

## Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
GEM211	Automatic Control	4	2	0	0	2	3

Prerequisites	
Admission Requirements	

Language of Instruction	Turkish
Course Type	Compulsory
Course Level	Associate Degree
Objective	The course provides comprehensive description and offers elaborated explanation for different marine auxiliary machinery systems so that the marine engineering officers understand the rules and regulations and principles of maintenance and running of these machines.
Content	Basics of control systems, control components, sensors, signal evaluation and measuring, main machine, velocity and load control of the auxiliary machines, control systems of the separators, level of the boilers, alarm systems in the machine engine room, scavenger air,tank level controls,propeller and steering machine controls
References	Hidrolik –Pnömatik uygulamaları/Doç dr.İsmail Deha Er/baş müh.Kemal Demirel Elektro Pnömatik ve Otamasyon/Faruk Kartal Dizel motorları oparasyonu ve gemi yardımcı makineleri ve sistemleri Fahrettin Küçükşahin Gemi yardımcı makinaları/Haluk Özgün

## Theory Topics

Week	Weekly Contents
1	Introduction to concepts
2	Application of controls in the engine room and pneumatic valves
3	pneumatic symbols
4	pneumatic control of the main machine
5	velocity and load control of the main machine
6	velocity and load control of the generator
7	General Evaluation
8	Mid term
9	separator control systems
10	moving and non-moving propellers
11	control of the steering machines
12	measuring systems and their control
13	Scavenge air combustion control
14	Signal evaluation, sensors, engine room alarm systems