UCLouvain

mtech1201

2023

Industrial Technologies

5.00 credits	30.0 h + 10.0 h	Q1
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Teacher(s)	Baclin Laurence ;Dhaeyer Christine ;Michel David ;Velings Nicolas ;				
Language :	French				
Place of the course	Mons				
Prerequisites	General high school math and science courses.				
Main themes	This learning unit addresses the industrial technological infrastructures necessary to be able to achieve, in Belgium and around the world, the objectives of sustainable development and the digital revolution. It aims to bring students to address different topics including manufacturing techniques; for health: the (bio)pharmaceutical industry; for food: the food industry; for energy: the production of electricity; the transportation industry; waste management and globally, the issue of materials or data network infrastructures.				
Learning outcomes	At the end of this learning unit, the student is able to: Given the « competencies referential » linked to the LSM Bachelor in Management and Business Engineering, this course mainly develops the following competencies: **Teamwork: Half of the course assessment is based on a group company visit report. **Assisted by teachers, students must exercise their creativity to obtain a visit to a company in the sector they are interested in. **They will exercise their digital and informational skills by gathering data from different sources: the company's websites, competitors, the people of the company itself, and, using their critical thinking, and their writing and oral communication skills, produce a written synthesis and defend it in front of the jury of professors. **The interdisciplinary aspect is inherent in the exercise, insofar as the company's observation grid is oriented towards both technology and management. **The interdisciplinary aspect is mainly related to their reflection on the place of the company visited in its economic, social and cultural context. **The problem solving aspect is mainly related to the logistics of the visit and the functioning of the team's work. **The lecture is used to bring the theoretical notions to build the observation grid necessary for the company visit. At the end of the class, the student will be able to: **describe a specific place of the management engineer in his role as an interface between management and the technical and technological components of a company; **explain the basic principles and concepts of the main technologies encountered in modern industries; **identify the specificities of the different industrial sectors and their environmental impacts; **analyze the links between the operation of a company, its management, its industrial sector, its technologies, its place in a world that is developing sustainably and the place occupied by digital technology.				
Faculty or entity in charge	CLSM				

Programmes containing this learning unit (UE)						
Program title	Acronym	Credits	Prerequisite	Learning outcomes		
Bachelor : Business Engineering	INGM1BA	5		•		