



ESCUELA DE INGENIERÍAS MARINA, NÁUTICA Y RADIOELECTRÓNICA

UCA MARITIME COLLEGE

**INFORMATION FOR ERASMUS AND VISITING
STUDENTS AND STAFF**



Website: <http://nauticas.uca.es/>

WELCOME ABOARD!

The Escuela de Ingenierías Marina, Náutica y Radioelectrónica, *UCA Maritime College* onwards (former *Faculty of Nautical Sciences*), welcomes exchange programme incoming students, visiting students and staff members as a gate to interchange insights into different educational systems and cultures and to promote international exchange of academic and research activities. The main goal of our College is to strengthen its educational facilities, its research and the international cooperation programmes and projects worldwide with other maritime training institutions eminently so that a permanent link can be created within the MET community.

At present, our main streamline of international mobility programmes is the *EU-funded Socrates/Erasmus Exchange Programme*, which provides the opportunity for our students to spend an academic period at MET partner institutions with a recognised study plan according to ECTS and STCW requirements. The number of exchange and visiting students increase every year and they are very fond of participating in the cultural and social events programmed by the College throughout the year. On the other hand, UCA Maritime College receives teaching staff from other MET institutions within the Erasmus exchange staff mobility programme, allowing exchange of views on the educational aspects of the MET courses concerned.

Both facets of the Erasmus programme –students and staff- have proved to be an enriching experience where English is the language for communication. Students can expand their views on how multilingual and multicultural communication works in intercultural meetings and are encouraged to participate in the exchange programmes. On the other hand, teaching staff establish contacts with teachers from similar departments and exchange knowledge and experience as well as create links between higher education institutions. At present, UCA Maritime College has Erasmus agreement with institutions from countries such as Ireland, Belgium, Norway, Estonia, Latvia, Finland, Poland, Lithuania, Eslovenia, Italy and Portugal.

Other mobility programmes widen the scope of the international projection to Latin-American countries, Russia and the USA. The outstanding ones are under the auspices of Santander Universidad Programme.

The staff members of UCA Maritime College also coordinate and participate in a broad range of transnational pilot projects. Our staff members are full members of many European Leonardo da Vinci projects, Tempus projects, MED projects from navigation and sea transport engineering, marine engineering, and marine radio electronics engineering areas and research groups.

MARITIME COLLEGE STUDIES OFFER

UCA Maritime College has a vast and firm tradition in maritime education and training, preparing the graduates for deck, marine engineering and marine radioelectronics for officer positions on board and at land-based institutions and companies in the maritime industries and related fields.

UCA Maritime College is the only College of higher maritime education in the Andalusian region and is located in the Campus of Puerto Real, one of the four campuses in which the University of Cádiz is divided. It is housed in the Andalusian High Education Centre for Sea Studies (C.A.S.E.M.), a modern building with outstanding facilities in technology such as a bridge simulator, engine simulator, radio station simulator, as well as different science, technical and language laboratories. It also houses other two sea related schools, the School of Shipbuilding and the Faculty of Sea and Environmental Sciences. As an integral part of the programme of some subjects, our nautical students can achieve practice experience aboard vessels (seaside period) from outstanding shipping companies.

The Maritime College offers programmes at undergraduate level and at postgraduate level, providing access to doctorate level covering the areas of Sea Navigation and Transport Engineering, Marine Engineering and Marine Radioelectronics Engineering. Our degrees are principally designed for students who wish to pursue a career as a deck officer, engineer officer or radio officer in the Merchant Navy either at sea or in shore-based occupations, such as marine surveyors, port managers, marine underwriting and other sectors of the marine industry.

Concerning the criteria for admission of applicants, they are the same as those for other University Schools and Faculties: Secondary or Vocational Studies and University Entrance Examination (where applicable), or a previous university degree (1st. cycle degree, Bachelor's or Master's Degree).

Main facilities offered by the Maritime College are the bridge simulator, the engine-room simulator, and the radio navigation and communications simulator. The central dome of the building houses the Planetarium, which is surrounded by study rooms. In lower floor levels, there are different mechanical technology rooms and workshops. The College also has three school training ships 'Tartessos', and 'UCA', which is also a research vessel, as well as different training quays. Other facilities for students in the Campus of Puerto Real include the a research aquaria, research laboratories, the new Sports Centre, a specialised Library centre awarded with ISO certificates and the Students' clubs.

There are eighteen departments involved in teaching and research and two of them -Navigation Sciences and Techniques and Theory of the Signal and Communications Department and Marine Engineering Department-, are located within the Faculty.

DEGREE COURSE OFFER

The degree studies are adapted to the European Higher Education System and are in compliance with STCW. The full duration is 4 years and the number of ECTS credits is 240:

- Degree in Sea Navigation and Transport Engineering
- Degree in Marine Engineering
- Degree in Marine Radioelectronics Engineering

■ Degree in Sea Navigation and Transport Engineering. Credits: 240 ECTS

▶ Contents: Navigation, Physics, Chemistry, Mathematics, Algebra and Geometry, ship construction and ship stability, basic and advanced seamanship, maritime safety and pollution prevention, maritime medicine, cargo handling and stowage, ship handling and manoeuvring, shipping law, meteorology and oceanography, marine communications, ship practical training, marine electronics and engineering, Maritime English.

▶ Job prospects: Merchant shipping, sea related industries, shipyards, port industry, vessel traffic service, civil service.

