

MOBILITY, INTERDISCIPLINARY ENGINEERING PROGRAMME, HIGH-LEVEL KNOWLEDGE



www.master-tribos.eu, info@master-tribos.eu



JOINT EUROPEAN MASTER ON TRIBOLOGY OF SURFACES AND INTERFACES - TRIBOS+



Materials Science and Engineering at the Cutting Edge

Tribology is a very interdisciplinary field dealing with the science and technology of **friction, wear and lubrication**. Tribology connects a range of traditional disciplines such as materials science, mechanics, mechanical engineering, chemistry, chemical engineering, physics, etc. and it is virtually present in all sectors of economy. Joint European Master Programme TRIBOS provides to the students the **high-level contemporary knowledge**, required for the next generation of engineers and scientists to tackle highly-interdisciplinary tribology and surface engineering-related problems.

www.master-tribos.eu, info@master-tribos.eu

2 YEARS, 4 SEMESTERS, 120 ECTS, INTERNSHIP, **MASTER DEGREE**

NEXT GENERATION ENGINEERS, ACADEMIC AND INDUSTRIAL CONNECTIONS, **SCHOLARSHIP**



TRUE JOINT DEGREE

The Consortium has successfully obtained approval of all four partner Universities to issue a Joint Degree certificate for TRIBOS Joint European Master Programme. By achieving this goal, all partner Universities now award **a true Joint Master Degree Diploma**, a unique document signed by all four Universities, immediately valid in all four countries, which is an ideal goal of Joint Master Programmes but achieved only by few.



SCHOLARSHIPS

Within TRIBOS programme students can apply for a scholarship provided by European Commission:

- **Programme Country Scholarships**
- **Partner Country Scholarships**

Details on EACEA scholarships and programmes can be viewed at the EACEA web site under Action 1 activities (http://eacea.ec.europa.eu/erasmus_mundus/programme/action1_en.php).

TRIBOS UNIVERSITIES

TRIBOS Consortium joins together European leading groups in different areas of tribology into a joint European **high-class master study** programme.

4 partner Universities represent an outstanding added value to the teaching of tribology and surface engineering;

- **University of Ljubljana, Slovenia**
- **University of Leeds, UK**
- **Luleå University of Technology, Sweden**
- **University of Coimbra, Portugal**

STUDY PROGRAMME

TRIBOS programme is a two year programme (120 ECTS) with mandatory mobility and a chance of a **scholarship**. It educates the next generation of engineers and researchers in the fields of:

- engineering surfaces and interfaces,
- lubricants and lubrication,
- friction and wear mechanisms at nano and macro scale,
- computational, modelling, analytical and experimental skills.

It is divided into four semesters and offers an **internship** with one of our several academic and industrial partners.

ADMISSION CRITERIA

- A minimum of a bachelor degree with an average grade of at least **80 %** in engineering, materials science, physical science or chemistry.
- Proof of English knowledge in a form of a IELTS or TOEFL (iBT) certificate that meets the following criteria:



	IELTS	TOEFL (iBT)
Overall score	6.5	92
Listening	6.0	21
Reading	6.0	21
Speaking	6.0	23
Writing	6.0	22
Validity	2 years	2 years

KEY DATES	
Application start	November
Application end	End of January
Unofficial results	March
Official results	May
Start of study	September

ASSOCIATED PARTNERS

SKF, Sweden | **Volvo Group**, Sweden | **Sultz**,
Metco, Swiss | **Indian Institute of Science**,
 India | **MiTiHeart Corporation**, USA | **University**
 of Pisa, Italy

University of Ljubljana
Faculty of Mechanical Engineering

UNIVERSITY OF LEEDS

LULEÅ
UNIVERSITY OF TECHNOLOGY

Admission open for fully funded Erasmus Mundus Master degree in Tribology (TRIBOS+ 2020)

What is TRIBOS+: The TRIBOS+ joint Master programme (2 years) started in 2013, University of Ljubljana (Slovenia) as coordinator offers this Master programme together with leading European universities: University of Leeds (UK), University of Coimbra (Portugal) and Technical University of Lulea (Sweden). TRIBOS+ Master programme is part of the European Erasmus+ mobility scheme, thus offer exciting networking and traveling opportunities alongside a top-level study experience. Students get a Joint master's degree from all consortium universities. So far 62 students have successfully finished their TRIBOS master's degree. Our graduates have a 100% employability rate in industry as well as higher education. 18 Scholarships for the European and non-European students are envisaged for the 2020-2022 edition from the European Commission. Deadline for applications is 31 Jan 2020! For more details about the programme and the application procedure please visit www.master-tribos.eu.

What is Tribology: Tribology is the science of interacting surfaces in relative motion and most particularly their friction, wear and lubrication behavior. Understanding the complex interfacial phenomena on a micro and nanoscale and solving the exciting technical challenges associated with them is what truly makes Tribology the engineering science of today. It is present in every aspect of modern technology: from industrial bearing production lines to ski coatings, food processing and a more green, sustainable future. The field of Tribology is highly specialized and incorporates Mechanical Engineering, Materials Science, Chemical engineering, Surface Chemistry, and Physics. Tribology focuses on research areas such as surface characterizations, lubricants, coatings and most importantly, the selection and design of lubrication systems and advanced engineering surfaces for future environmental-friendly applications.

