Project Management for Energy and Environmental Engineering

Targeted positions

Position	Description	Skills
Project engineer	To be involved in projects of construction or improvement of industrial units, design and optimization of clean manufacturing processes, pollution, waste and water treatment facilities, energy conversion and distribution systems	A, B, F
Exploitation or production engineer	Runs and manages an industrial production unit at different levels (technical, financial, human, regulatory) ; coordinates and implements environmental management activities in a company	A, C, F
Business or consultant engineer	Assesses new markets and develops new activities for firms at an international level, carries out audits and consultancy for industry, especially for sustainability, health and risk management and transfer of new technologies	A, D, F
Research & Development engineer	Designs, carries out experimental studies, develops models and simulates innovative processes applied to air, water, waste treatments or energy production or eco-efficiency	A, B, E, F
Entrepreneur	Undertakes innovations in the field of Energy/Environment together with finance and business to transform it into economic goods. This may result in new organizations or may be part of revitalizing mature organizations in response to a perceived opportunity	A, E, F

Targeted specific skills and knowledge

	Targeted specific skills: Field	Targeted specific skills: Specific competencies	Targeted specific knowledge
A	Management Sciences, Environmental/ Energy implementation of international	To manage complex project in the field of energy and/or environment while taking into account intercultural aspects,	A1 : To understand the organisational issues related to a company and its management functions A2 : To master the techniques to collect and understand the economic information generated by an institution A3 : To understand international policies for sustainable energy production and environmental legal framework
B	Eco-technologies, Process Engineering and Systems	To explain, design, model and control processes for energy production or for effluent/waste treatment	B1 : To understand and apply process engineering and control to optimize environmental remediation processes (water, air,waste, soil) B2 : To understand and apply process engineering and control to energy production processes
C	Multiscale integrated Energy Efficiency and Environmental	To design and implement mixed optimized solutions for energy supply and for environmental	C1 : To understand the utilisation of energy and the management of ressources/waste in the present day society C2 : To be able to evaluate energy demand and implement strategies of energy savings by considering societal and environmental features
D	Environmental assessment, Energy and Environmental auditing	To understand existing multiscale environmental and energy systems enabling to perform	D1 : To master the tools and methodologies for energy and environmental auditing (LCA, carbon footprint...) D2 : To understand and estimate ressources consumption in a given industrial fields (oil and gaz, steel production etc.) and to develop optimization
E	Innovation in the Environment and Energy sectors	To orient research and develop projects with innovative concepts in both Energy and Environment sectors	E1 : To be aware of the latest development in the field of energy and environment strategies for the future E2 : To know how to manage technological innovation and to manage intellectual property
F	Communication , Interpersonnal and intercultural	Ability to communicate at any levels using any means	F1 : To master at least 1 extra language after the master (French, Spanish, Swedish etc.) F2 : To master teamwork and intercultural teamwork