

| <b>Faculty of Maritime Studies / Marine Engineering</b>  |
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| <b>About The Program</b>   |
| <p>The Marine Engineering Bachelor's Program offers a comprehensive education that integrates contemporary marine machinery operation knowledge with its technical, operational, and managerial dimensions, in line with international maritime standards. The primary objective of the program is to educate well-qualified human resources who can serve both at sea and ashore, possessing the competencies of a marine engineering officer and a marine operations engineer.</p> <p>Students are provided with a strong theoretical and practical foundation in areas such as main and auxiliary marine machinery, energy systems, maintenance and operation practices, maritime safety, environmental protection, ship management, and maritime legislation.</p> <p>The program also adopts an educational approach that emphasizes compliance with international maritime regulations and STCW requirements, as well as professional ethics, occupational health and safety, leadership, problem-solving, and emergency management competencies. Graduates are trained as qualified maritime professionals capable of undertaking responsibilities in marine machinery operation and management, prioritizing safety and environmental awareness, adapting to technological advancements, and demonstrating strong analytical thinking skills.</p> |
| <b>Profile of the Program</b>  |
| <p>The Marine Engineering Bachelor's Program offers a comprehensive maritime engineering education encompassing main and auxiliary ship machinery, marine energy systems, maintenance and operation processes, maritime safety, and environmental protection. In line with international maritime standards and STCW requirements, the program provides a holistic engineering formation that focuses on safe machinery operation, energy efficiency, environmental sustainability, and operational effectiveness.</p> <p>Within the scope of the program, students gain competence in shipboard technical applications such as marine machinery operation, fault diagnosis and maintenance planning, automation and control systems, and fuel and energy management, while also having the opportunity to develop expertise in shore-based processes, including ship management, technical management, quality systems, safety management, and environmental management systems. In this respect, the program aims to educate qualified marine machinery operation engineers who are capable of serving both at sea and ashore, adaptable to technological advancements, and committed to a sustainable maritime perspective.</p>   |
| <b>Qualification Awarded</b>   |
| Marine Engineering, Bachelor's Degree  |
| <b>Length of Programme and Number of Credits</b>   |
| 4 years (excluding one year of English Preparatory Program), 2 semesters per year, 15 weeks per semester, 240 ECTS credits   |
| <b>Level of Qualification</b>  |
| Bachelor's Degree; YÖK National Qualifications Framework (TYYÇ), Level 6   |
| <b>Specific Admission Requirements</b>   |

The admission of Turkish citizens to higher education is based on a nationwide Student Selection Examination (ÖSYM) organized by the Turkish Higher Education Council (YÖK). The admission of citizens of the Turkish Republic of Northern Cyprus is based on the Near East University Entrance and Placement Examination organized for TRNC citizens. The admission of foreign students is based on their high school diploma. A document proving English language proficiency is also required.

#### **Recognition of Credit Mobility and Prior Learning**

The transfer and recognition of courses taken outside University of Kyrenia are carried out in accordance with the principles set forth in the relevant Regulations, based on the decision of the respective Faculty or Institute Board of Directors. If the content of the courses taken at another higher education institution is found to be compatible with the content of the courses offered at University of Kyrenia and is deemed appropriate by the relevant Faculty or Institute Board, students may be granted exemption from these courses.

#### **Qualification and Graduation Requirements and Regulations**

Students enrolled in the Marine Engineering program are required to achieve at least the minimum course passing grade and obtain a minimum cumulative grade point average (CGPA) of 2.00 out of 4.00 in order to graduate.

The certificates and qualifications awarded within the Marine Engineering program are fully compliant with the standards set by the Ministry of Transport and Infrastructure of the Republic of Türkiye and the International Maritime Organization (IMO), specifically the Standards of Training, Certification and Watchkeeping for Seafarers (STCW). Within this framework, students are required to complete a compulsory six-month sea internship and a six-month shore-based (workshop) internship in addition to their academic coursework.

The Marine Engineering program is subject to supervision and evaluation by the Ministry of Transport and Infrastructure of the Republic of Türkiye, the Directorate General of Maritime Affairs, the Council of Higher Education of Türkiye (YÖK), and the Higher Education Planning, Evaluation, Accreditation and Coordination Council of the Turkish Republic of Northern Cyprus (YÖDAK). The program is also a member of the International Association of Maritime Universities (IAMU), having fulfilled its accreditation requirements.

Upon graduation, students are awarded an engineering bachelor's degree and simultaneously fulfill the educational requirements for STCW Engine Officers.

