| Discipline | Technical Documentation code: 3 | 1 semester /winter/ |
|-----------------|--|---------------------|
| Specialty | Marine Engineering | |
| ECTS credits: 8 | Form of assessment: Inter-semester Evaluation | |
| Lecturer | Assist. Prof. Eng. Sonya Vachinska-Aleksandrova, PhD Room 508M Phone: +359 52 383 531 E-mail: s_vachinska@abv.bg s_vachinska@tu-varna.bg | |
| Department | Manufacturing Technologies and Machine Tools | |
| Faculty | Faculty of Manufacturing Engineering and Technologies | |

Learning objectives:

In the subject "TECHNICAL DOCUMENTATION" students will development of graphical representation skills associated with systems and industrial products. With this course they will be able to produce and transmit ideas, concepts and carry out small design projects using manual drawing. activity every engineer uses sectional thinking, imagination and skills for graphic and drawing work. The course provides knowledge about the requirements of the standards, criteria for design and preparation of technical documentation, be familiar and understanding all types of technical drawings, etc.

Technical documentation is a part of engineering drawing and this is a universal language of all engineers used in theirs design process. It is a formal and precise way of presenting specific information about the shape, the size, features, machining and precision of the elements. Actually, this is a graphical representation of objects and structures for quickly, fully and accurately visualizing objects and conducting analysis. The purpose of an engineering drawing is to convey all the required information that will allow a manufacturer to produce that component. All drawings are necessary to create in accordance with standardized conventions for layout, nomenclature, interpretation, appearance, size etc.

The curriculum was developed in accordance with a standard IMO - Model Course 7.04 "Officer in Charge of an Engineering Watch". Content of the discipline corresponds to part of Competence 3.2. "MAINTENANCE AND REPAIR OF SHIPBOARD MACHINERY AND EQUIPMENT".

CONTENTS: Lectures **Seminar** Course Training Area classes work Graphics in design and communication. Projection systems – first 4 8 angle orthographic projection and third angle orthographic projection. View types – main, additional, part and local views. Cutting plane and sectioning – successive section, revolved, broken-5 8 15 out, offset, aligned section and half section. Dimensioning –symbols and specific features. Developments. Treads joins. Type of threads. External and internal threads. 2 6 Standard threaded elements. Conventional representation of common Surface finishing. Roughness and tolerance. Rules for reading 4 8 assembly drawing and disconnect elements 15 **30 TOTAL:** 60 h 15