

Electrical Power Engineering

The production, storage and transmission of electrical energy are directly related to the contemporary problems of climate change and environmental protection. The primary goal of this master program is to enhance the European policy to increase energy efficiency and develop alternative energy forms. The intention of the EPE-master is to establish a high-quality European program of graduate education, to train and develop a network of experts which extends from Europe to the emerging energy markets throughout the world. Finally the program will establish a connection between universities and industry which will not only open career opportunities to our graduates, but also will contribute to reach the Union's Lisbon goal to boost the competitiveness of European economies.

The consortium consists of the Brandenburg University of Technology (BTU) in Cottbus, Germany; the University of Technology (TU) in Poznan, Poland and the University of Cardiff in the UK. In addition to this consortium a worldwide network of universities and industrial partners is being established to specifically support the EPE-Masters course. The language of instruction is English. The duration of the program is four semesters.

<http://www.tu-cottbus.de/cebra/index.php?id=86>

Environmental and Resource Management

The program offers an integrated approach to current environmental issues. Recognising that environmental questions can no longer be solved by a singular academic discipline, classes in technical subjects are offered as well as classes in natural sciences, sociology and economics. Building on this basis more specific classes are offered which deal with current environmental issues. The acquisition of management skills and social competence is therefore valued as highly as the necessary technical and scientific knowledge.

The program is truly international and as part of the programme you will spend one semester in another country. The countries where we have partner universities include: Argentina, Brazil, Bulgaria, China, Costa Rica, Czech Republic, Hungary, Japan, Jordan, Mexico, Poland, Slovenia, South Africa, Turkey, Ukraine and Venezuela.

www.tu-cottbus.de/environment

Environmental Technologies

On the basis of in-depth knowledge and methods of environmental sciences and technology, the program enables students to work scientifically, to critically categorise scientific knowledge and to make their own contributions in this field.

In addition, training is oriented towards the required profiles of the special fields at which this programme is directed. The departments "Environmental Protection/Safety/Authorisation" and approving authorities belong to this.

The program prepares the student for work in research. It also provides well-founded fundamentals for executives in the field. The program is basically research-oriented.

<http://www.tu-cottbus.de/BTU/Fak4/struktur/>

Euro Hydroinformatics and Water Management

The evolution of human activities, in the foreground of climate changes and growing earth population, induces situations more and more complex to manage. The sustainable development of water resources in the aquatic environment and its management represents today a major challenge. The global aim of management is to avoid or minimize risk of crisis in water supply, irrigation, floods, waste water treatment. Hydroinformatics, a European concept, emerges as the central element for the progress of modelling activities and management of capacities. The main objective of the Masters is to prepare and train future scientists and executive engineers in charge of modelling and managing projects in hydro-technologies and environment. These professionals are equipped to assist local, regional, national and international collectivities, public services and to be involved in private companies.

University of Nice - Sophia Antipolis (F), Brandenburg University of Technology at Cottbus (DE), Budapest University of Technology and Economics (HU), Polytechnic University of Catalonia (ES), University of Newcastle upon Tyne (UK) are the partners of the 4 semesters master programme (2 years). Mobility scheme covers at least 3 locations.

<http://www.euroaquae.org/>

Process Engineering and Plant Design

On the basis of in-depth knowledge and methods of process engineering, the program enables students to work scientifically, to critically categorise scientific knowledge and to make their own contributions in the field of process and plant design.

In addition, training is oriented towards the state-of-the art engineering practice and current research in process engineering. In addition, preparation for responsible tasks in the fields of apparatus design, plant technology and plant management is part of the program.

The program prepares the student for work in research. It also provides the basis for taking over executive tasks in the field. The program is basically research-oriented.

<http://www.tu-cottbus.de/BTU/Fak4/struktur/>

World Heritage Studies

On November 16, 1972, the General Conference of UNESCO passed the "Convention for the Protection of the Cultural and Natural Heritage of the World." With this convention, UNESCO sought to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity. Today, the so-called "World Heritage List" contains more than 780 entries from all over the globe.

BTU's World Heritage Studies is a unique and innovative program that combines scientific, technical, socio-economic, cultural, ecological and political objectives in order to help protect and conserve the heritage of mankind and thus to serve the goals of the UNESCO convention.

The course of studies integrates lectures and seminars from disciplines such as construction engineering, construction techniques, preservation of monuments and landscapes, management, or cultural studies, for students already holding a Bachelor of Arts and having practical experiences in the respective fields. The program was initially financed by the German Academic Exchange Service (DAAD) and is now being supported by the UNESCO / UNITWIN.

<http://www.tu-cottbus.de/whs/index.htm>