#### **Programme Learning Outcomes**

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|----------|--|
| <b>1</b> | Demonstrate comprehensive knowledge of marine engineering principles, systems, and machinery operations, and effectively apply this knowledge to ensure safe, efficient, and sustainable vessel performance in compliance with IMO and STCW standards. |
| <b>2</b> | Apply advanced engineering design principles to develop, adapt, and optimize mechanical, electrical, and control systems onboard ships and in shore-based industrial contexts, integrating safety, cost-efficiency, and environmental considerations.  |
| <b>3</b> | Perform engineering watchkeeping duties and operational management with professional responsibility, situational awareness, and adherence to international maritime conventions and best practices.  |

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| 4  | Identify, formulate, and analyze complex engineering problems using appropriate theoretical, computational, and experimental techniques to derive sound, data-driven solutions in marine and related engineering domains.  |
| 5  | Integrate principles of safety culture, risk assessment, and environmental protection into all engineering practices, promoting sustainable operations aligned with IMO conventions such as MARPOL and SOLAS.  |
| 6  | Employ advanced digital tools, diagnostic systems, and automation technologies for monitoring, control, and performance assessment of marine and industrial systems, in line with the requirements of the evolving maritime digitalization era.  |
| 7  | Demonstrate competence in planning, executing, and managing engineering projects, including resource allocation, budgeting, and maintenance planning, while ensuring quality, safety, and compliance with regulatory frameworks.   |
| 8  | Function effectively as a leader and member of multidisciplinary and multicultural teams, fostering collaboration, ethical conduct, and efficient communication in dynamic and often high-stress maritime environments.  |
| 9  | Communicate effectively in both written and oral forms with clarity, professionalism, and technical precision in English and other relevant languages within maritime and industrial contexts.   |
| 10   | Adhere to the ethical and professional standards of the engineering and maritime professions, demonstrating accountability, integrity, and a commitment to continuous professional development and lifelong learning.  |
| 11   | Evaluate and implement sustainable engineering practices and emerging green technologies to minimize the environmental footprint of marine and industrial operations.  |
| 12   | Exhibit the flexibility and interdisciplinary mindset required to transfer marine engineering knowledge and skills to diverse sectors, contributing effectively to innovation and technological advancement beyond the maritime industry.  |
| <b>Program Educational Objectives</b>                  |  |
| 1  | To educate Marine Engineering who are proficient in international maritime standards (IMO, STCW) and capable of effectively fulfilling professional duties and responsibilities in the fields of main and auxiliary marine machinery, energy and automation systems, and engine room safety.           |
| 2  | To train specialists who can plan, manage, and optimize marine machinery operation, maintenance and repair, energy management, and technical operations both onboard ships and ashore, while effectively utilizing modern and digital engineering practices by adapting to technological advancements. |
| 3  | To develop engineers with a high level of safety and environmental awareness who can integrate the principles of sustainability, environmental protection, energy efficiency, and green ship technologies into engineering applications and managerial decision-making within the maritime sector.     |
| 4  | To cultivate professionals who can communicate effectively in multidisciplinary and multicultural working environments within the global maritime and related industries, possess strong leadership and problem-solving skills, demonstrate ethical responsibility, and embrace lifelong learning.     |
| <b>Program Curriculum Map</b>                          |  |
| <b>M: Master / D: Develop / I: Introduce / N: None</b> |  |

