UCLouvain

lbirc2200

2026

Master thesis

27.00 credits		Q1 and Q2

Language :	French
Place of the course	Louvain-la-Neuve
Main themes	The master thesis is a personal work that each student must complete during his master cycle. This thesis is an initiation to scientific research that allows the future engineer to study a topic of his own preference. As a future engineer, the student must identify and address a specific question by respecting the following general approach : (1) Summarize the current knowledge about the chosen topic ; (2) Set an experimental protocol (in a wide meaning of the term) ; (3) Do observations (in the field or in a laboratory) ; (4) Analyze and interpret these observations ; (5) Draw appropriate conclusions ; (6) Present this material in a scientific document ; (7) Publicly defend his work
Learning outcomes	**At the end of this learning unit, the student is able to :** At the end of the master thesis, the student is able to : · analyze scientific publications that are related to his master thesis topic, master and discuss the corresponding content and present this content in a summarized way ; · design a consistent and sound approach in order to answer a scientific question by using a state-of-the-art knowledge about the question ; 1 · set up an experimental protocol (in a wide meaning of the term), analyze and interpret the corresponding results by the light of the scientific literature at hand and by taking into account the corresponding limitations ; · communicate the results and justify them using a rigourous scientific language, both in a printed document and during a public oral presentation in front of a jury. M.1.3, M1.4., M.1.5., M.2.3., M.2.4, M.3.1. - M.3.9., M.6.1 - M.6.8.
Evaluation methods	The Master thesis must be presented during one of the exam sessions within the Bioscience Engineering program. Students who are registered for the Master thesis but are unable to present it in the September session will be deferred to the following academic year. The Master thesis will be presented in English, except for the MISSOL specialization of SAIV, where the choice of English or French is left to the student. The student's work during the year is assessed by the thesis supervisor and co-supervisor. The Master thesis jury is responsible for assessing the thesis, both in written form and in its oral presentation. The student's ability to answer questions is also assessed. The jury decides on the final grade for the thesis, based on a weighted average grade that takes into account the student's work during the year, the written document, and the oral defense. The grade for the oral presentation is used for the course "Master Thesis Accompanying Seminar."
Content	Master thesis topics are proposed by supervisors in a database provided for this purpose. Students may also propose a topic of their own, but must then find a supervisor willing to accept responsibility for their guidance. Once they have made their choice, students submit a proposal stating the topic of their final thesis and the name of their supervisor and any co-supervisor, in accordance with the schedule and procedures set by the student secretariat and published on the faculty intranet. Guidance for the final thesis is provided by a supervisor and a possible co-supervisor. They are responsible for ensuring that the work required for the final thesis is carried out properly. They participate in the evaluation of the thesis, in particular by giving a grade for the year's work. The thesis topic chosen by the student may require part of the work to be carried out outside the University, in Belgium or abroad. Students who wish to travel abroad as part of their thesis must complete the administrative procedures in accordance with the established procedures. Throughout the completion of the thesis, students must comply with the Faculty's final thesis regulations, as available on the page https://www.uclouvain.be/fr/facultes/agro/restricted/memoire-fin-etudes-masters-bioingenieur Students who choose the “Interdisciplinary Training in Entrepreneurship” (INEO) option are required to comply with the regulations governing the final thesis for this option. The INEO Master thesis replaces the faculty Master thesis and the accompanying seminar. A schedule has been established to facilitate the procedure and monitoring of the various stages necessary for the completion of the final thesis. It is the student's responsibility to comply with this schedule.

Faculty or entity in charge	AGRO

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Chemistry and Bioindustries	BIRC2M	27		