

Research, development, innovation. DNA of the Pilsen Region

Get Smart

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Research, development and innovation are the Pilsen Region's driving force, making it one of Czechia's most advanced and productive regions. Innovation is the linchpin of the region's identity, which has always relied on personalities able to look beyond the familiar, determined to move the world forward. This is still the case today. We have a lot to be proud of. Both the city of Pilsen and the entire Pilsen Region have been made famous in the past by globally successful brands such as Pilsner Urquell and Škoda. Today, companies and research facilities in the Pilsen Region are successfully building on these traditional industries, while also developing other areas, often as part of start-up projects. The Pilsen Region is building on long-standing industrial practice while also supporting research, development and innovation that are shaping the future and making the region not only a great place to study and do business, but also a great place to live.

There are more than a hundred scientific, research and development teams operating in the Pilsen Region, across fields and disciplines. They can be found in private companies, research centers, at faculties and scientific departments of the University of West Bohemia in Pilsen, and the Faculty of Medicine of Charles University in Pilsen. Working in close connection with the private sector has brought the teams many awards, both domestic and international. We have long excelled in areas that fall in one of the five so-called specializations: **Biomedicine and Technology in Healthcare**, **Smart Mobility**, **Intelligent Manufacturing Systems**, **Modern Energy**, and **New Materials and Technologies**.

The Pilsen Region aspires to be a region for the future, having long supported innovation and development activities through various initiatives, such as the Smart Accelerator project of the Pilsen Region.

Pilsen Region



geographical coordinates 49°42' s. š. / 13°12' v. d.

613,109	population *(as of 30 December 2024)*
501	municipalities and towns
30%	of the region's population is concentrated in Pilsen
79	population density per km²
46,767 CZK	average gross wage *(in March 2025)*
3,5 %	unemployment *(in January 2025)*

2.5 hours from Munich
1 hour from Vaclav Havel Airport – Prague
4.5 hours from Berlin
4 hours from Vienna
Fast train connection to Nuremberg, Munich, Prague
Šumava National Park with an area of **680.64 km²**

Czechia's third largest region in the Czech Republic is one of the least populated, but that makes it all the more attractive for anyone looking for a pleasant place to live. With its national park, rivers and other natural gems, it attracts walking and hiking enthusiasts, while the many cultural and historical sites will delight history buffs.

The Pilsen Region also offers excellent civic amenities from primary to higher education, first-rate medical care and very good transport connections. It is a safe place to bring up children, offering a wide range of leisure activities for both children and grown-ups and a wealth of cultural events and opportunities for personal development.

Another of the region's advantages is its convenient location – it only takes an hour or so to get to Prague's Vaclav Havel Airport or to go skiing at the Großer Arber peak in Germany. Entrepreneurs looking for new markets can also benefit from the region's proximity to the border.

The Pilsen Region is a traditional industrial region, and the locals are understandably proud of it. Industry is thriving in the region, including international projects and enterprises, which provide a considerable number of job opportunities.

And that is just skimming the surface. The best way to learn about the region is to come and see for yourself.

Come to the Pilsen Region to live, work, or just visit. **We look forward to seeing you.**

Innovating Since the 15th Century



Škoda electric truck

Present, future, and past: Research, development and innovation have always been part of the Pilsen Region. Did you know, for example, that in the Trojan Chronicle – one of the first books printed in the Czech language – came out of the workshop of a now unknown printer from Pilsen, in the late 15th century? And that was only the beginning.

The real innovation boom came in the 19th century. In 1842, the Pilsner-type pale lager, which is now literally world-famous, was first brewed in Pilsen. It was created by the Bavarian brewer Josef Groll, but it was not his name, but the place of its creation, which gave the brand its name. Today's Pilsner Urquell can proudly build on more than 180 years of its history.

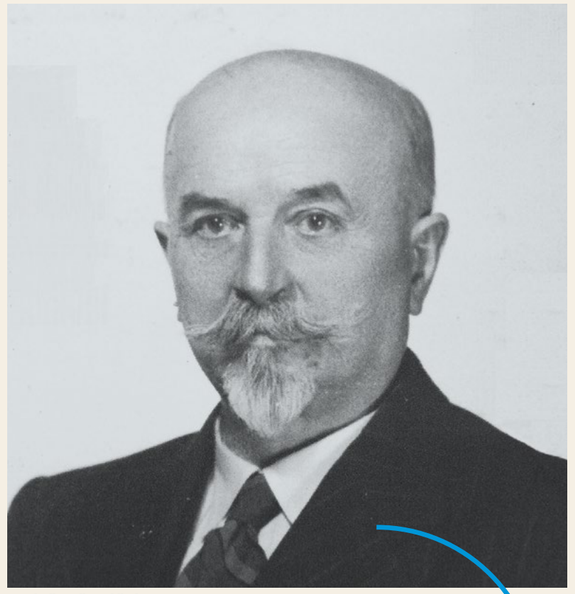
Skoda, another world-famous brand with roots in the West Bohemian metropolis, was founded by the engineer Emil Škoda in 1866. Over the years, the ambitious company grew into a concern and later transformed into independent companies that continue to maintain their legacy, producing vehicles, turbines, and nuclear power technologies.