| Curriculum Courses            |             |  | Key Learning Outcomes |   |   |   |   |   |   |   |   |    |    |    |
|-------------------------------|-------------|--|-----------------------|---|---|---|---|---|---|---|---|----|----|----|
| Level of Course Unit Semester | Course Code | Course Name  | 1                     | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1/1                           | MTH101      | Calculus I   | I                     | N | N | I | N | N | N | N | I | N  | N  | I  |
| 1/1                           | MED101      | Workshop I   | N                     | I | I | N | I | N | D | N | I | N  | I  | I  |
| 1/1                           | SEA101      | Seamanship I   | I                     | I | I | N | I | I | I | I | N | I  | I  | I  |
| 1/1                           | SAF101      | Maritime Safety I  | I                     | I | D | N | I | I | I | D | N | I  | D  | I  |
| 1/1                           | MEC101      | Technical Drawing I  | N                     | I | N | I | N | N | I | N | I | N  | N  | I  |
| 1/1                           | MPH101      | Physics for Mariners I                                       | I                     | N | N | I | N | N | N | N | I | N  | N  | I  |
| 1/1                           | CFM101      | Chemistry for Mariners                                       | I                     | N | I | I | N | N | N | D | N | N  | D  | I  |
| 1/1                           | MRE101      | General Aspects of Marine Engineering                        | D                     | I | I | I | I | I | I | I | I | N  | I  | D  |
| 1/1                           | ENG101      | English I  | N                     | N | N | N | I | N | N | N | I | D  | I  | I  |
| 1/2                           | MTH102      | Calculus II  | I                     | N | N | D | N | N | N | N | I | N  | N  | I  |
| 1/2                           | MED102      | Workshop II  | N                     | D | I | N | I | N | D | N | I | N  | I  | I  |
| 1/2                           | MED104      | Maritime English I   | N                     | N | N | N | I | I | N | N | I | D  | I  | I  |
| 1/2                           | SAF102      | Maritime Safety II   | I                     | I | M | N | I | I | I | D | N | I  | D  | I  |
| 1/2                           | MPH102      | Physics for Mariners II                                      | D                     | N | N | D | N | N | N | N | I | N  | N  | I  |
| 1/2                           | MED106      | Marine Diesel Engines I                                      | D                     | D | I | I | N | N | D | I | I | N  | I  | D  |
| 1/2                           | ENG102      | English II   | N                     | N | N | N | I | N | N | N | I | D  | I  | I  |
| 1/2                           | MED108      | Marine Auxiliary Machinery I                                 | D                     | D | I | I | N | N | D | I | I | N  | I  | D  |
| 1/2                           | CMP102      | Introduction to Information Technologies                     | N                     | I | N | I | N | N | I | N | D | I  | N  | D  |
| 2/3                           | MEC203      | Statics  | D                     | N | N | D | N | N | N | N | I | N  | N  | I  |
| 2/3                           | MTH112      | Linear Algebra   | D                     | N | N | D | N | N | N | N | I | N  | N  | D  |
| 2/3                           | MEC205      | Material Science   | D                     | D | I | D | I | N | N | I | I | N  | I  | D  |
| 2/3                           | NRC201      | Ship Construction I  | D                     | D | I | D | I | N | I | I | I | N  | I  | D  |
| 2/3                           | MEC207      | Thermodynamics I   | D                     | D | I | D | N | N | N | N | I | N  | N  | D  |
| 2/3                           | SAF201      | Maritime Safety III  | I                     | I | M | N | I | I | I | D | N | I  | D  | I  |
| 2/3                           | MED201      | Operations and Maintenance of Main and Auxiliary Machinery I | D                     | D | D | I | I | N | D | I | I | N  | D  | D  |

|     |        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|-----|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2/3 | TUR101 | Turkish I: Written Expression                                 | N | N | N | N | N | N | N | N | N | I | D | I | I |
| 2/3 | AIT101 | Ataturk's Principles and History of Turkish Revolution I      | N | N | N | N | N | N | N | N | N | I | I | D | I |
| 2/3 | MEC209 | Strength of Materials   | D | D | I | D | N | N | N | N | N | I | N | N | D |
| 2/4 | MEC204 | Dynamics  | D | D | I | D | N | N | N | N | N | I | N | N | D |
| 2/4 | SAF202 | Maritime Safety IV  | I | I | M | N | I | I | I | D | N | I | D | I |   |
| 2/4 | MTH201 | Differential Equations  | D | N | N | D | N | N | N | N | N | I | N | N | D |
| 2/4 | MTH301 | Numerical Analysis for Engineers                              | D | D | I | D | I | N | N | I | I | N | N | N | D |
| 2/4 | TUR102 | Turkish II: Verbal Expression                                 | N | N | N | N | N | N | N | N | N | I | D | I | I |
| 2/4 | AIT102 | Ataturk's Principles and History of Turkish Revolution II     | N | N | N | N | N | N | N | N | N | I | I | D | I |
| 2/4 | MEC208 | Thermodynamics II   | D | D | I | D | I | N | N | N | N | I | N | N | D |
| 3/5 | MED301 | Marine Electrotechnology I                                    | D | D | I | D | I | N | N | N | N | I | N | N | D |
| 3/5 | MED303 | Marine Engines Simulator                                      | M | M | D | I | D | N | D | I | I | N | D | D |   |
| 3/5 | MED305 | Marine Diesel Engines II                                      | M | D | D | I | I | N | D | I | I | N | N | N | D |
| 3/5 | LAW301 | Maritime Law and Conventions I                                | N | N | I | N | N | D | I | D | I | I | D | I |   |
| 3/5 | MED307 | Hydraulic, Pneumatic and Automatic Control                    | D | D | D | D | I | N | N | N | N | I | N | N | D |
| 3/5 | MEC305 | Fluid Mechanics   | D | D | D | D | I | N | N | N | N | I | N | N | D |
| 3/5 | TSM301 | Technical Ship Management I                                   | I | I | I | N | D | D | D | D | D | D | I | D | I |
| 3/6 | SGT302 | Seagoing Training   | M | M | M | D | D | D | M | D | D | D | I | D | D |
| 4/7 | MED403 | Maritime English II   | I | I | N | N | N | N | I | I | I | I | M | D | D |
| 4/7 | NRC401 | Ship Construction II  | D | D | D | D | I | N | N | N | N | I | N | N | D |
| 4/7 | LAW401 | Maritime Law and Conventions II                               | N | N | I | N | N | D | I | D | I | I | D | I |   |
| 4/7 | MED405 | Theory of Marine Steam Engines and Boilers                    | D | D | D | I | I | N | D | I | I | N | N | N | D |
| 4/7 | MEC310 | Marine Hydromechanics   | D | D | D | D | I | N | N | N | N | I | N | N | D |
| 4/7 | TSM401 | Technical Ship Management II                                  | I | I | I | N | D | D | D | D | D | D | I | D | D |
| 4/7 | TEC409 | Latest Power and Propulsion Technologies                      | D | D | D | D | D | N | I | I | I | I | N | D | M |
| 4/8 | MED402 | Automatic Control   | D | D | D | D | D | N | I | I | I | I | N | N | D |
| 4/8 | EMR402 | Emergency Procedures  | I | I | D | N | D | M | I | D | I | I | D | I |   |
| 4/8 | MED404 | Engine Room Simulator   | D | D | M | I | D | N | D | I | I | N | N | N | D |
| 4/8 | MED406 | Operations and Maintenance of Main and Auxiliary Machinery II | M | D | D | I | D | N | D | I | I | N | N | N | D |

