

PEES8AC ENVIRONMENTAL IMPACT ASSESSMENT

PEES8AC		ECTS Credits : 2	Semester : S8
Environmental impact assessment		Duration : 21 hours	
Person(s) in charge :			
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Keywords : Life-Cycle Assessment (LCA) of processes, products and services			
Prerequisites : SP141 Course			
Objective : To be capable of conducting and LCA in a conventional manner			
<p>Building on the systemic process analysis seen in course SP141, we study here the way the impact of processes, products and services is assessed by the LCA method. This methodology is today internationally acknowledged, by institutional organisations (such as PNUE and Ademe for example) as well as by companies (Total, Veolia, eDF, Arcelormittal...).</p> <p>This course will study the methodology in detail within the normative framework (ISO14040 series) and will be completed by case studies developed in class.</p> <p>At the end of the course, students will have all the initial concepts required to understand, criticise and carry out a LCA in a conventional manner. A dedicated software, widely used in companies, will be used in class (GABI4).</p>			
Abilities :			
Levels	Description and operational verbs		
Know	The compatibility rules of elementary flows linked to a system, the different environmental impacts		
Understand	how an elementary flow develops into an environmental impact. What a cause and effect chain is.		
Apply	The methodology developed in class within the ISO14040 series framework		
Analyse	Results at different complexity levels and draw the necessary conclusions		
Summarise	The different results of a LCA, be capable of taking a step back to draw conclusions and recommendations		
Assess	Develop one's critical judgement and be capable of giving a scientifically supported point of view on the environmental issues		
Evaluation :			
<input checked="" type="checkbox"/> Written test	<input type="checkbox"/> Continuous Control	<input type="checkbox"/> Oral report	<input type="checkbox"/> Project
			<input checked="" type="checkbox"/> Written report