

1. Title of the certificate (HR) and programme number <sup>(1)</sup>

**Tehničar za brodostrojarstvo**  
(011704)

<sup>(1)</sup> In the original language.

2. Translated title of the certificate (EN) <sup>(2)</sup>

**Ship engineering technician**

<sup>(2)</sup> This translation has no legal status.

## 3. Profile of skills and competences

## A) GENERAL EDUCATION COMPETENCES

- Use basic communication knowledge and skills through active use of mother tongue and foreign languages in different situations and use and draft documentation in a foreign language (English)
- Apply basic mathematical knowledge, skills and processes
- Organise and manage space, apply basic physical and chemical knowledge within the framework of sustainable community development
- Use modern information and communication technology actively and critically
- Continuously acquire knowledge and skills in line with technological changes
- Have knowledge of basic economic concepts and functioning of the economic system as a whole
- Apply ethical principles and respect diversity
- Identify, assess and manage risks and dangers
- Act responsibly towards one's own and other people's health

## B) VOCATIONAL COMPETENCES

- Safeguard the ship engine room
- Operate the main propulsion machine, auxiliary machines and ship systems
- Identify the cause of machinery and on-board equipment malfunction
- Use hand tools, machine tools and measuring devices for overhaul and repairs on-board
- Manage maintenance and repair procedures for ship machine tools and equipment according to the regulations
- Apply consistently regulations related to work safety, fire protection and procedures for the prevention of pollution of the marine environment
- Use fire extinguishers, life-saving equipment and other means of security maintenance
- Provide medical assistance on-board
- Implement national and international requirements and regulations on the safety of life at sea and the protection of the marine environment
- Use ship's internal communications appropriately
- Ensure the protection of the ship, crew, passengers and system operations in emergency situations
- Use of spoken and written English in performing ship engineering technician's job

## 4. Range of occupations accessible to the holder of the certificate

The qualification ship engineering technician includes all the operations of safe handling and operation of the main propulsion machine and its related ship management systems: handling of fuel, lubrication and ballast procedures, handling of equipment failure to restore equipment to operational status, detection and identification of causes of failures, repair and maintenance of ship machine tools and equipment, ensure safe working practices, monitor and control compliance with legal measures to ensure the protection of human life at sea and the marine environment, maintain the safety and protection of ships, crews and passengers and the functioning of the rescue system, firefighting protection and other security systems, design plans and procedures in emergency cases, and use management skills for the purposes of carrying out traffic and navigation services in order to achieve economic efficiency. A ship engineering technician works in all organisations involving marine engineering, either on-board a ship or on land, in public maritime engineering organisations. A good knowledge of international and national legal regulations is necessary to carry out the operations.

## 5. Official basis of the certificate

<p><b>Name and status of the body awarding the certificate</b></p> <p>The certificate is issued by the secondary education institution (vocational education and training school).</p>	<p><b>Name and status of the national authority providing accreditation/recognition of the certificate</b></p> <p>Ministry of Science, Education and Youth Donje Svetice 38 10000 Zagreb <a href="http://www.mzom.gov.hr">www.mzom.gov.hr</a></p>
<p><b>Legal basis</b></p> <p>Primary and Secondary School Education Act (Official Gazette No. 87/2008, 86/2009, 92/2010, 105/2010-corr., 90/2011, 16/2012, 86/2012, 94/2013, 152/2014, 7/2017, 68/2018, 98/2019, 64/2020, 151/2022 and 156/2023) Vocational Education Act (Official Gazette No. 30/2009, 24/2010, 22/2013, 25/2018 and 69/2022) Croatian Qualifications Framework Act (Official Gazette No. 22/2013, 41/2016, 64/2018, 47/2020 and 20/2021)</p>	<p><b>National grading system / Pass requirements</b></p> <p>Excellent 5 (10) A Very good 4 (9) B Good 3 (8) B Sufficient 2 (6-7) C Insufficient 1 (0-5) F</p> <p>In order to pass the exam, it is necessary to get the grade 2 (6-7), i.e. C (sufficient).</p>
<p><b>Level of qualifications</b></p> <p>Level 4.2 in the Croatian Qualifications Framework</p>	<p><b>Access to next level of education/training</b></p> <p>Access to higher level of qualification in accordance with the Croatian Qualifications Framework.</p>

## 6. General data of acquiring the certificate

	Percentage of total programme (%)	Total number of hours
General education part	51,2	2233
Vocational part – theoretical	37,9	1651
Vocational part – practice/exercises	10,9	475
<b>Duration of education</b>		4 years

**Entry requirements:** Completion of primary education

**More information available at:**

Ministry of Science, Education and Youth ([www.mzom.gov.hr](http://www.mzom.gov.hr))  
Education and Teacher Training Agency ([www.azoo.hr](http://www.azoo.hr))  
Agency for Vocational Education and Adult Education ([www.asoo.hr](http://www.asoo.hr))

National Europass Centre in Croatia ([www.europass.hr](http://www.europass.hr)) at the Agency for Mobility and EU Programmes ([www.ampeu.hr](http://www.ampeu.hr)).

**(\*) Explanatory note**

The Certificate supplement provides additional information about the certificate and does not have any legal status in itself. Its format is based on the Decision (EU) 2018/646 of the European Parliament and of the Council of 18 April 2018 on a common framework for the provision of better services for skills and qualifications (Europass) and repealing Decision No 2241/2004/EC.

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