

**EMQAL**  
**Erasmus Mundus Master in Quality in Analytical Laboratories**

**Duration:** 24 months

**Course description:**

The EMQAL Master's course is a pioneering project in the EHEA in the field of Quality in Analytical Laboratories. Analytical laboratories play a critical role in all aspects of modern society, including public health, medicine, the environment and, even, trade, where they are called upon to provide information that can serve as the basis for the taking of key decisions. As such, there is a growing need to assure the quality and reliability of analytical laboratories in all countries of the world. The objective of EMQAL is to prepare scientists and administrators to implement and manage Laboratory Quality Systems. In socio-economic terms, EMQAL builds capacity and trains students to fulfil the crucial role of providing sound, reliable analytical results. This has an impact at all levels of society: in the field of health, the environment and the economy.

The Master's is offered by a Consortium of five European and three non-European Universities: Universities of Barcelona (Spain), Algarve (Portugal), Bergen (Norway) and Cádiz (Spain), Gdansk University of Technology (Poland), Central South University (China), Universidade de São Paulo (Brazil) and Novosibirsk State University (Russia). The Master's programme is organised over two years, comprising a one-year taught course and a further year dedicated to completing a research project and writing a dissertation. The language of instruction is English. Each host university also offers intensive courses in the language of the country prior to the programme, as well as additional local language training during the course. The taught course is composed of stand-alone modules in the fields of quality management, analytical methods and data analysis. Students are allowed to build their study plan according to the program guidelines, their own interests and needs. Classes are held in one of the European Universities in the consortium and are delivered by selected specialists from universities and public institutions. The Host University rotates every year. In the second year each student moves to a different University in the Consortium located in another European country to complete their research project. Part of the research project can be undertaken in one of the non-European institutions in the Consortium in Brazil, China or Russia. Research projects are proposed each year by the partner institutions in the fields of laboratory accreditation, quality management, analytical methods and data analysis.

Dissertations are integrated within on-going research projects at the Universities in the Consortium and may be offered in collaboration with public and private companies. On successful completion, students are awarded a European Joint Master's Degree in Quality in Analytical Laboratories, issued by the European universities that the student attended during the ERASMUS MUNDUS programme. Details of the modules taken and the research project presented by the student are included in a Diploma Supplement.

**Website:** [www.emqal.org](http://www.emqal.org)

**Partners:**

UNIVERSITAT DE BARCELONA, Spain (Co-ordinating Institution)  
UNIVERSIDADE DE SAO PAULO, Brazil  
CENTRAL SOUTH UNIVERSITY, China  
UNIVERSITETET I BERGEN, Norway  
GDANSK UNIVERSITY OF TECHNOLOGY, Poland  
UNIVERSIDADE DO ALGARVE, Portugal  
NOVOSIBIRSK NATIONAL RESEARCH STATE UNIVERSITY, Russian Federation  
UNIVERSIDAD DE CÁDIZ, Spain

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**Maximum grant:**