| Discipline | STRUCTURE and STRENGHT of SHIPS | S-2 code: 39 | 2nd Semester Third Year |
|-----------------|---|--------------|----------------------------|
| Specialty | NAVAL ARCHITECTURE AND MARINE TECHNOLOGY | | |
| ECTS credits: 6 | Form of assessment: EXAM | | |
| Lecturer | Assist. prof. Yordan Denev Room 418a M Phone: +359 52 383 384 E-mail: y.denev@tu-varna.bg | | |
| Department | Department of Naval Architecture, Marine Engineering | | |
| Faculty | Faculty of Shipbuilding | | |

Learning objectives:

/ANNOTATION/

The discipline introduces students to basic principles of ship design, acting forces applied to floating vessels and structures, various scenarios of acting forces and loads, issues related to hull girder and local strength of the ships structure.

CONTENTS:

Structural design principles

Dynamic load cases

Ship motions and accelerations

Hull girder loads

External and internal loads

Design load scenarios

Hull girder yielding, ultimate and residual strength

Load application

Minimum thickness

Plating

Stiffeners

Primary supporting members and pillars