



PERSONA CIENCIA EMPRESA
Universitat Ramon Llull

MASTER'S DEGREE IN CHEMICAL ENGINEERING

Basic and general skills

a. Basic skills

CB6 – Acquisition and understanding of knowledge that provides an opportunity to be original in the development and/ or application of ideas, often in a research context

CB7 - Know how to apply knowledge acquired and ability to solve problems in new or unfamiliar environments within broader contexts (or multidisciplinary contexts) related to the student's field of study

CB8 – Ability to integrate knowledge and face the complexity of formulating opinions from incomplete or limited information, including reflections on social and ethical responsibilities related to applying knowledge and understanding

CB9 - Know how to clearly and precisely communicate conclusions, ideas and justifications supporting said knowledge to both a specialized or lay audience

CB10 – Development of the necessary learning skills to undertake further studies with a high level of independence and self-management

b. General skills

CG1 – Know how to design, manage, carry out and present a project

Cross- curricular skills

T1 - Ability to communicate effectively both orally and in writing with a specialized and lay audience

T2 - Ability to communicate in English and use English as a working language

T3 - Ability to work in multidisciplinary environments, either individually or as a member of a team

T4 - Ability to lead and manage work teams

T5 - Ability to appreciate the impact of the use of chemistry in the sustainable development of society

T6 - Ability to develop learning abilities necessary to undertake subsequent activities and recognize the need of constant training in order to grow professionally

T7 - Ability to fulfil responsibilities related to professional activity while working in a responsible manner

Specific skills

CE1 – Ability to apply advanced knowledge of mathematics, physics, chemistry, biology and other natural science disciplines obtained through study, experience and practice, using critical thinking to find economically viable solutions to technical problems.

CE2 – Design products, processes, systems and services of the chemical industry, as well as optimising others that have already been developed, taking as a technological basis the different

fields of chemical engineering, including processes and transport phenomena, separation operations and engineering of chemical, nuclear, electrochemical and biochemical reactions as a technological foundation

CE3 – Conceptualise engineering models, apply innovative methods to correctly solve problems and software applications for the design, simulation, optimisation and management of processes and systems

CE4 – Ability to solve problems that are relatively unknown or incompletely defined and consider the possible methods to solve them, including the most innovative methods, choosing the most appropriate and putting it into practice, evaluating the different design solutions

CE5 – Manage and supervise all kinds of installations, processes, systems and services in the different industrial fields related to chemical engineering

CE6 – Design, build and implement methods, processes and installations for the comprehensive supply management and waste, solids, liquids and gases in industries with the ability to evaluate impacts and risks

CE7 – Manage and organise companies, production systems and services, using knowledge and skills of industrial organisation, business strategy, planning and logistics, tax and labour law, finance accounting and cost accounting