

List of Courses & Course Description (GMOS for Spring 2022)

Classification	Subject	Description	Credit	Hours
Regular	Marine Engines	Learn the structure, principles, and operation of a ship's two-stroke diesel engine used as a ship's propulsion engine through theory and practice (VR, CBT simulator).	2	30
Regular	Navigational Instrument	Information from surrounding circumstances and environments as well as position of a ship are essential for safe navigation. In this subject the fundamental concept and operational methods for the navigational equipment, which provide such information precisely, are lectured. Following equipment is included in this subject: Magnetic and Gyro Compasses – bearing and direction, EM Log and Doppler Log – velocity, Echo Sounder – depth, Autopilot – maneuvering, Sextant and Chronometer – observation of celestial bodies, ECDIS – display electronic charts and information, RADAR and AIS – safe navigation, LRIT and SSAS – safety and security, VDR, BNWAS, etc.	3	45
Regular	Exploration and Development of Marine-borne Resources	This subject aims to understand introductory oceanography for the basis of marine-borne resources. Specifically, the formation of the ocean, properties of water, movement of water body, and organisms dwelling would be introduced.	3	45
Regular	Marine Applied Microbiology Lab.	This course offers a fundamental microbiological principles and laboratory techniques. The course focuses on an experimental background in microbiology which includes culturing of bacterial cells, isolating bacterial cells from environmental samples, performing bacterial identification tests by microscopic and biochemical experiments, sterilizing samples to inactivate bacteria, and studying microbial growth control methods. Students demonstrate an understanding of these principles through a variety of lab experiments.	3	45

Regular	Marine Food Resource Practice	This subject is to apply knowledges of food science to food industry through field trip. Along the way, the goal is to give students to the tool to seek their food related job and to expand their career.	3	45
Irregular	Korean Language and Culture	The Korean Language and Culture Experience Program is designed for students who want to improve their Korean language skills and also experience Korean culture over this program period. Studying Korean basic level intensively and being able to learning in additional Korean language with a real life in Korea. To learn the Korean expressions for the real life in Korea, multimedia materials are used such as K-Pops, K-Dramas, etc. Through this course, students will also learn more about Korea's past and present as well as experience Korean culture firsthand.	-	45
Irregular	Maritime & Ocean Field Trip	<ol style="list-style-type: none"> 1. Korean East Sea Rim <ul style="list-style-type: none"> - National Ocean Science Museum, Marine Industry Research Institute for East Sea Rim, Korea Institute of Ocean Science and Technology, POSCO etc. 2. Ports, Shipbuilding <ul style="list-style-type: none"> - SAMSUNG Heavy Industries, Daewoo Shipbuilding & Marine Engineering, Busan New Port, Busan Port Authority 3. Korean Culture Experiences <ul style="list-style-type: none"> - Gyeongju City, Busan Museum, Hanbok, K-Culture experiences 4. Ocean & Fishery Science <ul style="list-style-type: none"> - National Fisheries Science Museum, Busan Techno Park, Fisheries Industries 	-	-