



Máster Erasmus  
Mundus en Ciencia del  
Color Imágenes y Visión  
Computacional /  
Computational Colour  
and Spectral Science

## Presentation

**Important: The COSi master program is in the process of renewing its Erasmus+ label (on February 2025), so the academic offering will undergo some changes for the 2024-25 academic year. Visit the consortium's official website at <https://cosi-master.eu/> to stay updated on these changes.**

We are an European academic consortium offering the Master Degree COSI, designed and operated by an unique world leading university-business cooperation of 4 European universities, 13 academic partners and 9 industrial leaders across the globe.

Two-year scientific Erasmus+ Joint Master's Degree, aiming to train the next generation of highly-skilled industrial experts in applied colour science, in various cutting-edge industries (photonics, optics, spectral imaging, multimedia technologies, computer graphics and vision) in a diverse range of sectors (including multimedia, health care, cosmetic, automotive, food-processing). The two areas of focus are spectral technologies and applied colour imaging.

We have renewed the Erasmus+ excellence label and are a fresh European academic consortium in intelligent image processing, colour, spectral and digital imaging offering a Master Degree designed and operated by a unique world leading university-business cooperation of 4 European universities, and different Asian universities and industrial leaders across the globe.

More information:

- **Call for applicants - from October to January:** access to the application form through the Consortium web <https://cosi-master.eu/>

- **COSI / COMPUTATIONAL COLOUR AND SPECTRAL IMAGING** / is a two-year scientific Erasmus+ Joint Master's Degree. The 2-year Master Programme (120 ECTS) aims to develop interdisciplinary trained experts in sectors encompassing intelligent image processing, colour, spectral and digital imaging in applied science and in applications development and analysis. The objective is to educate students in advanced methodologies, applied models and practical applications with 2 goals: enhance the employability and improve career prospects of graduates on one hand and meet the needs of industrials on the other hand.
- The COSI applicants must hold a bachelor of science (or any nationally recognized first cycle degree equivalent to 180 ECTS), preferably in the fields of technology, engineering, computer science, physics or mathematics, with a fluent knowledge in spoken and written English. Courses are structured according to the ECTS with 120 credits acquired over four semesters of full-time study.
- **Mobility:** study in four different campuses (France, Spain, Norway and/or Finland). [Download COSI Master curriculum](#).
- **Scholarships & Erasmus+ JMD grants:** the JMD scholarship programme offers talented prospective students the unique opportunity to pursue a degree in COSI master programme and up to 45,000 Eur for the entire duration (24 months) of COSI programme [full details](#).
- **Awarded degrees:** successful completion of the COSI Joint Master Degree will result in the award of multiple Master degrees (i.e. 4 national diplomas issued by 4 higher education institutions from 4 European countries and fully recognized in these respective countries).

You can find [more information about the programme](#) (detailed description of the scholarships, the study programme, application procedures, required documents, available mobility routes, etc.)

## Goals and Competences

COSI is the answer to the lessons learnt drawn from pioneer courses implementation, its intimacy to industry challenges and the willingness of the founding partners to push even further convergence and attractiveness of the consortium.

A programme as interdisciplinary and innovative as COSI mobilized such a broad coverage of knowledge that it could not be provided at any single institution. This is why COSI is a highly integrated Master, encapsulating a collaborative model based on horizontal cooperation, applied at each stages of design, implementation and institutional learning.

## Why COSI?

Wondering what makes us unique? The COSI spirit: “The European higher education excellence meeting worldwide colour markets”.

COSI curriculum is unique at European and international level. You may find colour science specialization courses in other higher education institutions, but we are confident to say that COSI will become a landmark programme for the industry in the coming years.

COSI brings to you the best that European higher education has to offer. COSI is an Erasmus Mundus Joint Master Degree (EMJMD), which means that the program have been reviewed, selected and granted technical and financial support from Erasmus +, the new European Union 16 billion euros catch-all framework program for Education and Training.

Being an EMJMD is a true label of excellence, considering that COSI is one of the only 9 Join Master Degrees that have been awarded this label out of 61 projects submitted by European higher education institutions during the first Erasmus+ call for proposal.

Skills and qualifications you'll acquire during COSI will be widely recognized and understood by other education institutions and the labor market thanks to the award of 3 national master degrees and additional EU transparency and recognition tools such as the European Credit Transfer and Accumulation System (ECTS) and diploma supplement.