| 4/8   | FGP444                 | Graduation Project  | M                     | M | M | M   | D | D | D | D | M | D  | D  | M  |
|---|------------------------|---|-----------------------|---|---|---|---|---|---|---|---|----|----|----|
| 4/8   | FMC402                 | First Aid and Medical Care  | N                     | N | I | N   | D | M | I | D | N | I  | D  | I  |
| 4/8   | MED408                 | Refrigeration and Conditioning  | D                     | D | D | I   | D | N | I | I | I | N  | N  | D  |
| 4/8   | MED410                 | Gas Turbines and Turbo Machineries  | D                     | D | D | D   | D | N | I | I | I | N  | N  | D  |
| Curriculum Electives                        |                        |   | Key Learning Outcomes |   |   |   |   |   |   |   |   |    |    |    |
| Level of Course<br>Unit Semester            | Course<br>Code         | Course Name   | 1                     | 2 | 3 | 4   | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 2/3   | MEL201                 | Introduction to Marine Electronics  | I                     | I | D | I   | I | I | I | D | I | N  | I  | I  |
| 2/4   | MEC202                 | Manufacturing Technology  | D                     | D | D | D   | I | I | I | I | D | D  | I  | N  |
| 2/4   | MED202                 | Marine Auxiliary Machinery II   | D                     | D | D | D   | D | D | D | D | D | D  | D  | D  |
| 3/5   | MEC301                 | Heat Transfer   | D                     | D | D | D   | D | D | D | D | D | D  | D  | D  |
| 3/5   | MEC303                 | Machine Component Design  | I                     | I | I | I   | I | I | D | I | I | I  | I  | I  |
| 4/7   | EAS431                 | Economics For Engineers   | D                     | D | D | D   | D | D | D | D | D | D  | I  | N  |
| 4/7   | MED401                 | Marine Electrotechnology II   | D                     | D | D | D   | D | D | D | D | D | D  | D  | D  |
| 4/7   | AER209                 | Computer-Aided Design (CAD)   | D                     | D | D | D   | D | D | D | D | D | D  | I  | N  |
| TQF-HE & Program Learning Outcomes Coverage |                        |   |                       |   |   |   |   |   |   |   |   |    |    |    |
| Group                                       |                        | TQF-HE Qualification  |                       |   |   | Program Learning Outcomes   |   |   |   |   |   |    |    |    |
| Knowledge                                   | Theoretical, Empirical | He/she has sufficient background in mathematics, science, and engineering topics related to his/her field.  |                       |   |   | Comprehensively apply knowledge of marine engineering principles, systems, and machinery operation. |   |   |   |   |   |    |    |    |
| Skills                                      | Cognitive, Applied     | It combines theoretical and applied knowledge in mathematics, science, and their respective fields to create engineering solutions.                               |                       |   |   | Analyzing and formulating complex engineering problems and generating data-driven solutions.        |   |   |   |   |   |    |    |    |
|   |                        | Identifies, defines, formulates, and solves engineering problems, selecting and applying appropriate analytical methods and modeling techniques for this purpose. |                       |   |   | Develop solutions to problems using theoretical and experimental techniques.                        |   |   |   |   |   |    |    |    |