Trams have long been a part of Skoda's manufacturing portfolio. The tram's inventor, František Křižík, nicknamed *"the Czech Edison,"* was also connected with the region, being a native of the local town of Plánice. Thanks to him, the first electric tram started operating in Prague in 1891, and trams were introduced in Pilsen eight years later. As early as 1880, however, Křižík patented an electric arc lamp and started its production in Pilsen. In 1881 he won a gold medal in Paris, competing with Edison's bulb. Thanks to him, the South Bohemian town of Písek became the first Czech town with permanent public lighting, which was officially launched on 23 June 1887.

The turn of the 19th and 20th centuries saw innovations in an area that is perhaps a little unexpected for the time – electromobility. Its main architect was, again, František Křižík, who in 1895 modified the Laurin & Klement car and created a hybrid vehicle with a combustion engine that generated electric power. During the Second World War, Skoda provided its electromobility expertise to the Pilsner brewery, so it could deliver beer by electric trucks.



František Křižík



Ludvík Očenášek

"Ludvík Očenášek, Czech rocket and aviation pioneer." The Hall of Fame in the New Mexico Museum, USA, features only two Czechs. One of them was a native of the Pilsen Region, from the village of Kříše, born at a time when Křižík was yet to make his greatest achievements. Between the two world wars, Očenášek was involved in rocket design, among other pursuits. His rockets flew first to an altitude of 1.5 km, later a kilometer higher, and The Sun newspaper in New York reported on the first successful tests with the headline *"Latest Plan – Rocket Mail,"* which was Očenášek's planned purpose for his inventions.

As you can see from this little trip into history, the Pilsen Region has long been a place closely linked with research, development and innovation. It has much to build on and continue. It is very likely that today's inventions and those behind them will be written about in a hundred years' time just as much as Křižík's once were.

1842
Founding of the Pilsner Urquell brewery

1866
Emil Škoda established an engineering company bearing his name

1880
František Křižík patented the arc lamp and electrified Piett's paper mill

1941
The first trolleybus hit the streets of Pilsen *(Pilsen has the oldest trolleybus network in Czechia)*

1945
Faculty of Medicine, Charles University established in Pilsen

1948
Faculty of Education established in Pilsen

1949
Independent Institute of Microbiology and Immunology established in Pilsen

1949
School of Mechanical and Electrical Engineering established in Pilsen

1991
University of West Bohemia established in Pilsen *(UWB)*

1992
BIC Pilsen – Business Innovation Center established in Pilsen

1996
First investor contracts signed for the new industrial zone Borská pole; a year later, Panasonic launched a TV production facility in the zone

2000
Pilsen Region officially established

2000
New Technologies Research Center (NTC) established

2005
Science and Technology Park Pilsen opened

2008
Techmania Science Center opened in Pilsen

2014
NTIS Research Center *(New Technologies for Information Society)* established at the Faculty of Applied Sciences of UWB

2014
Full operation of the Biomedical Center

2015
Regional Technological Institute launched its operation at the Faculty of Mechanical Engineering, UWB

2015
Pilsen became the European Capital of Culture

2016
Research and Innovation Center for Electrical Engineering *(RICE)* established at the Faculty of Electrical Engineering, UWB

2018
Completion of the first Regional Innovation Strategy of the Pilsen Region

2020
The region's areas of specialization in research, development and innovation defined

2022
Faculty of Medicine of Charles University in Pilsen opened a new campus, the most modern Czechia

2025
Pilsen Region decided to establish a regional innovation center

Universities – Centers of Education and Science

Higher education institutions have been an integral part of the Pilsen Region's educational system for over 70 years, with a natural center in Pilsen, where the University of West Bohemia is located, as well as the Faculty of Medicine of Charles University.

Both schools attract prospective students both from the Pilsen region and from neighboring regions. The University of West Bohemia has also established branches in the neighboring Karlovy Vary region, offering local students the possibility to study closer to their home.

Universities are also important centers of excellence in science. Thanks to the various research teams who are both willing to tackle challenges and educate a new generation of scientists in the process, we can safely say that science is at home in the Pilsen Region and will continue to be so.