COSI is a new programme, yet building on 12 years of founding partners' close cooperation, trust, achievements and lessons learnt. We are the ones behind the Erasmus Mundus Master Course CIMET (Color in Informatics and MEdia Technologies), which have trained 87 graduates since 2008, now industry leaders in Colour sciences and Imaging, and the past Erasmus+ course COSI (Color in Science and Industry), which have implemented 4 editions since 2014. So even if you apply for the first intake, don't be afraid to be experience too much trial and error: we know how to keep the ship steady. COSI Master is open to all nationalities and 100% taught in English. We target no less than 12 different nationalities from all over the world for the first COSI cohort (around 20 students). You will therefore have the unique opportunity to join a community of fellow students and alumni, coming from very diverse horizons and bringing to the programme different perspectives.

You'll study in 3 European universities, in Norway, and depending on your concentration France, Spain or Finland with an international faculty of local and international guest lecturers. You will have access to any of the European and Asian

countries where COSI partners' research centers and companies are located.

As an Erasmus Mundus alumni, you'll be part of the Erasmus Student Network (ESN) is the biggest student associations in Europe.

Special attention has been brought to allow you to get most of this international experience: host-country language courses, learning design fostering extended intercultural experiences and networking services are few examples of what you can find in this life-changing experience that will equip you for positions requiring agile and internationally-minded professionals with high soft skills.

COSI offers a wide range of learning technologies designed to maximize your learning outcomes, building on your own mode of leaning. A notable feature of this academic support is that each student is mentored by an Academic Advisor.

To allow you to focus on studying, the COSI staff is here to make your administrative life as easy as possible. This means notably that from online application until graduation, you will have one and only one administrative focal point and contact person. This also means that you won't have to deal directly with housing, insurance and banking red-tape in each country by yourself and you'll receive support for immigration issues.

You will live in safe countries and cities. No safety problems happened to CIMET/COSI alumni in the past 12 years, a programme with a similar mobility scheme. And because Erasmus Mundus student life is not all about studying, you'll benefit from campuses extensive health, food, sports and culture services.

ERASMUS+ financial support and close links with industrial partners allow us to deploy an ambitious scholarship strategy to attract the best international students. Based on your academic achievements, you can be sponsored up to 50,000 EUR, and up to 1200 EUR per months during your work placement. Largely enough to enjoy countries you'll discover given local cost of living. This means as well that as self-sponsored students, you can be sure to join a community of students with outstanding academic and professional background.

Tackling the talent gaps of our industrial partners is the main focus of the COSI Master initiative. It should come as no surprise that your employability will be our very first priority.

Our ambition is that a relevant proportion of COSI students get their job while studying, through COSI networking, recruitment events and compulsory work placements. We've set an ambitious yet achievable target of 100% employment rate within 6 months of graduation.

Wider recognition of the COSI brand name towards industries, structural involvement of our industrial partners from COSI design to teaching activities and strategic development, inclusion of innovative competencies and soft skills in the curriculum: those are just a few steps we've taken to ensure you'll get a rewarding and meaningful job.

Lab sessions and industrial cases-studies will allow you to engage with latest industrial equipment and top-notch technologies and products such as Microsoft Kinect sensor, Emotiv EEG system and Google glass, to cite a few. As a COSI student, you'll have access to facilities (research units, laboratories) of all our academic and industrial partners.

In rapidly evolving sectors, this exposure will enable you to enter the job market with a strong competitive advantage.

## **Facilities**

The Consortium is a joint venture, involving top European and Asian universities at the forefront of fundamental and applied research and knowledge transfer in colour science and industrial leaders in their fields, in sectors where expertise in colour-related applications is growing fast.

4 European universities are at the core of COSI and CIMET master programmes management and development as governing institutions:

- University Jean Monnet, (UJM) France
- University of Granada, (UGR) Spain
- University of Eastern Finland, (UEF) Finland
- Norwegian University of Science and Technology, (NTNU) Norway

## **Consortium**

Strong links between University Jean Monnet (France), University of Eastern Finland, Norwegian University of Science and Technology (Norway) and University of Granada (Spain) pre-existed our formal organisation as a consortium to provide the COSI two-year Master Programme.

Team competencies, specialities and on-going research activities in the consortium universities serve as basis for the CIMET specializations programme. The expertise of our four Universities and associated laboratories is recognized at international level. Fields of specialization offered within the CIMET framework reflect the expertise, competencies and on-going research activities carried on respective University sites.

Our Consortium spread over Europe from its Scandinavian part to its most southern part. See full details at [COSI web](#)

## **Practical Information**

UGR practical info at [COSI web](#)