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|                     |  | Analyzes a system, system component, or process and designs it to meet the desired requirements under realistic constraints; applies modern design methods accordingly. | Develop and optimize mechanical, electrical, and control systems.                                       |
|                     |  | Selects and uses modern techniques and tools necessary for engineering applications.  | Using digital tools, automation, and diagnostic systems.  |
|                     |  | Designs experiments, conducts experiments, collects data, analyzes results, and interprets them.  | Using experimental and computational methods in complex engineering problems.                           |
| <b>Competencies</b> | <b>Ability to Work Independently and Take Responsibility</b> | Works effectively both individually and in multidisciplinary teams.   | Work effectively as a leader or member in highly disciplined and multicultural teams.                   |
|                     |  | Accesses information and conducts source research for this purpose, using databases and other information sources.  | The ability to transfer knowledge and skills to different sectors and continuous learning.              |
| <b>Competencies</b> | <b>Learning Proficiency</b>                                  | Accesses information and conducts source research for this purpose, using databases and other information sources.  | Processing databases using digital and automation technologies.   |
|                     |  | He/She is aware of the necessity of lifelong learning; he follows developments in science and technology and constantly renews himself.                                 | Continuous professional development and learning in accordance with ethical and professional standards. |
|                     |  | It combines theoretical and applied knowledge in mathematics, science, and their respective fields to create engineering solutions.                                     | Be effective in applying marine engineering principles and systems.                                     |
|                     |  | Identifies, defines, formulates, and solves engineering problems, selecting and applying appropriate analytical methods and modeling techniques for this purpose.       | Defining and solving complex engineering problems.  |

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| <b>Competencies</b> |  | Analyzes a system, system component, or process and designs it to meet the desired requirements under realistic constraints; applies modern design methods accordingly.                               | Analyzing and optimizing mechanical and control systems.                              |
|                     |  | Mühendislik uygulamaları için gerekli olan modern teknik ve araçları seçer ve kullanır.   | Selects and uses modern techniques and tools necessary for engineering applications.  |
|                     |  | Works effectively both individually and in multidisciplinary teams.   | Work effectively in highly disciplined and multicultural teams.                       |
|                     | <b>Communication and Social Skills</b> | Uses information and communication technologies along with computer software at a level equivalent to at least the European Computer Driving License Advanced Level, as required by the field.        | Using technologies that meet the requirements of the digital age.                     |
|                     |  | Establishes effective verbal and written communication; uses a foreign language at least at the B1 General Level of the European Language Portfolio.  | Establishing technical and professional communication in English and other languages. |
|                     |  | Communicates using technical drawings.  | Apply technical drawing in design and system analysis.                                |
|                     |  | Accesses information and conducts research for this purpose, using databases and other information sources.   | Continuous learning to apply knowledge and skills across different sectors.           |
|                     |  | Is aware of the universal and societal impacts of engineering solutions and applications; is conscious of entrepreneurship and innovation issues and possesses knowledge about contemporary problems. | Sustainable engineering practices and environmental awareness.                        |



|              |                           |     |     |   |     |     |     |     |  |      |      |      |
|--------------|---------------------------|-----|-----|---|-----|-----|-----|-----|--|------|------|------|
| Competencies | Field-Specific Expertise  |     |     | Possesses a sense of professional and ethical responsibility.   |     |     |     |     | Comply with professional and ethical standards.              |      |      |      |
|              |                           |     |     | Project management, workplace practices, employee health, environmental and occupational safety awareness; awareness of the legal consequences of engineering practices.                                |     |     |     |     | Planning, executing, and managing engineering projects.      |      |      |      |
|              |                           |     |     | Demonstrates awareness of the universal and societal impacts of engineering solutions and applications; is aware of entrepreneurship and innovation issues and knowledgeable about contemporary issues. |     |     |     |     | Implementing sustainable engineering and green technologies. |      |      |      |
| TAY          | Program Learning Outcomes |     |     |   |     |     |     |     |  |      |      |      |
| TAY \ PO     | PO1                       | PO2 | PO3 | PO4   | PO5 | PO6 | PO7 | PO8 | PO9  | PO10 | PO11 | PO12 |
| 1            | ✓                         |     |     |   |     |     |     |     |  |      |      |      |
| 2            |                           |     |     | ✓   |     |     |     |     |  |      |      |      |
| 3            |                           |     |     | ✓   |     |     |     |     |  |      |      |      |
| 4            |                           | ✓   |     |   |     |     |     |     |  |      |      |      |
| 5            |                           |     |     |   |     | ✓   |     |     |  |      |      |      |
| 6            |                           |     |     | ✓   |     |     |     |     |  |      |      |      |
| 7            |                           |     |     |   |     |     |     | ✓   |  |      |      |      |
| 8            |                           |     |     |   |     |     |     |     |  |      |      | ✓    |
| 9            |                           |     |     |   |     | ✓   |     |     |  |      |      |      |
| 10           |                           |     |     |   |     |     |     |     |  | ✓    |      |      |
| 11           | ✓                         |     |     |   |     |     |     |     |  |      |      |      |
| 12           |                           |     |     | ✓   |     |     |     |     |  |      |      |      |
| 13           |                           | ✓   |     |   |     |     |     |     |  |      |      |      |
| 14           |                           |     |     |   |     | ✓   |     |     |  |      |      |      |