University of West Bohemia in Pilsen

- founded in 1991 after the merger of the School of Mechanical and Electrical Engineering (est.1949) and the Faculty of Education (est. 1948)
- offers a wide range of study programs, both in STEM and humanities
- 62 departments and 303 study programs for more than 12,000 students
- 9 faculties: the Faculty of Applied Sciences, the Ladislav Sutnar Faculty of Design and Art, the Faculty of Economics, the Faculty of Electrical Engineering, the Faculty of Arts, the Faculty of Education, the Faculty of Law, the Faculty of Mechanical Engineering, the Faculty of Health Care Studies
- 4 Research Centers: **RICE** *(Research and Innovation Center for Electrical Engineering)*, **NTC** *(New Technologies Research Center)*, **NTIS** *(New Technologies for Information Society)*, **RTI** *(Regional Technological Institute)*

www.zcu.cz



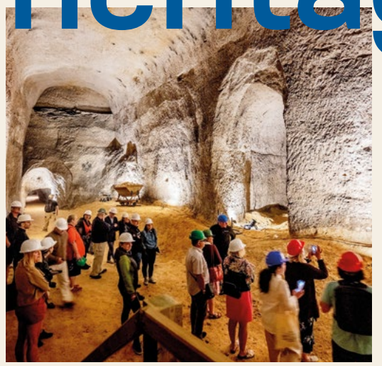
Faculty of Medicine in Pilsen, Charles University

- founded in 1945
- an integral part of Charles University in Prague, one of the five medical schools
- over 2000 students of general medicine and dentistry
- the campus includes a state-of-the-art Biomedical Center
- the faculty conducts research in the fields of genetics, immunology, environmental effects on human health, epidemiology, prevention and treatment of chronic non-infectious diseases, treatment of kidney failure by dialysis and kidney transplantation, hematological diseases, oncology, dentistry
- closely cooperates with the Pilsen University Hospital

www.lfp.cuni.cz

(Not only) industrial heritage sites

The Pilsen Region is a place where innovation, technology and craftsmanship have roots long in the past. What can you do to see for yourself?



Go underground

Kaolin was mined in the town of Nevřeň in the northern Pilsen Region from 1870 to 1897. Though it only operated for a short time, the unique historic site has been preserved to this day and thanks to the town's efforts, the mine was made accessible again in 2019. The Caolinum Center in the town center offers an exhibition about the underground kaolin mining and the geological history of the region, as well as a chance to sit down refreshments.



Find fresh energy by the water

Čeňkova pila and Vydra are two functional hydroelectric power plants at the confluence of the Vydra and Křemelná rivers in the Šumava Landscape Park. Čeňkova pila, dating from 1912, is a designated national industrial heritage site. The Vydra plant, built 20 years later, is equally interesting. The power plants are one of the most popular tourist destinations in the entire Šumava region. Guided tours focus mainly on electricity production, but also on timber industry in the past, demonstrating how technology and nature can complement each other.



Experience the past

The Dobřív hammer mill is the largest and most important industrial heritage site of its kind in Czechia. And it is fully functional! Four water wheels power a trip hammer, a pillar drill, scissors for cutting thick iron plates and other equipment. In the 19th century, the hammer mill first processed pig iron, which was then used to forge iron bars. Later, the mill was used for manufacturing heavy wrought iron tools. The copious exhibits will allow you to explore the history of the iron industry as well as observe it in practice.



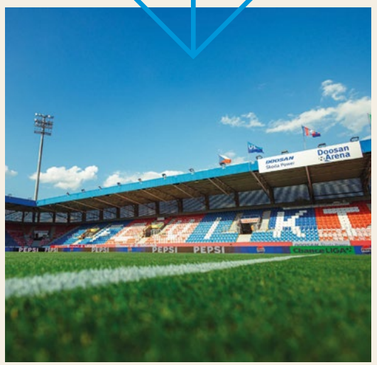
Take an industrial hike

What is the one thing that connects the Pilsner Urquell Brewery, the Gambrinus Brewery, the Pilsen Waterworks, the DEPO2015 area, the ZEVO Pilsen waste incineration plant in Chotíkov, or the Bohemia Sekt plant in Starý Plzenec, known for its sparkling wine production? All these places are on the route of the Industry Open trail. The trail will lead you to interesting sites that are connected by their industrial past or where industrial production is still going on today. In the summer, the sites along the trail become part of the Industry Open Festival; but the trail itself is open all year round.



Check out the buildings

Scientific and educational events are combined with experience and entertainment in the renovated farming complex of the Cistercian Monastery in Plasy. In 2015, the National Technical Museum opened its Center for Building Heritage in the monastery: a unique hub for documentation, presentation and education in the fields of building history and traditional architecture that is the only one of its kind in Czechia. It is a place for both experts and those who seek both new information and entertainment, even families with children. As the museum's motto says, *"You don't destroy what you know."*



Go to a football game

The Doosan Arena, home to the FC Viktoria Plzeň football team, is one of the most modern stadiums in the country. In 2024, the Commission for Stadiums and Playing Fields of the Czech Football Association judged its turf to be the best in the country. Interesting technology tidbit: The club looks after the grass on the turf using lawn aerators, verticutters, hand-push reel mowers and rotary mowers, half of which are from the Green Way range, i.e., electric-powered.

