

Doctorate Degree in Maritime Transport Technology Program

Program Aim

Doctoral Program aims to provide a generation of distinguish researchers in the Arab and African regions who have the capacity of scientific and logical thinking and find realistic solutions to professional and technical problems. Researchers will have capacity for innovation, modernization and development of different areas in their work environment. The program also aims to enrich the Arabic library with specialized marine researches and make full use of them to enhance maritime and shipping industry at the national and regional bases.

However, the program aims to have a research base specializing in the areas of maritime transport technology, and contribute to the research activities of the International Maritime Organization.

Program Objectives

- To develop the use of scientific research tools in order to expand scientific thinking and advanced technologies.
- Improve student's ability to professionally develop logical solutions in order to be able to trace and solve scientific problems.
- Increase the capacity of the student to use the means of scientific research on the electronic information network.

Program Learning Outcomes

Student successfully completing this program will be able to:

- a. create and incorporate knowledge of Maritime Transport Technology in professional practices and apply the advanced knowledge of marine environment.
- b. Revise, and support the implementation and enforcement of international regulations in the context of maritime safety, security, and environmental pollution prevention

- c. Evaluate the economic tools to analyze the shipping market and develop the quality of decision making in the maritime industry.
- d. Evaluate the current trends in shipping industry development and support more developments to reduce the major accident risks.
- e. sustained commitment to the development of Using the modern technology (hardware and software) required in the particular research domain of interest to extend and redefine existing knowledge or professional practice
- f. use ethical considerations and practices, such as the importance of maintaining objectivity, protecting the privacy and dignity of human subjects, leading work carefully and accurately, and reporting results completely, without bias, and with a discussion of the limitations of the analysis, in a range of research methodology.

The doctorate program has been designed to meet the requirements of the doctorate Degree European Qualifications Framework (EQF) level 8

Level Descriptors of Quality Framework

Knowledge

(K1) Highly specialized factual and theoretical knowledge and an understanding of the boundaries in a field of work or discipline, encompassing a broad and coherent body of knowledge and concepts, with substantive depth in the underlying principles and theoretical concepts.

(K2) An understanding forefront knowledge, and theories in maritime fields of work or study including international regulations, standards, codes, and conventions. understanding of the critical approach to the creation and compilation of a systematic and coherent body of knowledge and concepts gained from a range of sources.

(K3) A comprehensive understanding of critical analysis, research systems and methods, and evaluative problem-solving techniques.

(K4) develop the most advanced knowledge, as the basis for original thinking and/ or research and Critical awareness of maritime field and at the interface between related field.

Skills

Technical, creative, and analytical skills appropriate to:

1. (S1) Solve specialized problems using evidentiary and procedural-based processes in predictable and new contexts that include devising and sustaining arguments associated with a discipline.
2. (S2) Evaluate and apply most advanced methods, procedures, or techniques including synthesis and evaluation, required to solve critical problems in research in processes of investigation towards identified solutions.
3. (S3) Present, explain, and/or critique complex and unpredictable matters using highly developed most advanced communication and information technology skills to integrate knowledge from different fields.
4. (S4) Innovate and develop the most advanced research tools and strategies associated with a maritime technology.

Aspects of Competence: Autonomy and Responsibility

Can take responsibility with conditional autonomy for:

1. (AA1) Developing innovative and advanced approaches to evaluating and managing complex and unpredictable work or study procedures and processes, resources, or learning.
2. (AA2) Analyzing the management of technical, supervisory, or design processes in sustained and unpredictable, new strategic approaches, and varying contexts to the development of new ideas or processes at the forefront of work or study contexts, including research.
3. (AA3) Working creatively and/or effectively as Demonstrate substantial authority as team leadership role, in managing contexts related to technical or professional activities and reviewing the strategic performance of team.
4. (AA4) Expressing an internalized, personal view, autonomy, scholarly and professional integrity, and accepting responsibility to society at large and to socio-cultural norms and relationships.