

Traces of UWB in the world

What do the traces of the University of West Bohemia look like? Follow us in the footsteps you can find all over the world: these are successful people, whose successful thoughts and achievements we can be proud of. And thanks to one such achievement, the traces of the University of West Bohemia can be found even on the Moon.



Centre of Advanced Nuclear Technologies

**Faculty of Mechanical Engineering,
Faculty of Electrical Engineering**

Under the auspices of the University of West Bohemia, the strategic consortium Centre for Advanced Nuclear Technologies (CANUT) was established, which brings together internationally recognized research institutions and industrial enterprises with a long historical tradition. A comprehensive long-term nuclear research project for existing and new nuclear installations is concerned, for example, with nuclear fuel cycle innovations, the development of packaging for the long-term storage of spent nuclear fuel, the development of pressure vessel manipulators and the establishment of a primary circuit. Students of the Faculty of Mechanical Engineering are also involved in addressing individual projects. The picture shows the ŠKODA 1000/19 spent nuclear fuel container, which was developed in cooperation with students.

ARIANE 6

**Regional Institute of Technology – RTI, research
centre of the Faculty of Mechanical Engineering**

The Regional Institute of Technology cooperates with the company Aero-tech Czech, s.r.o., to develop machining technology for the ARIANE 6 space rocket. This is a launch rocket developed by the European Space Agency, whose first test flight is planned for 2020. The rocket is intended to transport equipment for the extraction of minerals on the surface of the Moon.



Ladislav Sutnar Award

Ladislav Sutnar Faculty of Design and Art

The Ladislav Sutnar Award has been given every year since 2012 by the Dean of the Ladislav Sutnar Faculty of Design and Art – Sutnarka – to leading world personalities, institutions and schools for their contributions to the development and popularization of design. Representatives of prominent art schools, world-famous museums and galleries, as well as artists and educators come to Pilsen for this honoured award. They receive it over at a ceremony attended by representatives of the University, the Faculties, the Pilsen City Hall and the Pilsen Region. The Ladislav Sutnar Award has already brought representatives of the Cooper Hewitt Museum of Design, the J. Paul Getty Trust, the Museum of Modern Art and the Art Institute of Chicago to the University. Representatives of incubators have also arrived, together with representatives of design centres which support the development of design and the employment of university graduates: ArkDes in Stockholm, the Taiwan Design Centre and Stichting NDSM of Amsterdam. Of course, relations with laureates do not end with the bestowal of the award. On the contrary, that is the beginning of cooperation.

Stainless steel caps

New Technologies – Research Centre, NTC

Among other things, the University Institute NTC is also involved in material analysis which has helped to preserve the reputation of Pilsner beer. NTC scientists received a contract from Pilsen Prazdroj: what happened was that the caps of beer bottles that Prazdroj exported to the USA corroded and rust destroyed the beer. Why the caps corroded, this is what NTC found out just through a thorough material analysis. So the brewery could, based on its results, accurately specify the production of caps so that the problem does not recur in the future.



Unique thin layers

Faculty of Applied Sciences, New Technologies for the Information Society – NTIS

In 2013, the research team of the Head of the Department of Physics, Professor Jaroslav Vlček, and the NTIS Centre of the Faculty of Applied Sciences, UWB developed a unique method of high-speed preparation of thin-film materials. It is the basis for the preparation of so-called smart windows which, thanks to the thin coating applied to the glass, will control the passage of thermal solar radiation depending on the temperature. All results achieved by the Pilsen research team have been ranked by the International Union of Vacuum Science, Technology and Applications (IUVSTA) among the top five results for 2015-2018 which have contributed most to the development of knowledge and technological advances in the area of advanced surface engineering of material.



