



54° IG Member (Larnaca) IT International FALL Semester

ITALIAN NAVAL ACADEMY PROPOSALS



- LEADERSHIP SEMINAR
- INTERNATIONAL FALL SEMESTER

LEADERSHIP SEMINAR



- FROM 19 SEPTEMBER TO 24 SEPTEMBER
- 10 CADETS-MIDSHIPMAN
- Accommodation, meals, and other expenses in relation to the education are free of charge.
- The Italian Naval Academy will provide free transport from the PSA to the Academy and back
- **Last date for registration is 10th of September 2022.**

INTERNATIONAL FALL SEMESTER



- FROM 26 SEPTEMBER TO 23 DECEMBER
- 10 CADETS-MIDSHIPMAN
- Accommodation, meals, and other expenses in relation to the education are free of charge.
- The Italian Naval Academy will provide free transport from the PSA to the Academy and back
- **Last date for registration is 10th of July 2022.**

INTERNATIONAL FALL SEMESTER



INTERNATIONAL FAL SEMESTER	ECTS	WEEK
NAVAL ARCHITECTURE	4	26.09.2022-08.10.2022
MARITIME SECURITY	2	10.10.2022-15.10.2022
NAVAL COMMUNICATIONS	2	17.10.2022-22.10.2022
NAVL SENSORS	2	24.10.2022-29.10.2022
NAVAL COMPUTER NETWORK	4	31.10.2022-12.11.2022
NAVAL ELECTRONICS		
NAVAL CYBER THREATS	4	14.11.2022-26.11.2022
NAVAL POWER PLANTS	2	30.11.2022-03.12.2022
OCEANOGRAPHY	2	05.12.2022-10.12.2022
NAVAL ENGLISH TERMINOLOGY	2	12.12.2022-17.12.2022
NAVAL LEADERSHIP	2	19.12.2022-22.12.2022
MILITARY LEADERSHIP C (PHYSICAL TRAINING)	2 + 2	
	30	

EXTRA WORK	ECTS
NAVAL ARCHITECTURE	2
NAVAL POWER PLANTS	2
NAVAL SENSORS	2
	6

INTERNATIONAL FALL SEMESTER



CLASS TITLE	NAVAL ARCHITECTURE
CREDITS	4 ECTS
TYPE OF CLASS	Integrated Class + Exercise
EXAM	To be taken at the end of the class.
TEACHING CONTENTS	<ul style="list-style-type: none"> • Ship structures: terminology and definitions • Ship balance, stability diagram and ship ballast • Effects of free liquid surfaces, flooding and collision • Dynamic stability • The components of the resistance of a Ship. • Seakeeping • International anti-pollution regulations

INTERNATIONAL FALL SEMESTER



CLASS TITLE	NAVAL COMMUNICATIONS
CREDITS	2 ECTS
TYPE OF CLASS	Integrated Class
EXAM	To be taken at the end of the class.
TEACHING CONTENTS	<ul style="list-style-type: none"> • Notions of Radio propagation: e.m. waves, free and guided propagation • Antenna theory: Principles of operation and performance parameters. Radiation diagrams • Types of antennas: wideband antennas • Via satellite communications: satellites and constellations, techniques for sat access • Introduction to TLC systems onboard: services and applications

INTERNATIONAL FALL SEMESTER



CLASS TITLE	NAVAL SENSORS
CREDITS	2 ECTS
TYPE OF CLASS	Integrated Class
EXAM	To be taken at the end of the class.
TEACHING CONTENTS	<ul style="list-style-type: none"> • Radar fundamentals • Primary radars and relevant performances • 2D navigation, 3D air surveillance, Phased array and multifunctional radar • Radar techniques for fire control • Secondary radar: IFF and civilian modes • Electronic Warfare system: passive and active EW (interception, goniometry, jamming and deception techniques) • Sonar: acoustic sensors, active and passive detection, CATAS-DTAS-CAPTAS, anti-torpedoes sonar, acoustic buoys

