

# DSE Curriculum in 2022

GE: general elective subject, RS: requires major subject, ES: Elective major subject

Grade	First semester				Second semester			
	Category	Course title	Credit	Hour	Category	Course title	Credit	Hour
1	GE	Freshman seminar 1	1	1	GE	Freshman seminar 2	1	1
	GE	Writing and presentation for problem-solving	3	3	GE	Western Philosophy : Issue and Discussion	3	3
	GE	The Universe, Nature and Mankind	1	1	GE	College English	2	3
	GE	Basics of Software and Coding	3	3	GE	Application of Programming Language-C	3	3
	GE	Calculus 1	3	4	GE	Calculus 2	3	4
	GE	Phyics 1	3	4	GE	Physics 2	3	4
	RS	Seminar on Naval Officer' s Job 1	0	0	RS	Introduction to Naval Electronic Engineering	3	4
	RS	Naval History	3	3	RS	Familiarizing Courses of the ROK Navy 1	0	0
	RS	Marine Sports	1	2	RS	Seminar on Naval Officer' s Job2	0	0
2	GE	Artificial Intelligence	3	3	GE	Engineering Mathematics 2	3	3
	GE	Engineering Mathematics 1	3	3	RS	System Applied SW	3	4
	RS	Digital Systems and Lab.	3	4	RS	Introduction to Mechanics	3	3
	RS	Military Ethics	3	3	RS	Signals and Systems	3	3
	RS	Seminar on Naval Officer' s Job 3	0	0	RS	Familiarizing Courses of the ROK Navy 2	0	0
	ES	Introduction to Navigation	3	3	RS	Seminar on Naval Officer' s Job 4	0	0
	ES	Introdution to Aerospace Engineering	3	3	ES	Introdution to Naval Architecture	3	3
	ES	Information Communication Systems	3	3	ES	Computer Architecture	3	3
	ES	Introduction to Military Science	3	3	ES	Vessel Operations	3	3
3	RS	Electromagnetics	3	3	RS	Random Process	3	3
	RS	Linear Algebra and System Theory	3	3	RS	Control Theory	3	3
	RS	Seminar on Naval Officer' s Job 5	0	0	RS	Leadership	3	3
	RS	Digital Signals Processing	3	4	RS	Familiarizing Courses of the ROK Navy 3	0	0
	ES	Advanced Programming Languages	3	3	RS	Seminar on Naval Officer' s Job 6	0	0
	ES	System Dynamics	3	3	ES	Numerical Analysis	3	3
	ES	Electro Opic Systems	3	3	ES	Application of Microcontroller	3	4
	ES	System Engineering	3	3	ES	Radar Systems	3	3
	ES	Military Strategy	3	3	ES	Introduction and training of artificial intelligence in defense	3	4
4	ES	Independent Study and Career Skills/Senior Project 1	1	1	ES	Independent Study and Career Skills/Senior Project 2	1	1
	RS	Weapons System Engineering	3	3	RS	Acoustic Vibration	3	4
	RS	Seminar on Naval Officer' s Job 7	0	0	RS	Introduction to Navigation	3	3
	ES	Applied Control System	3	4	RS	Familiarizing Courses of the ROK Navy 4	0	0
	ES	Robot System	3	3	RS	Seminar on Naval Officer' s Job 8	0	0
	ES	Naval Propulsion System	3	3	ES	Modern Control System	3	3
	ES	Electronic Warfare	3	3	ES	Special Topic on Unmanned Weapon System	3	3
	ES	Communication Systems	3	3	ES	Modern Weapon Systems and Future Warfare	3	3
	ES	Deep learning signal processing in defense	3	3	ES	Network Systems	3	3
	ES	Weapon System Acquisition Management	3	3	ES	Advanced Topics on Modelling and Simulation	3	3
	ES	Naval Doctrins and Operations	3	3				
	ES	North Korean Studies	3	3				