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|--|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 15   |   |     |     |     |     |     |     | ✓   |     |     |      |      |      |
| 16   |   |     |     |     |     | ✓   |     |     |     |     |      |      |      |
| 17   |   |     |     |     |     |     |     |     | ✓   |     |      |      |      |
| 18   |   | ✓   |     |     |     |     |     |     |     |     |      |      |      |
| 19   |   |     |     |     |     |     |     |     |     |     |      |      | ✓    |
| 20   |   |     |     |     |     |     |     |     |     |     | ✓    |      |      |
| 21   |   |     |     |     |     |     |     |     |     | ✓   |      |      |      |
| 22   |   |     |     |     |     |     | ✓   |     |     |     |      |      |      |
| 23   |   |     |     |     |     |     |     |     |     |     | ✓    |      |      |
| Institutional Learning Outcome / Program Learning Outcome Coverage |   |     |     |     |     |     |     |     |     |     |      |      |      |
| R = Relevant    PR = Partly Relevant    NR = Not Relevant          |   |     |     |     |     |     |     |     |     |     |      |      |      |
| Institutional Learning Outcome                                     |   | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
| 1  | They will be able to analyze, synthesize, and evaluate information and ideas from different perspectives.   | R   | PR  | PR  | R   | R   | PR  | PR  | PR  | PR  | PR   | PR   | PR   |
| 2  | They will be able to perform their duties within the framework of multidimensional quality standards without disregarding ethical rules.  | PR  | PR  | R   | NR  | PR  | R   | R   | R   | PR  | NR   | R    | NR   |
| 3  | By being aware of different cultures and global and historical perspectives, they can serve society through consistent and responsible behavior.  | PR  | NR  | R   | PR  | R   | R   | PR  | R   | PR  | PR   | R    | PR   |
| 4  | By bringing together the concepts and knowledge they will acquire from numerous scientific disciplines, they will be able to access different fields of knowledge, compare them, and critique them. | R   | PR  | PR  | R   | PR  | PR  | PR  | PR  | PR  | PR   | PR   | R    |
| 5  | They will be able to demonstrate expertise in a specialized field of work and combine theory with practice.   | R   | R   | PR  | R   | PR  | PR  | R   | PR  | R   | NR   | PR   | PR   |
| Occupational Profiles of Graduates                                 |   |     |     |     |     |     |     |     |     |     |      |      |      |

Graduates sit for the Unlimited Watchkeeping Engineer competency examinations at the Seafarers Examination Center (GASM). Candidates who successfully pass the Seafarer Certificate of Competency Examination administered by the Ministry of Transport and Infrastructure of the Republic of Türkiye are awarded the Unlimited Watchkeeping Engineer Certificate of Competency.

With this certificate, graduates are qualified to serve on commercial vessels as Second Engineer or Third Engineer. Following a specified period of sea service, Unlimited Watchkeeping Engineers may upgrade their certificates of competency, progressing first to Unlimited Chief Engineer (First Engineer) and subsequently to Unlimited Chief Engineer (Master Engineer).

In addition, graduates of the department may assume various shore-based positions within maritime companies, including general management, operations management, technical management, marine engineering inspection, and personnel management. After gaining sufficient sea-going experience, graduates may also serve as watchkeeping engineers and/or chief engineers in the Turkish Straits Area and Turkish ports.

#### Access to Further Studies

May apply to second cycle (master's) degree programmes.

#### Maritime Transportation Management Engineering Bachelor's Degree Program Graduate Statistics (Last Five Years)

| Year | Number of Graduates |
|------|---------------------|
| 2020 | 23                  |
| 2021 | 11                  |
| 2022 | 11                  |
| 2023 | 9                   |
| 2024 | 6                   |

#### Course Structure Diagram with Credits

##### I. Class / I. Semester

| Course Code | Course Name       | Core Elective | Theory | Practice | ECTS |
|-------------|-------------------|---------------|--------|----------|------|
| MTH101      | Calculus I        | Core          | 4      | 0        | 6    |
| MED101      | Workshop I        | Core          | 1      | 2        | 3    |
| SEA101      | Seamanship I      | Core          | 2      | 2        | 3    |
| SAF101      | Maritime Safety I | Core          | 2      | 2        | 3    |

