrial problem ' Analyse and make a diagnosis ' Elaborate alternative solutions ' Experiment and test hypotheses ' Materialize and implement a solution ' Communicate a written summary ' Express ideas clearly (oral communication) <p>2. Internship reports</p> <p>At the end of the internship, the student will be able to :</p> <ul style="list-style-type: none"> - Internship presentation ' Describe the company activities and the department where the internship took place, and characterize of the organization and working environment ' Explain the project in which the student was involved, including the issues in terms of performance and use for the customers ' Describe the constraints considered in the project (technical, regulatory, environmental, social, cultural...) ' Present the deliverables expected during the project (in what form, how fast, in what context ?) ' Explain the project organization, together with the work situations encountered and the role(s) assigned to the student in these situations ' Describe the technical and methodological resources ' Present the internship planning and history, i.e. the time assigned to the various phases of the project (Gantt chart) ' Critically assess the learning outcomes of the internship, based on evaluation grids (filled in by the industrial mentor and the student) - Scientific report <p>At the end of the internship, the student will be able to :</p> <ul style="list-style-type: none"> ' Summarize in at least 5 pages the scientific results and/or technical achievements of the internship. <p>3. Oral presentation</p> <p>At the end of the internship, the student will be able to :</p> <ul style="list-style-type: none"> ' Present orally the company, the internship achievements, and the main conclusions relative to the internship assessment. <p><i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i></p>

<p>Evaluation methods :</p>	<p>Students are evaluated by the academic supervisor according to ' the internship report, in particular the critical assessment of the student on his/her skills in an industrial environment ' the qualitative assessment by the industrial internship supervisor of the trainee's motivation and contribution, as well of the technical report and deliverables ' the oral presentation with the academic supervisor (presentation of slides and discussion)</p>
<p>Teaching methods :</p>	<p>Internships can take place in: a production or service company, an industrial research center located in Belgium or abroad. An "internship market" with offers gathered by the Internships Coordination Office is accessible for students on the EPL virtual office (see "how to find a job" sub section). Naturally, the option for students to use thier personal contacts network can always be useful and efficient.</p>
<p>Content :</p>	<p>The main objective of the internship is to be able to contribute to a concrete project within the company. This can be done in several ways such as investment or R& mp;D project, supervision of a construction site, improvement project for a production process, project focused on a quality maintenance, logistics, security, management issue, etc.</p>
<p>Bibliography :</p>	<p>Documents Internship agreement and documents available on iCampus.</p>
<p>Cycle and year of study :</p>	<p>> Master [120] in Mathematical Engineering > Master [120] in Civil Engineering > Master [120] in Computer Science and Engineering > Master [120] in Mechanical Engineering > Master [120] in Computer Science > Master [120] in Electrical Engineering > Master [120] in Electro-mechanical Engineering > Master [120] in Chemical and Materials Engineering > Master [120] in Physical Engineering</p>
<p>Faculty or entity in charge:</p>	<p>EPL</p>