

Discipline	AUTOMATIC CONTROL of SHIP POWER SYSTEMS    code: 36    2nd Semester Third Year	
Specialty	MARINE ENGINEERING	
ECTS credits: 6	Form of assessment: EXAM	
Lecturer	Assoc. prof. Mariana Todorova Room 303a E Phone: +359 52 383 215 E-mail: .mgtodorova@tu-varna.bg	
Department	Department of Automation	
Faculty	Faculty of Computing and Automation	
Learning objectives:		
<p style="text-align: center;">/ANNOTATION/</p> <p>The aim of the course is to introduce students to the basic principles of automatic control of ship power systems, as specific attention is paid to the elements of automatic systems and their mathematical modeling, principles of operation, types of controllers, etc.</p> <p>The syllabus is developed in accordance with the requirements of IMO Model Courses 7.04</p> <p>.</p>		
<p style="text-align: center;">CONTENTS:</p> <p>Functional structure of automatic control systems</p> <p>Fundamental principles of building control systems</p> <p>Mathematical description and modeling of ship’s objects for control</p> <p>Classification, principles of operation and mathematical description of main functional elements</p> <p>Automatic controllers – PID controllers</p> <p>Optimal adjustment of automatic controllers</p> <p>Systems for automatic control of ship power systems</p> <p><b>Total: 30 lectures and 45 exercises    ECTS credits: 6</b></p>		