|                                  |  |                      |               |                 |             |
|----------------------------------|--|----------------------|---------------|-----------------|-------------|
| MEC101                           | Technical Drawing I                      | Core                 | 2             | 2               | 5           |
| MPH101                           | Physics for Mariners I                   | Core                 | 3             | 2               | 3           |
| CFM101                           | Chemistry for Mariners                   | Core                 | 2             | 2               | 3           |
| MRE101                           | General Aspects of Marine Engineering    | Core                 | 2             | 0               | 3           |
| ENG101                           | English I                                | Core                 | 3             | 0               | 3           |
| <b>Total ECTS</b>                |  |                      |               |                 | <b>32</b>   |
| <b>I. Class / II. Semester</b>   |  |                      |               |                 |             |
| <b>Course Code</b>               | <b>Course Name</b>                       | <b>Core Elective</b> | <b>Theory</b> | <b>Practice</b> | <b>ECTS</b> |
| MTH102                           | Calculus II                              | Core                 | 4             | 0               | 6           |
| MED102                           | Workshop II                              | Core                 | 1             | 2               | 3           |
| MED104                           | Maritime English I                       | Core                 | 2             | 0               | 3           |
| SAF102                           | Maritime Safety II                       | Core                 | 2             | 2               | 3           |
| MPH102                           | Physics for Mariners II                  | Core                 | 3             | 2               | 3           |
| MED106                           | Marine Diesel Engines I                  | Core                 | 2             | 2               | 4           |
| ENG102                           | English II                               | Core                 | 3             | 0               | 3           |
| MED108                           | Marine Auxiliary Machinery I             | Core                 | 2             | 2               | 3           |
| CMP102                           | Introduction to Information Technologies | Core                 | 3             | 0               | 3           |
| <b>Total ECTS</b>                |  |                      |               |                 | <b>31</b>   |
| <b>II. Class / III. Semester</b> |  |                      |               |                 |             |
| <b>Course Code</b>               | <b>Course Name</b>                       | <b>Core Elective</b> | <b>Theory</b> | <b>Practice</b> | <b>ECTS</b> |
| MEC203                           | Statics                                  | Core                 | 3             | 0               | 5           |
| MTH112                           | Linear Algebra                           | Core                 | 3             | 0               | 5           |
| MEC205                           | Material Science                         | Core                 | 3             | 0               | 4           |
| NRC201                           | Ship Construction I                      | Core                 | 3             | 0               | 3           |
| MEC207                           | Thermodynamics I                         | Core                 | 3             | 0               | 5           |
| SAF201                           | Maritime Safety III                      | Core                 | 2             | 2               | 3           |

|                                 |  |                          |               |                 |             |
|---------------------------------|--|--------------------------|---------------|-----------------|-------------|
| MED201                          | Operations and Maintenance of Main and Auxiliary Machinery I | Core                     | 2             | 2               | 3           |
| TUR101                          | Turkish I: Written Expression                                | Core                     | 2             | 0               | 2           |
| AIT101                          | Ataturk's Principles and History of Turkish Revolution I     | Core                     | 2             | 0               | 2           |
| MEC209                          | Strength of Materials  | Core                     | 2             | 2               | 3           |
| TE**                            | Technical Elective   | Elective                 | 2             | 2               | 3           |
| <b>Total ECTS</b>               |  |                          |               |                 | <b>38</b>   |
| <b>II. Class / IV. Semester</b> |  |                          |               |                 |             |
| <b>Course Code</b>              | <b>Course Name</b>   | <b>Core<br/>Elective</b> | <b>Theory</b> | <b>Practice</b> | <b>ECTS</b> |
| MEC204                          | Dynamics   | Core                     | 3             | 0               | 5           |
| SAF202                          | Maritime Safety IV   | Core                     | 2             | 2               | 3           |
| MTH201                          | Differential Equations                                       | Core                     | 4             | 0               | 6           |
| MTH301                          | Numerical Analysis for Engineers                             | Core                     | 3             | 0               | 5           |
| TUR102                          | Turkish II: Verbal Expression                                | Core                     | 2             | 0               | 2           |
| AIT102                          | Ataturk's Principles and History of Turkish Revolution II    | Core                     | 2             | 0               | 2           |
| MEC208                          | Thermodynamics II  | Core                     | 3             | 0               | 5           |
| TE**                            | Technical Elective   | Elective                 | 2             | 2               | 3           |
| TE**                            | Technical Elective   | Elective                 | 2             | 2               | 3           |
| <b>Total ECTS</b>               |  |                          |               |                 | <b>34</b>   |
| <b>III. Class / V. Semester</b> |  |                          |               |                 |             |
| <b>Course Code</b>              | <b>Course Name</b>   | <b>Core<br/>Elective</b> | <b>Theory</b> | <b>Practice</b> | <b>ECTS</b> |
| MED301                          | Marine Electrotechnology I                                   | Core                     | 1             | 2               | 3           |
| MED303                          | Marine Engines Simulator                                     | Core                     | 1             | 2               | 3           |
| MED305                          | Marine Diesel Engines II                                     | Core                     | 2             | 2               | 3           |
| LAW301                          | Maritime Law and Conventions I                               | Core                     | 4             | 0               | 4           |
| MED307                          | Hydraulic, Pneumatic and Automatic Control                   | Core                     | 1             | 2               | 3           |
| MEC305                          | Fluid Mechanics  | Core                     | 3             | 0               | 4           |

