

# Wrocław University of Science and Technology (WUST) Wrocław, Poland



The Wrocław University of Science and Technology (WUST) (Politechnika Wrocławska) was founded in 1945 when a group of Polish academic teachers, mostly from Lvov, arrived in Wrocław. The education offered at our institution is strongly linked with scientific research and the needs of industry and is consistent with standards of the European Higher Education Area. The degrees awarded by WUST are a symbol of high quality of education, confirmed by the National Accreditation Committee and the Accreditation Committee of Universities of Technology. The university has been functioning under the current name since 1945. Today, it belongs to the best technical universities in Poland – over 35 000 students study here under the guidance of 2 000 academic teachers, at the 12 faculties and the Department of Fundamental Studies, as well as in the 3 regional branches. It rates high in the annual rankings of Polish universities. The University campus is situated 1.5 km from the City centre and occupies a large area splendidly located on a bank of the Odra River.

WUST offers opportunities to study abroad and to take part in joint research projects. The university is involved in the following research programs: LLP-Erasmus, Erasmus-Mundus, the 7th Framework Program,

and Leonardo da Vinci. The high level of research carried out, matching the world's best, and the well-equipped laboratories result in a wide cooperation with Polish and international companies, e.g. Philips Lighting Poland S.A., KOGENERACJA S.A., Toyota, LG, WABCO, EnergiaPro, and Whirlpool. As part of these agreements, joint research projects are carried out. Also, students gain the opportunity to perform internships or training or to write their diploma thesis in the branches of the renowned companies in any part of the world.

### **Offers for International Students:**

- ❖ Beautiful architecture, featuring fine examples of different styles, e.g. the modernist Centennial Hall of the UNESCO list.
- ❖ Unique Quarter of Four Denominations, also known as the Four Temples Neighborhood.
- ❖ Plentiful green areas: over 44 parks including a unique Japanese Garden.
- ❖ Strolling areas in the Old Town and along the Odra river, available also for cyclists.
- ❖ A good infrastructure and communication links, international airport.
- ❖ Theatres, galleries, cinemas and numerous cultural events among others: NewHorizons film festival, Wrocław Jazz Festival.
- ❖ Different sporting opportunities.
- ❖ A variety of Polish and International food served in bars, pubs, restaurants and cafeterias.

## **Faculty of Electrical Engineering**

The Faculty of Electrical Engineering (FEE) is one the oldest faculties of WUST and at the same time it is one of the best faculties of electrical engineering in Poland. Its high position is confirmed by co-operation with world scientific centers, a large number of graduates who are successful in their professional careers in Poland and abroad, as well as a rich offer of studies.

The FEE offers two four-semester MSc Programs in Electrical Engineering:

- **Control in Electrical Power Engineering (CPE)**
- **Renewable Energy Systems (RES)**

The four-semester duration is split up into three theory semesters and finally a Master's Thesis semester. The 4-week industrial placement is a part of the studies as well; program is aimed at preparing the students for an international environment, as they will encounter it during their later engineering career.

CPE students can choose an international version of the program and participate in exchange with the Brandenburg University of Technology (BTU), Cottbus, Germany. Students spend their first year of study in BTU Cottbus and second year in WUST. After fulfilling all the requirements at both Universities the graduates will obtain two MSc degrees, both from WUST and BTU. The program is focused on new and challenging issues of power system automation and control. The program is devoted to the candidates interested in work related to electric power system control, reliability, transmission and distribution of electrical energy, protection and decision-making in power systems, energy market issues etc.

Students joining the dual degree program will study the 1st and 2nd semester of the MSc "Power Engineering" at BTU. During this period students have to collect 60 credit points according to the European Credit Transfer System (ECTS) for modules. Limited number of best qualified candidates can benefit from the WUST-BTU cooperation agreement.



