Energy Science and Technologies Ph.D. Program Outcomes

1. To have the competence to independently perceive, design, implement, conclude and evaluate the research process on a unique and special subject with scientific dignity, together with the development and deepening of knowledge in the field of energy specialization,

2. To present a comprehensive study that brings scientific innovations in the field of energy, to develop a scientific method or to apply a known method to a field as a thesis, to publish it in national and international peer-reviewed journals, to contribute to science,

3. To have the ability to analyze, discuss and evaluate new and complex issues with the theoretical and applied knowledge gained in the field of energy.

4. By means of the ability to critically analyze knowledge, skills and also a study related to energy area that requires expertise on that area, directing and continuing independently, developing new strategies for the problems that are not foreseen and taking the responsibilities together with fulfilling the leader role, the ability to produce solutions for those problems.

5. By means of the ability to promote current development and studies by supporting with qualitative and quantitative data and to use computer software together with information and communication technologies with a required level, critical analyzing, developing, and altering, if required, social relationships and the norms directing these relationships, establishing written oral and visual communication with groups within energy or different fields.

6. Achieving advanced competence in establishing written and oral communication with scientific communities and the public, both in their own language and in a foreign language,

7. By means of the ability to inspect the steps like gathering, interpreting, implementing, and announcing related data with the energy area by overseeing scientific, cultural and ethical norms, teaching these norms, developing strategy, policy and action plans in related subjects and evaluating the obtained results by making the use of quality processes, using the gathered information and solving problems and/or implementation skills in the interdisciplinary strategies.

8. To be able to apply the acquired knowledge and skills during interdisciplinary studies and to reach a standard knowledge and competence that will enable access to doctoral programs.

Skills and Competences (Doctorate)

KNOWLEDGE -Theoretical -Applied	Skills - Conceptual/Cognitive -Applied	PERSONAL AND PROFESSIONAL COMPETENCES			
		Competence of independent study and responsibility	Competence of Learning	Communication and social competence	Field-specific and professional competence
To be able to develop and deepen their knowledge of the same or a different field based on their qualifications	To be able to use theoretical and practical knowledge in the field of expertise	To be able to perform and solve a study independently that requires expertise related to the field, to evaluate the results and to apply them when necessary	To be able to critically evaluate the knowledge related to the field, to guide learning and to carry out advanced studies independently	To be able to explain the current developments of the field and their own studies in a systematic manner in written, oral and visual ways	To be able to develop strategy, policy and implementation plans related to the field and to be able to evaluate the obtained results within the framework of quality processes
To be able to develop and deepen their knowledge in the field of expertise based on their master's competencies and to reach original studies to bring innovation to the field	To be able to create new information by integrating the information in their field with information from different fields; to be able to solve problems requiring expertise by using scientific research methods	To be able to develop new strategic approaches for the solution of unforeseen problems encountered in applications related to the field and to be able to produce solutions by taking responsibility	To be able to develop a positive attitude towards life-long research and analysis	To be able to critically examine the social relations and the norms that guide these relations, to be able to develop them and to change them when necessary	To be able to consider social, scientific and ethical values, and to teach and control these values in the course of collecting, interpreting and announcing data
Being able to comprehend interdisciplinary interactions that are related to field	To be able to analyse the problems related to the field using research and analysis methods	To be able to lead the field in cases which require problem solving		To be able to use computer software along with information and communication technologies at advanced level as required by the field	To be able to use their field information, problem solving and application skills in interdisciplinary studies