Course Title : **How to Build Autonomous Ships**

Instructor Coordinator : Wasis Dwi Aryawan, Ph.D

Media : Zoom Apps

Time : 23 August – 3 Sept 2021 (GMT +7, Surabaya Zone Time)

1st Session: 15.00 – 18.00

2nd Session: 19.00 – 22.00 (2-3 hours depends on the session)

Synopsis

Interest in autonomous and remotely-controlled ships is growing fast. Enabled by recent developments in sensor technology, connectivity at sea, and analysis and decision support software and algorithms, the first commercial projects are ready for launch in the near future. Autonomous surface vehicles (ASV) are vehicles that operate on the surface of the water (watercraft) without a crew. This topic will focus on what is autonomous surface vehicles, their missions, their unique features, as well as ship design process that include Archimedes theory, Lines Plan, General Arrangement, and ship production process. These basic knowledges will be required when the participants have an interest for create a ASV.

Schedule

Week 1

Time	Monday	Tuesday	Wednesday	Thursday	Friday
1st Session	History of Ship/Maritime Nation	Ship Design (Archimedes Theory, Lines Plan, and General Arrangement)	Ship Outfitting	Ship Production	ASV (concept, mission and unique features)
2nd Session	Ship Types, Part, & Structure	Case study and discussion (Titanic)	Ship Propulsion	Development of New Ship Technology (Solar Powered Boat & Introduction to ASV)	ASV (components)
Media	PPT and video				

ITS Global Engagement
Rectorate Building 1st Floor
ITS Campus, Sukolilo, Surabaya 60111 Indonesia
Phone/Fax: +62-31-5923411

Week 2

Time	Monday	Tuesday	Wednesday	Thursday	Friday
1st Session	ASV (communication and navigation system)	Department's projects (based on Final Project)	Department's projects (based on iBoat)	Department's projects (based on Unmanned Rescue Boat)	Discussion
2nd Session	ASV (propulsion and control system)				Discussion
Media	PPT and video				

*diisi dengan nama rencana coursenya. Belum fix fix banget tidak apa apa Pak, Bu

(lampiran CV Coordinator Instructor)

ITS Global Engagement
Rectorate Building 1st Floor
ITS Campus, Sukolilo, Surabaya 60111 Indonesia
Phone/Fax: +62-31-5923411