

Wrocław University of Science and Technology



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BLENDED EDITION 2 weeks in magical Wrocław and 1 online course

7 - 25. 07. 2025

Our Programme offers interactive small-scale courses. They are designed to provide an intensive, in-depth look at selected topic of study. As **3E+ is open to applicants from all over the world** you will engage in discussions with a unique group of peers! Apart from lessons, you will get to enjoy our fun and exciting Social Programme! We offer City sightseeing tours, sport activities and all day trips outside the City of Wrocław. We arrange a variety of social events to help you get to know your colleagues and Poland better while having fun!



WHY WROCŁAW?

- + one of the major academic centers in Poland,
- + open and dynamic city with rich history and culture in the heart of Europe,
- +Wrocław is easily accessible from many other major cities.

Wrocław Tech



WHY WROCŁAW TECH?

- + one of the best technical universities in Poland
- + over 20 000 students
- + over 2 000 academic staff
- + 36 distinguished educational programmes, in English
- + campus located in the city center





WHY 3E+ SUMMER SCHOOL?

- 60 hours of specialized courses in a friendly atmosphere
- laboratory activities
- + 4 ECTS points
- + trips, events social activities

- Polish language and culture course
- participants from all over the world
- + blended formula

HOW MUCH DOES IT COST?

+ 1200 euro (special discount for Unite! students, partner institutions and early bird registration applicable) Follow our website for the details!

WROCŁAW TECH OFFERS SUMMER SCHOOL **COURSES AT SEVERAL FACULTIES:**

+ Faculty of Architecture **Universal Design in Architecture**

07 - 25.07.2025

The course provide students with the skills to practically apply the principles of Universal Design and accessibility diagnosis both in public spaces and in the design of residential spaces considering individual or collective special needs, in particular people with disabilities and the elderly. Educating a new generation of designers representing a human-centered approach to desian is one of the activities that bring us closer to realizing the idea of a civil society based on the principles of eaual opportunities and non-discrimination. Summer school demonstrate the integrative role of Universal Design in the functioning of communities, by ensuring that as many people as possible can use architectural space independently and autonomously. Participants will experience architectural barriers through personal experience during simulation workshops.











+ Faculty of Chemistry

Alternative fuels

07 - 25.07.2025

This course aims to provide foreign students with basics knowledge and skills in the field of renewable energy. It offers a few specialized courses, including lectures, laboratories, and seminars, covering a wide range of topics such as understanding problems of manufacturing and using crude oil origin fuels, natural aas, and biofuels, production of high purity hydrogen and biogas, physical and chemical properties of biofuels and their production methods in the industry. During the laboratories and seminars, students are involved in some experiments and problem solving activities associated with the subject of the course.









+ Faculty of Information and Communication Technology Designing secured and reliable computer networks

07 - 25.07.2025

During the course, students will be introduced to the best practices of designing reliable and redundant computer network topologies. The aim: the creation of networks resistant to various types of failures. Redundancy issues in the second and third layer will be raised. Various methods of computer networks management will be presented. First, the standard methods of configuration and IOS systems management. Secondly, modern methods of programming SDN networks will be practiced, during which students will train the centralized configuration of devices using Python scripts and the API of IOS systems. Due to the increasing popularity of computer networks, the group of people interested in breaking into them is also growing. Therefore, the next part of the course is devoted to securing networks and network devices against attacks and overload. The final part will be devoted to monitoring and analyzing network traffic and detecting threats or attacks.



+ Faculty of Environmental Engineering The Future of Building: Net-Zero Design and Thermally Optimized Living Spaces

07 - 25.07.2025

Are you passionate about sustainable design and eager to shape the future of our built environment? Learn how to design buildings that are not only energy-efficient but also comfortable for living. Join our Net-Zero Design summer course and be part of the sustainable building revolution!