INTERNATIONAL FALL SEMESTER



CLASS TITLE	NAVAL ELECTRONICS + NAVAL COMPUTER NETWORKS
CREDITS	4 ECTS
TYPE OF CLASS	Integrated Class + Exercise
EXAM	To be taken at the end of the class.
TEACHING CONTENTS	<ul style="list-style-type: none"> • Principles of communication networks • Networking and main net topologies • OSI/ISO stack and TCP/IP • Commutation and multiplation • Transport net and access net: transmission support and means • Switching and forwarding: main devices • LAN, WAN, routing and gateways • Internetworking: IP addressing, main protocols, VPN • Command & Control systems: main architecture and principles of operation

INTERNATIONAL FALL SEMESTER



CLASS TITLE	NAVAL CYBER THREATS
CREDITS	4 ECTS
TYPE OF CLASS	Integrated Class + Exercise
EXAM	To be taken at the end of the class.
TEACHING CONTENTS	<ul style="list-style-type: none"> • Information security, security of communications and data Encryption, Hashing, Authentication and digital signature, secure network architectures (Wired networks and wireless networks, IT networks, OT networks). • Systems evaluation techniques. Vulnerability and methodologies of attack. • Risk Assessment and Management (IT vs OT, Multidimensional threat, Vulnerability Assessment, Penetration Test). • Network control methods (Logging, monitoring and analysis, IDS and Data Analysis Techniques, Near real-time security and communications).

INTERNATIONAL FALL SEMESTER



CLASS TITLE	NAVAL POWER PLANTS
CREDITS	2 ECTS
TYPE OF CLASS	Integrated Class
EXAM	To be taken at the end of the class.
TEACHING CONTENTS	<ul style="list-style-type: none"> • Overview of a naval propulsion system: terminology and definitions • Types of engines: diesel, fuel-cells, dual fuel, Gas Turbine • Gear box • Shaft and bearings • The efficiency chain matching between FP or CPP with the engine. • Propulsion management: performance, endurance, fuel consumption, normal operations and degradation

INTERNATIONAL FALL SEMESTER



CLASS TITLE	OCEANOGRAPHY
CREDITS	2 ECTS
TYPE OF CLASS	Integrated Class
EXAM	To be taken at the end of the class.
TEACHING CONTENTS	<ul style="list-style-type: none"> • Chemical and physical characteristics of the Sea water • General concepts about the waves (deep water/shallow water) • Oceanographic processes impacting the operational activities • Remote sensing • METOC organization • Rapid Environmental Assessment

INTERNATIONAL FALL SEMESTER



CLASS TITLE	MARITIME SECURITY
CREDITS	2 ECTS
TYPE OF CLASS	Integrated Class + Exercise
EXAM	To be taken at the end of the class.
TEACHING CONTENTS	<ul style="list-style-type: none"> • Maritime Security Concept. • State, regional and international aspects on Maritime Security. • EU Maritime Security Strategy. • Maritime Security Operations, Maritime Policy. • Maritime Transport Infrastructure Security. • Technology Usage on Maritime Security.

INTERNATIONAL FALL SEMESTER



CLASS TITLE	ENGLISH TERMINOLOGY
CREDITS	2 ECTS
TYPE OF CLASS	Integrated Class
EXAM	To be taken at the end of the class.
TEACHING CONTENTS	<ul style="list-style-type: none"> • Ship Structure interior and exterior; • Nautical directions, mooring equipment, • Ship organization Command structure and Department, uniform rank and rate; • Radio communications and visual communication; • Ship's platform systems; • Warfare systems and maritime operation, • Weather and weather forecast; • First Aid; • Shipboard Duties and Condition of readiness • Manoeuvrability, handling and mooring.

INTERNATIONAL FALL SEMESTER



CLASS TITLE	NAVAL LEADERSHIP
CREDITS	2 ECTS
TYPE OF CLASS	Integrated Class
EXAM	To be taken at the end of the class.
TEACHING CONTENTS	<ul style="list-style-type: none"> • Ethics and Leadership in the Navy environment; • How communicate and interact in an international environment; • How optimize the human resources; • Mediation and negotiation techniques.

