

# Apply! When and how?

The three partner universities are committed to developing and implementing new forms of teaching, training, and research; to assuring a progressive culture within their walls; and to sustaining and nurturing internationally-minded staff and students. They designed the EMMS programme for top students who are ready and able to meet this challenge.

## ★ Minimum Requirements for application to the programme

- A good first degree in Materials Science/Engineering and related areas, e.g. Chemistry or Physics
- Certified proof of a thorough command of English (to be demonstrated by passing a TOEFL with a minimum score of 550 (paper-based) / 213 (computer-based) or IELTS with a minimum score of 6.5, or an equivalent test)
- Curriculum Vitae, including Statement of Purpose
- Two letters of recommendation

In case of admission at TUHH:

- GRE General Test (Holders of an ERASMUS Mundus grant or of a DAAD scholarship are exempted)

Prior knowledge in the following subjects enhances your chances for admission by the academic committees evaluating your application: Metallurgy/Physical Metallurgy, Materials Science/Materials Physics, Polymers, Ceramics, and Materials for Electronic Applications. Your application will be double-checked, first locally then by a joint committee.



**Jie Gao, from China, started in Aveiro, and is now in Hamburg:**

"Both studies and life in the EMMS partner universities are significant, meaningful, unforgettable and an attractive experience in my life. If you are prepared to meet high scientific requirements, this is an experience not to be missed!"

## ★ Application Deadlines

Deadline for applicants eligible for grants from ERASMUS Mundus: **31 January**. (Candidates have to submit a complete application up to this date. Otherwise they can not obtain the grant.)

Only applicants from "third countries", (all countries except European Union, EEA/EFTA countries and candidates for membership in the European Union) are eligible for grants from ERASMUS Mundus.

Deadline for admission to the programme for all other applicants: **May 31**. A second call for applications will be announced in August.

Completed application forms, available under <http://emms.web.ua.pt>, must be sent to one of the following address:

**Prof. Vitor Amaral**  
Departamento de Física  
Universidade de Aveiro  
P 3810-193 Aveiro, Portugal

It is not possible to begin your studies at Aalborg Universitet in Denmark under this programme.



**Ricardo from Mexico, started in Aveiro, and then moved to Aalborg:**

"For me, this is not only a big chance to improve my technical knowledge; it is also the opportunity to grow up as a person."

## ★ Enquiries

For students starting at TUHH: [study@tuhh.de](mailto:study@tuhh.de)  
For students starting at UA: [emms@adm.ua.pt](mailto:emms@adm.ua.pt)

**Course Information:**  
<http://emms.web.ua.pt>  
[http://www.tuhh.de/eciu-gs/pro\\_joint\\_match.html](http://www.tuhh.de/eciu-gs/pro_joint_match.html)

**Additional Information:**  
<http://www.ua.pt/>

**Universidade de Aveiro, Portugal**

**Technische Universität Hamburg-Harburg, Germany**  
<http://www.tu-harburg.de/>

**TUHH**  
Technische Universität Hamburg

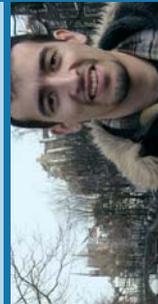
**Aalborg Universitet, Denmark**  
<http://www.aau.dk/>



**ECIU - European Consortium of Innovative Universities**  
<http://www.tuhh.de/eciu-gs/>



**European Union, ERASMUS Mundus**  
[http://europa.eu.int/comm/education/programmes/mundus/index\\_en.html](http://europa.eu.int/comm/education/programmes/mundus/index_en.html)



**Orley from Brazil, first in Hamburg, continued in Aalborg:**

"After graduation, I want a job that I would find interesting, challenging and stimulating. Consequently the EMMS programme gave me the best opportunity to fulfil my dream."

# EMMS – the joint European Master in Materials Science

Selected by the European Union as Erasmus Mundus course



Education and Culture



ECIU Erasmus Mundus



## Crossing the borders for education – move to get the real best



<http://emms.web.ua.pt>

# What is EMMS?

- A two-year European Master Programme in Materials Science for degree-holders in Materials Science/Engineering and related areas
- A joint degree programme delivered by three top European Universities, bringing together their outstanding expertise in the subject
- A Master programme with a strong intercultural component, facilitating student and staff mobility
- A programme of excellence that has been included by the European Union into its ERASMUS scholarship scheme
- An exceptional education that will give you the leading edge in the employment market

## ★ A new international Master programme in Materials Science

The new Master programme is offered jointly by the Technische Universität Hamburg-Hamburg in Germany, Universidade de Aveiro in Portugal and Aalborg Universitet in Denmark. It was developed as an exclusive top-level programme that requires students to study in at least two of the three Universities in order to be awarded a Joint Master Degree. For its outstanding academic quality it was selected by the European Union as an ERASMUS MUNDUS programme.