## Modules and Credits at the Wrocław University of Science and Technology

Name of the Module	ECTS Credits	Semester
<b>Compulsory Modules</b>		
Numerical and optimization Methods	3	WS
Power System Faults	6	WS
Dynamics and Control of AC/DC Drives	6	WS
Advanced Measurements in Electrical Engineering	4	WS
Selected Problems in Circuit Theory	5	SS
Diploma Project	9	SS
Diploma Seminar	3	SS
Master Thesis	18	SS
<b>Basic Modules</b>		
Advanced Technology in Electrical Power Generation	5	WS
Statistics and Decision Methods	4	WS
Advanced Substations and Electrical Equipment	3	WS
Electrical Power Systems Management	2	WS
Power System Automation and Equipment	5	WS
Electromagnetic Compatibility	4	WS
Artificial Intelligence Techniques	3	WS

Advanced High Voltage Technology	6	WS
Electrical Power System Operation and Control	4	SS
Power System Protection	6	SS
Simulation and Analysis of Power System Transients	4	SS
Digital Signal processing for Protection and Control	5	SS
Fiber Optics for Communication and Sensors	3	SS
Renewable Energy Sources	3	SS
Foreign Language	3	WS&SS
<b>Elective Specialization Modules</b>		
Intenational Law of Intellectual Property	2	WS
Power Quality Assesement	3	WS
Digital Control Systems	2	WS
Advanced Signal Processing Methods	3	WS
Logic Design	2	WS
Lightning Protection	2	WS
Fuzzy Logic Control	2	WS
Signals and systems	3	WS
Visual Engineering Environments and Graphical Languages	3	WS
Power System Modeling	3	WS
Computer Control Power System	3	SS

WS – Winter Semester (October – mid February) , SS – Summer Semester (mid February – mid July)

## Services for International Students

### The International Office:

The International Office provides information, counseling and advisement to international students on all non-curricular issues including immigration regulations, financial issues, personal concerns and general Polish academic questions. The International Office is a part of the University administration and is concerned with the international relations of the institution including exchange programmes, as well as the general affairs of foreign students.

### Accommodation:

The WUST guarantees that it will provide every foreign student with accommodation in a students' or assistants' hostel. All residences are situated two or three bus stops away from the University buildings. The



range of facilities offered varies but most of them have areas for study and recreation, cafeterias, laundry facilities and car parks.

### **Student card:**

All students receive a student identity card entitling them to a 50% discount on public transport in the city and 51% discount on national railways (only when they are under 26). The card also entitles the student to access the university library, sport centres and other facilities as well as to discounted tickets to cinemas, theatres and museums.

### **Computer Facilities:**

Students have access to the Internet in the dormitories in their rooms and wireless Internet access on the campus. Computer laboratories are open 24/7.

### **Main Library:**

All students have a free access to the main library which is opened seven days a week and offers the biggest collection of technical volumes in the region and one of the biggest in Poland. The index is available online with a possibility of booking volumes. There is also a 24 h service – a digital library with e-books.



### **Career's Office:**

Whether you are interested in internship opportunities during holidays or want to inquire about job offers, our career office staff will guide you.

### **Student Information Point (BIS):**

BIS gives you full information about the university which is varied and constantly updated from databases (dean's offices, phones, contacts, health care facilities, student clubs, etc.). Cooperates with team of Psychologists and Psychotherapists, Career's Office, International Office, Dorms, Information and Promotion Offices.

## Cultural and sports life of the University

Special attention is paid to students' time spent out of classes. Support (also financial) is given to students' cultural interests and activities, amateur artistic creativity, competitive or recreational sports, and trips. Artistically gifted students can develop their talents and creative passions in such areas as music (Academic Choir), film and film art, photography (Film Discussion Club "Politechnika", Academic Film Makers' Club "Fosa", Photographic Agency "SpAF") or the student broadcasting centre. Performing arts range from classical to innovative music, theatre and dance programmes. Students have the opportunity to be involved with all the events through attendance or residency activities. The International office also coordinates cross-cultural programmes and other extracurricular activities with campus- and community-based organizations to facilitate development of cross-cultural understanding.

Being a WUST student you can choose from a variety of sports to fill your free time. The majority of courses are free of charge. To mention only a few: aerobics, athletics, archery, aviation, badminton, basketball, chess, climbing, judo, horse riding, kickboxing, mountain biking, paragliding, rowing, rugby, sailing, skiing, and swimming. Regarding sports and travel, a number of activities are offered by the Academic Sports Association of WUST (AZS). The AZS Club offers a unique diversion from academic life through instruction and intramural competition on a club basis. Special care is given to the needs of handicapped students, for whom a special rehabilitation club "Remedium" and a semi-sanatorium have been established. Open recreation provides an opportunity for informal non-scheduled activities at the various recreational facilities on campus for students, faculty and staff. The University has several recreational centres located at attractive travel resorts in the mountains and at the seaside.

