UCLouvain

lmeca2711

2018

Quality management and control.

5 credits	30.0 h + 30.0 h	Q2

Teacher(s)	Bronchart Nicolas ;
Language :	English
Place of the course	Louvain-la-Neuve
Main themes	• Quality: definition & history • Where is Quality within an organization? • Quality Management & Quality Management Systems (QMS): principles, evolution and quality improvements methods • Extensions of Quality Management: Environment, Safety, CSR, Organizations,…
Aims	With respect to the reference AA of the programme of studies "Masters degree in Mechanical Engineering", this course contributes to the development and acquisition of the following skills: • AA2.3, AA2.5 • AA4.1, AA4.3, AA4.4 • AA5.1, AA5.3, AA5.6 • AA6.1, AA6.2 1 **Specific learning outcomes of the course:** At the end of the course, the student will be able to • Define what is Quality, how it impacts an organization (through products, processes, people), including historical and cultural aspects; • Illustrate the links between Quality Management and Strategy, including aspects such as HR Management, R&D Strategy, Investments' Strategy or in general Leadership aspects; • Choose a Quality Improvement tool and apply it to a specific situation • Define a long term Quality Management Strategy, and implement it through an enterprise simulation. - - - - *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".*
Evaluation methods	The final grade will be based on: • The participation to the enterprise simulation (50%) including the final group presentation; • An oral examination (50%).
Teaching methods	The course is based on lectures, illustrated by case studies and examples. Speakers from different companies will be invited to illustrate some topics. During the exercise periods, students will get the opportunity to practice the concepts presented. They will participate in a business simulation game that will allow them to play the role of managers / leaders, as a management team.
Content	1. Quality: definition and historical perspectives. How did we reach the current situation, and where could we go next? Examples to show the impact of Quality Management going poorly or making a difference. 2. How is Quality integrated in a global company and a company strategy. How does it impact competitiveness, and the critical importance of the holistic view when taking strategic decisions. Roles & Responsibilities of Quality Control (QC), Quality Assurance (QA), Regulatory Affairs (RA), Release, and Continuous Improvements. 3. Quality Management, Ethics & Corporate (Social) Responsibility. How is leadership critical in moving companies in the right direction, through shaping a Quality Culture, or driving towards Customer Satisfaction. 4. Continuous Improvement: tools and techniques through history and applications.
Inline resources	https://moodleucl.uclouvain.be/course/view.php?id=8305
Bibliography	• « The Goal : A Process of Ongoing Improvement », E. M. Goldratt, 2014 (or previous editions) • « Processus et Entreprise 2.0 - Innover par la collaboration et le Lean management », Yves Caseau, 2011 • «Quality Management for organizational excellence: introduction to total quality », David Goetsch & Stanley Davis, 2012
Faculty or entity in charge	MECA

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Mechanical Engineering	MECA2M	5		
Master [120] in Physical Engineering	FYAP2M	5		
Master [120] in Statistic: Biostatistics	BSTA2M	5		
Master [120] in Chemical and Materials Engineering	KIMA2M	5		
Master [120] in Biomedical Engineering	GBIO2M	5		