INTERNATIONAL FALL SEMESTER



CLASS TITLE	MILITARY LEADERSHIP C (PHYSICAL EDUCATION)
CREDITS	4 ECTS (2 ECTS Theoretical part + 2 ECTS practical during the entire semester).
TYPE OF CLASS	Integrated Class + Exercise
EXAM	<p>Trainees are to be observed and are to be evaluated concerning their leadership profiles, during training sessions.</p> <p>Theoretical background is to be tested and graded after the theoretical part.</p>
TEACHING CONTENTS	<ul style="list-style-type: none"> • First Aid. • General and Specific (theoretical) Sports Education. • Practical Sports Education.

APPLICATION FORM e POC



POC

marco.carrieri@marina.difesa.it

patrizio.perin@marina.difesa.it



ANNEX 1
APPLICATION FORM
 ITALIAN NAVAL ACADEMY
 INTERNATIONAL FALL SEMESTER 2022

Please do not forget to register your stay via your national (military) diplomatic chain of command!

Notes: 1. Please fill in the yellow & blue fields only. 2. Fill in 1 form for 1 person. 3. Click into the squares to mark, click again to unmark. 4. When concluded, send this form by 30 July 2022 to: emilyo@marina.difesa.it marina.difesa@marina.difesa.it Please send the application form with a copy of passport or ID card. See also: http://www.emilyo.eu/node/676	<input type="checkbox"/>	Entire International Semester 25 Sep – 23 Dec 2022	<input type="checkbox"/>	Naval communications 17 Oct – 22 Oct 2022
	<input type="checkbox"/>	Naval Architecture 26 Sep – 08 Oct 2022	<input type="checkbox"/>	Naval sensor 24 Oct – 29 Oct 2022
	<input type="checkbox"/>	Maritime security 10 Oct – 15 Oct 2022	<input type="checkbox"/>	Oceanography 05 Dec – 10 Dec 2022
	<input type="checkbox"/>	Naval cyber threats 14 Nov – 24 Nov 2022	<input type="checkbox"/>	Naval power plants 28 Nov – 03 Dec 2022
	<input type="checkbox"/>	Naval computer network 31 Oct – 05 Nov 2022	<input type="checkbox"/>	English terminology 12 Dec – 17 Dec 2022
<input type="checkbox"/>	Naval electronics 07 Nov – 12 Nov 2022	<input type="checkbox"/>	Naval leadership 19 Dec – 22 Dec 2022	

Male <input type="checkbox"/>	Female <input type="checkbox"/>	Rank	FAMILY NAME	First name (s)
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Date of birth Click for date	Nationality	Passport or ID number	Passport or ID expiry date Click for date
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Branch of Service (if available)	Sending institution's name	I want to participate as:		
		Student <input type="checkbox"/>	Instructor <input type="checkbox"/>	Observer <input type="checkbox"/>

Phone number (if available)	Mobile number (if available)	E-mail address (es)
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Arrival by plane <input type="checkbox"/>	Arrival by train <input type="checkbox"/>	Arrival by own car <input type="checkbox"/>	Location of arrival	Arrival date Click for date	Arrival time
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Departure by plane <input type="checkbox"/>	Departure by train <input type="checkbox"/>	Departure by own car <input type="checkbox"/>	Location of departure	Departure date Click for date	Departure time
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Special dietary or food requirements due to medical or religious reasons	If yes, please specify food you cannot eat	
No <input type="checkbox"/>	Yes <input type="checkbox"/>	

Additional remarks (need for special equipment, special travel arrangements, etc.)

Point of contact (POC) of sending institute				
Male <input type="checkbox"/>	Female <input type="checkbox"/>	Rank	FAMILY NAME	First name

POC's phone number	POC's e-mail address
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IT International Naval Semester



**Thank YOU
for YOUR
attention!**

attention!