■ Degree in Marine Engineering. Credits: 240 ECTS

▶ Basic contents: Ship construction and ship stability, materials science and technology, seamanship, chemistry, mechanical technology and assembly systems, regulation and control systems, technical drawing, physics, mathematics, steam generators, steam turbines, shipping law, electricity and electrical engineering, ships' auxiliary systems, mechanics and strength of materials, medicine at sea, thermodynamics and fluid mechanics, English for marine engineering, internal combustion engines, mechanical technology.

▶ Job prospects: Merchant shipping, Sea related industries, marine equipment companies, maintenance, shipyards, port industry, civil service.

■ Degree in Marine Radioelectronics Engineering. Credits: 240 ECTS

▶ Basic contents: Mathematics, Physics, Chemistry, radioelectronic standards and procedure, radio maritime traffic, seamanship, electricity and electronics, radionavigation systems, physics, mathematics, radiocommunications, digital circuits, analogic circuits, electrotechnics and electronic technology, GMDSS equipment, English for marine radioelectronics engineering, radioelectronics maintenance, maritime safety, ship practical training, marine transmitters and receivers, ship internal communications, medicine at sea.

▶ Job prospects: Merchant shipping, sea related industries, electronic maintenance industries, vessel traffic service, sea related industries, port industry, civil service.

The degree studies are integrated with practical training at sea. To gain the experience and qualifications needed, it is compulsory to undertake specialized courses which include Fire-Fighting, GMDSS, First Aid and other skills necessary at sea. These courses, which fully comply with STCW requirements, are run by the University of Cádiz and by partner organisations.

Further studies:

- MSc in Port Management and Logistics
- MSc in Acoustics Engineering

UCA offers PhD Programmes covering maritime areas. UCA Maritime College is deeply involved in performing applied and scientific maritime research activities.

SUPPORT FOR STUDENTS AND THEIR LEARNING

- 1.- Induction week for orientation and introduction to UCA Maritime College and its facilities.
- 2.- Student Academic Module Guides.
- 3.- Degree module coordinator and tutors to assist with initial needs, programme and module choice and development learning.
- 4.- Extensive library and other learning resources (including on-line material).
- 5.- Student email and open personal access to staff.
- 6.- Access to University counselling and welfare services.
- 7.- Access to students' group work rooms.

METHODS FOR EVALUATING AND IMPROVING THE QUALITY AND STANDARD OF TEACHING AND LEARNING

- Annual programme self assessment prepared by University Quality Commission.
- Quality Board of the Faculty of Nautical Sciences.
- External assessment by National Agency for Accreditation and Evaluation of Quality (ANECA).
- Internal committees with responsibility for monitoring and evaluating quality and standards.

WORLDWIDE MARITIME INSTITUTIONS PARTNER AGREEMENTS

Among others, UCA international joint project partners includes those involved in Erasmus cooperation agreement, AECI (Spanish Agency for International Cooperation), or AUIP (Iberoamerican Agency for international projects and cooperation), PCI (Iberoamerican, Mediterranean and African International Cooperation Programmes), and Leonardo Da Vinci Programmes, among others.

- Cork Institute of Technology. National Maritime College of Ireland (Ireland)
- Latvian Maritime Academy (Latvia)
- Kymenlaakso University of Applied Sciences (Finland)
- Hogere Zeevaartschool Antwerpen (Belgium).
- Stord Haugesund University (Norway)
- Gdynia Maritime University. Akademia Morska (Poland)
- Universidad Marítima de Szczecin (Poland)
- Technische Universiteit Delft (Netherlands).

- Novia University of Applied Sciences (Finland)
- Università degli Studi di Trieste (Italy).
- Hamburg Polytechnic (ISSUS), Hamburg, (Germany)
- Universidad Austral, Valdivia, (Chile)
- CUJAE, La Habana, (Cuba)
- Escuela Superior Politécnica del Litoral de Ecuador, Guayaquil (Ecuador)
- Universidad Nacional de Ingeniería del Perú, Lima (Peru)
- Universidade Federal Fluminense do Brasil (Brazil)
- Kalmar Maritime Academy (Sweden)
- Bremen University of Applied Sciences (Germany)
- Estonian Maritime Academy (Estonia)
- Sydväst Polytechnic, Institution for Health Science, (Finland)
- Sydväst Polytechnic, Maritime Institute, (Finland)
- Åland Polytechnic, (Maritime Institute), Åland (Finland)
- University of the Aegean (Greece)
- University of Piraeus (Greece)
- Maritime Safety and Survival Training Centre (Iceland)
- Maritiem Instituut 'Willem Barentsz', (Netherlands)
- Vestfold University College (Norway)
- Swedish Maritime Administration (Sweden)
- International Federation of Shipmasters' Associations (United Kingdom)
- Buskerud University College (Norway)
- Satakunta University of Applied Sciences, Rauma, (Finland)
- Szczecin Maritime University, (Poland)
- Gdynia Maritime University, (Poland)
- University of Warwick, (United Kingdom)

Outstanding research groups in the Maritime College also lead many joint projects with external companies and maritime organizations. The main research lines of the groups are focused on shipping and logistics, safety and security at sea, marine environmental conditions, knowledge engineering, control applications in maritime systems, methods and models in automation and robotics, sea communications' technologies.

International Issues' Contacts

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