|                                   |   |                      |               |                 |             |
|-----------------------------------|---|----------------------|---------------|-----------------|-------------|
| TSM301                            | Technical Ship Management I                                   | Core                 | 2             | 2               | 3           |
| TE**                              | Technical Elective  | Elective             | 2             | 2               | 3           |
| <b>Total ECTS</b>                 |   |                      |               |                 | <b>26</b>   |
| <b>III. Class / VI. Semester</b>  |   |                      |               |                 |             |
| <b>Course Code</b>                | <b>Course Name</b>  | <b>Core Elective</b> | <b>Theory</b> | <b>Practice</b> | <b>ECTS</b> |
| SGT302                            | Seagoing Training   | Core                 | 0             | 0               | 30          |
| <b>Total ECTS</b>                 |   |                      |               |                 | <b>30</b>   |
| <b>IV. Class / VII. Semester</b>  |   |                      |               |                 |             |
| <b>Course Code</b>                | <b>Course Name</b>  | <b>Core Elective</b> | <b>Theory</b> | <b>Practice</b> | <b>ECTS</b> |
| MED403                            | Maritime English II   | Core                 | 3             | 0               | 2           |
| NRC401                            | Ship Construction II  | Core                 | 1             | 2               | 2           |
| LAW401                            | Maritime Law and Conventions II                               | Core                 | 4             | 0               | 4           |
| MED405                            | Theory of Marine Steam Engines and Boilers                    | Core                 | 3             | 0               | 3           |
| MEC310                            | Marine Hydromechanics   | Core                 | 3             | 0               | 3           |
| TSM401                            | Technical Ship Management II                                  | Core                 | 2             | 2               | 3           |
| TEC409                            | Latest Power and Propulsion Technologies                      | Core                 | 3             | 0               | 3           |
| TE**                              | Technical Elective  | Elective             | 2             | 2               | 3           |
| <b>Total ECTS</b>                 |   |                      |               |                 | <b>23</b>   |
| <b>IV. Class / VIII. Semester</b> |   |                      |               |                 |             |
| <b>Course Code</b>                | <b>Course Name</b>  | <b>Core Elective</b> | <b>Theory</b> | <b>Practice</b> | <b>ECTS</b> |
| MED402                            | Automatic Control   | Core                 | 3             | 0               | 3           |
| EMR402                            | Emergency Procedures  | Core                 | 2             | 2               | 3           |
| MED404                            | Engine Room Simulator   | Core                 | 1             | 4               | 3           |
| MED406                            | Operations and Maintenance of Main and Auxiliary Machinery II | Core                 | 2             | 2               | 4           |
| FGP444                            | Graduation Project  | Core                 | 0             | 4               | 4           |

|   |                                    |   |      |   |   |     |
|---|------------------------------------|---|------|---|---|-----|
| FMC402  | First Aid and Medical Care         |   | Core | 2 | 2 | 3   |
| MED408  | Refrigeration and Conditioning     |   | Core | 2 | 2 | 3   |
| MED410  | Gas Turbines and Turbo Machineries |   | Core | 2 | 2 | 3   |
| Total ECTS                                      |                                    |   |      |   |   | 26  |
| Total ECTS                                      |                                    |   |      |   |   | 240 |
| Examination Regulations, Assessment and Grading |                                    |   |      |   |   |     |
| Grade   | Coefficient                        | Percentage                                      |      |   |   |     |
| AA  | 4                                  | 90-100  |      |   |   |     |
| BA  | 3.5                                | 85-89   |      |   |   |     |
| BB  | 3                                  | 80-84   |      |   |   |     |
| CB  | 2.5                                | 75-79   |      |   |   |     |
| CC  | 2                                  | 70-74   |      |   |   |     |
| DC  | 1.5                                | 60-69   |      |   |   |     |
| DD  | 1                                  | 50-59   |      |   |   |     |
| FF  | 0                                  | 49 and below                                    |      |   |   |     |
| NA  | -                                  | Participation rate is below 70%                 |      |   |   |     |
| Mode of Study                                   |                                    |   |      |   |   |     |
| Full Time                                       |                                    |   |      |   |   |     |
| Field(s) of Study                               |                                    |   |      |   |   |     |
| Engineering                                     |                                    |   |      |   |   |     |
| Head of Program and ECTS Coordinator            |                                    |   |      |   |   |     |
| Head of Program                                 |                                    | Oceangoing Marine Chief Engineer Volkan Varışlı |      |   |   |     |
| ECTS Coordinator                                |                                    | Dr. Gökhan Tari                                 |      |   |   |     |