## ★ An interdisciplinary Masters

EMMS is an interdisciplinary Masters, integrating course units delivered by academic staff from three partner universities and leading guest scholars. Based on our long-term excellence in teaching and research, you will deal with the relationships between synthesis, composition, processing, structure, physical and chemical properties and the performance of materials in advanced technological applications.



## ★ Taught entirely in English

EMMS is taught entirely in English and aims to specialise you in the science and engineering of ceramics, metals, polymers and composites, with emphasis on a variety of subjects like materials for electronics, bio-materials, nanotechnologies, etc. In addition you will be able to choose from a number of electives including courses in local languages and European cultural studies. You will have a unique opportunity to experience the European business and industry cultures by means of compulsory work assignments/internships in leading companies.

## ★ Superior qualifications and competences

- EMMS will allow you to gain much-demanded qualifications and competences. With successful graduation you will have acquired an outstanding Qualification Profile, in addition to profound subject based competences in Materials Science, you will have obtained:
  - Research skills and capacity for independent analysis and synthesis,
  - Strong aptitude to work in an interdisciplinary, multicultural team,
  - Advanced capability to apply knowledge in practice,
  - Enhanced fluency in English, working knowledge in two more European languages.



## ★ Scholarships

EMMS offers ERASMUS Mundus scholarships, funded by the European Commission, for third country applicants (i.e. all nationals other than European Union, including EEA/ EFTA and accession states) of exceptional merit for the entire duration of the course. The total value of the scholarship is 42,000 Euro and is intended to cover all your student expenses like fees, maintenance, study material and mobility costs etc. European students on the programme have two options: They may apply for ECIU mobility grants (6 instalments of 300 EUR) covering mobility costs for the 2nd, 3rd, or 4th semester and/or for ERASMUS mobility grants under the European Socrates-Erasmus programme, provided they fulfil the eligibility requirements. Both grants can be combined. Applications for mobility grants are only made after classes begin. (Detailed description of requirements on the EMMS homepage)



# Who are the universities?

The three partner universities are members of the European Consortium of Innovative Universities (ECIU), a continent wide network to share and build on the success of its members as entrepreneurial institutions. The partners have several characteristics in common: All have academic strengths in engineering; all are young and innovative; and all have close ties to industry and to the regions in which they are situated.



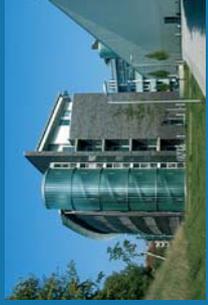
## ★ Aalborg University

The Aalborg Universitet, inaugurated in 1974, is a young and modern university which over the years has grown to become a large, well-established research and teaching institution in Denmark offering quite an untraditional range of educational programmes and research in the fields of Humanities, Social Sciences, Natural Sciences and Engineering. Aalborg is a lively city, buzzing with activity day and night, summer and winter. This is a city where anything can happen. With its 160,000 inhabitants, Aalborg is the fourth largest city in Denmark. Today, the university has more than 13,000 registered students and 1,700 staff and internationally has become known for the 'Aalborg Model', a pedagogical structure based on problem-centred, real-life projects of educational and research relevance situated in the south-eastern part of the city.



## ★ University of Aveiro

Founded in 1973, the Universidade de Aveiro is now an exponent of quality and progress, occupying an outstanding place in the field of research and higher education. The University offers a broad range of innovative courses in various fields that are closely allied with regional and national productivity. At present the University has some 12,385 students enrolled, of which some 400 are international students, and a teaching staff body of 885 professors. Located in the city of Aveiro, a city of tradition, progress, and high quality of life, with a population of around 80,000, the Universidade de Aveiro also plays a preponderant role in the growth and development of one of the most beautiful and promising regions of Portugal.



## ★ Hamburg University of Technology

The Technische Universität Hamburg-Hamburg was founded in 1978 and is located south of the river Elbe. It is the gateway to Hamburg, a city with 1.7 million inhabitants and the business, entertainment and cultural centre of northern Germany. The Campus hosts around 5,000 students (of which 27% are foreigners) and is a landmark in city-planning – his combination of beauty and function provides a multifaceted environment, inspiring both social and intellectual exchange. The fundamental principles of the TUHH are unique in Germany: Priority is given to research, interdisciplinary studies, innovation and internationalisation. The Leitmotiv it follows in research, teaching and technology transfer is the development of technology for the benefit of mankind.