Locomotives from Pilsen

Faculty of Electrical Engineering, Regional Innovation Centre of Electrical Engineering – RICE

Thanks to the long-term cooperation with the Pilsen Škoda factory, smart solutions of employees of the Faculty of Electrical Engineering and its research centre RICE travel from Pilsen to the whole country and to the world comfortably by rail. For example, for the well-known locomotive of class 263 with the nickname Princess, our scientists, led by Professor František Vondrášek, developed the so-called alternate main drive control; the well-known three-car unit of class 471, known to passengers as the City Elephant double-decker train, also exists thanks to the University of West Bohemia. For the City Elephant (pictured), our scientists have solved the so-called double-star connection, and the problem of voltage equalization on series-connected input capacitors of inverters. Other locomotives on which scientists of the Faculty of Electrical Engineering and RICE cooperated include, for example, series 114, series 169 and, especially, series 380, which are the new fast train 3-system Škoda 109E locomotives. In addition to locomotives, the University of West Bohemia and Škoda also cooperate on the development of public transport vehicles – the metro, trams, trolleybuses, electric buses and hybrid buses. These run, for example, in the USA, China, Italy and Turkey.

Quick help to all

Faculty of Health Care Studies

Thanks to the project Strategic Plan for Coordination and Implementation of Cross-Border Cooperation of Emergency Medical Services, rapid, high-quality, effective and legislation-compliant cross-border medical assistance to urgently ill persons on the Czech and German sides of the border has been ensured. While before the project, there were sometimes problems in handing over patients between Czech and Bavarian rescuers, the cooperation is absolutely tops today. Both sides have interconnected, overcome legislative barriers and established an effective partnership that helps protect lives and speeds up the patient treatment process on both sides of the border. The project, in which the Bavarian Red Cross and the Technical College in Deggendorf co-operated with the Faculty of Health Care Studies and the Emergency Medical Service of the Pilsen Region, also created a Competence and Coordination Centre aimed at further improving of the entire system.





Marquette University

Faculty of Economics

In 1995, the Faculty of Economics concluded a cooperation agreement with Marquette University in the U.S.A. Since 2002, a semester course has been held annually during which teams of students visit partner workplaces. In addition to strengthening this long-term partnership, the Faculty and the University are collaborating on projects comparing case studies from the Czech and American environments. From November, as a rule, ten students from the Faculty of Economics and ten students from Marquette University work on a joint project related to some of the given topics. This finishes in March or April, when American students visit the Czech Republic and Czech students go to the USA (pictured), where the final part of the project take place. Topics are changed and innovated every year; participants gain unique knowledge, learn to work in an international team and present the results of their research to American colleagues. For the American University, this partnership is as prestigious as it is for our University.



Castrum Novum

Faculty of Philosophy and Arts

Since 2016, academics and students of the Department of Archeology of the Faculty of Philosophy and Arts have been involved in the research of the defunct Roman colony Castrum Novum from the 3rd century B.C. on the territory of Santa Marinella in central Lazio in Italy. In collaboration with the Museum of the Sea, Ancient Sea Cruises in Santa Severa and the organization Gruppo Archeologico del Territorio Cerite, they have identified, for example, a Roman public bath construction, a city gate and a building adjacent to the Forum. Relics of the town of Castrum Novum were already known in the 18th century; the findings of the first excavations are still part of the Vatican Museums.



Our sportspeople

Faculty of Education, Faculty of Mechanical Engineering

At the University of West Bohemia, sports are run under the auspices of two Faculties. At the Faculty of Education, the Western Stars programme was created in 2018, bringing together athletes under the same brand. At the Faculty of Mechanical Engineering, the Department of Physical Education and Sport sees to athletes' performance. The origins of the Faculty date back to 1952, to the former University of Mechanical and Electrical Engineering in Pilsen. Domestic representation, as well as representation at international tournaments, is a matter of course for our athletes. These are not only contests between universities (you can see happy sportswomen from UWB who have won bronze at the 19th International Tournament of Universities EuroMilano 2019), but many of our students also succeed in the colours of various sports clubs.