You will learn how to apply the renewable energy and passive solutions in modern buildings with the emphasis on maintaining thermal comfort of the users. You will be introduced to the design of buildings with minimal energy demand, installations based on solar thermal collectors, heat pumps and energy recovery systems. You will have an opportunity to measure physical parameters of indoor air with the high-quality laboratory equipment and familiarize with the range of engineering tools (EDSL TAS, PVGIS, TRNSYS and others) dedicated for energy simulations. The course consists mostly of active forms like laboratory, calculus and simple projects. Practical classes will be preceded by short lectures.



+ Faculty of Management Human-AI collaboration: Optimizing performance in the Digital Age

07 - 25.07.2025

This course provides a comprehensive overview of artificial intelligence and its practical applications in everyday life. Participants will gain a foundational understanding of AI principles, learn to effectively utilize various AI platforms, and develop advanced prompt engineering techniques for optimal results. Furthermore, the course critically examines the ethical implications of AI technologies and explores the psychological impact of human-AI collaboration. Through a combination of theoretical exploration and hands-on exercises, participants will develop the skills and knowledge necessary to leverage AI for increased productivity, enhanced creativity, and improved well-being across personal and professional domains.



summerschools.pwr.edu.pl



+ Faculty of Mechanical Engineering Modern manufacturing - from state-of-art processes to automation and Industry 4.0

Robotization and automation of processes, remote operation of machines, devices and sensors are issues directly connected with the current trends of a modern manufacturing. During the classes, students will learn about following contemporary solutions applicable in modern production systems: programming of industrial robots that perform advanced joining, forming and other processes related to engineering materials; technology development for different joining processes of metals and application of selected technological tests for quality assessment, using industrial robots and manipulators for coating technologies by thermal spraying; methods, design, production and post processing of parts by 3D printing technology; advanced programming of automation elements used in industrial networks and communication interfaces.

+ Faculty of Pure and Applied Mathematics Introduction to Data Science with Python

07 - 25.07.2025

According to CareerCast, Data Scientist is one of the best job of recent years. It requires a unique blend of skills from three disciplines: mathematics computer science and domain, which is very attractive to many employers. Strong computer science skills and different approach to data analysis, based on scientific method, is what makes Data Scientists different from statisticians. At the same time, Python is becoming a language of choice for many data scientists, next to languages like Scala and statistical packages like R. It is also the first programming language many people learn, no matter their age. This course gives you a chance to quickly build up your Python skills, learn basics of how data scientist works and apply all this to a project on a real, large data sets.



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+ Faculty of Pure and Applied Mathematics Scientific computing

07 - 25.07.2025

Knowing programming alone is not enough to be a successful engineer or scientist. This is because the type of programming used by them is very different from what is required at (for example) big companies which make and maintain applications, and standard programming courses typically focus on that. Engineer needs to know how to translate mathematical models into code, make it efficient, transparent and flexible, analyse and visualise results of the simulations. This is the area of scientific computing.

The course will also teach Julia programming language, which is a useful bridge between high level languages which are easy to code and flexible, and low level languages which are faster and more suitable for extensive computations.

+ Faculty of Electronics, Photonics and Microsystems Smart Engineering with LabVIEW

07 - 25.07.2025

Have you ever had to write software for your project quickly? How can you build a complete application for hardware control or data acauisition in a day? Is there a programming language that you can learn without memorizing instructions and syntax? Find the best solution to these and other engineering tasks by learning graphical programming in LabVIEW! Created by National Instruments (NI) this programming environment is used worldwide to develop engineering systems for automated testing and design validation, to control and monitor machines, devices or industrial equipment, and for many other professional applications. It is also often the first choice for developing research setups, mechatronic systems, student projects, and even smart home applications with intuitive hardware control and simple communication with sensors or actuators. LabVIEW uses graphical symbols that are easy to remember and understand. So take part in this summer course, learn LabVIEW from zero and check out that programming may be simple, easy... and smart!











BE A PART OF AN UNFORGETTABLE EXPERIENCE AT ONE OF THE BEST TECHNICAL UNIVERSITIES IN POLAND

- WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY JOIN US FOR A SUMMER OF 3E+!

ENVIRONMENT 🕂 ENERGY 🕂 ELECTRONICS

Feel free to contact us at: events@pwr.edu.pl