Techmania Science Center

The Pilsen Region offers a rich industrial tradition and an innovative present, education and a wide range of tourist destinations for all. There are few places where these areas intersect as perfectly as in the Techmania Science Center.

Techmania welcomed its first visitors in 2008. It was created thanks to the joint effort of ŠKODA Investment and the University of West Bohemia in Pilsen, and it was the former Škoda factory halls that were chosen to house the center. The buildings are interesting in themselves, but that's nothing compared to what's going on inside.

Techmania offers hundreds of interactive exhibits; programs in workshops and laboratories; the first 3D planetarium in the Czech Republic; short films projected on a giant interactive globe; entertaining science shows; and much more.

The aim of the center is *"to help children, students and families find and develop an affinity toward science and technology and, more generally, to explore the possibilities of human knowledge".*

Techmania offers *(literally)* smart entertainment for every season and every age.

More info at **www.techmania.cz**



Science and Technology Days of the University of West Bohemia in Pilsen

An annual event for which scientists of the University of West Bohemia interrupt their research – but that doesn't mean they stop doing science. Held since 2005, the event is aimed primarily at school children, striving to demonstrate that science does not have to be an arcane, complicated thing; that in fact, it can be quite fun. However, the excursions into knowledge can be beneficial and fun for children and parents/grandparents alike. The event offers interactive exhibitions from all of the university's departments and research centers, which means that everyone can find something of interest to them: from computer science and electricity to health science and philosophy. The Science and Technology Days traditionally take place by the St. Bartholomew's Cathedral in Pilsen's central square, but events are also held in other towns in the Pilsen Region.

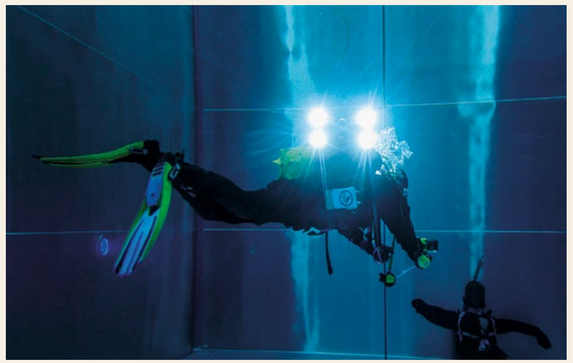
More info at **www.dnyvedy.zcu.cz**



Researchers' Night

While the Science and Technology Days are specifically a Pilsen thing, the Researchers' Night is a nationwide event. Every year, on an autumn evening, it brings together hundreds of places of science, from universities to research institutes to science centers, observatories and other institutions, and Pilsen simply cannot miss out. Researchers' Night has a different theme every year. In the past, it focused on time, mobility, robotics, or the senses. The University of West Bohemia campus has hosted the event in recent years, but it has also been held at Techmania.

More info at **www.nocvedcu.cz**



We innovate Pilsen

The We innovate Pilsen Festival allows the general public and professionals the opportunity to see that research, development and innovation are thriving in Pilsen. It actually started in 2016 as Dronfest, a festival of drone flying, but naturally expanded to its current scope. It is organized by the Information Technology Administration of the City of Pilsen. Since 2023, Innovate Pilsen has taken place in the new TechTower technology park, where students on a field trip have the opportunity to check out the latest technological innovations, but often also to meet their future employers, and companies can reach out to partners and make valuable contacts. The festival also includes lectures which are open to everyone, in the spirit of its slogan: *„Become part of progress. Become part of the We innovate Pilsen festival."*

More info at **www.inovujemeplzen.cz**

Smart Specialization of the Region

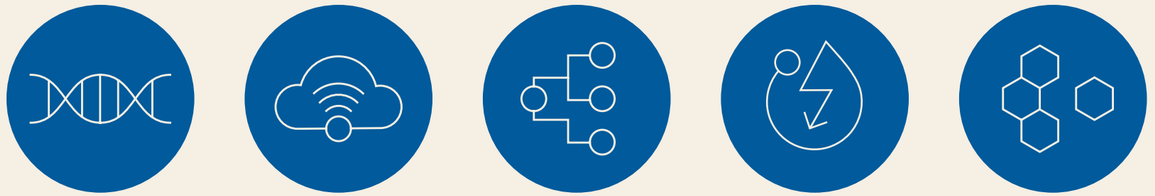




The Pilsen Region supports development, competitiveness, and economic growth through research and innovation activities. These activities include not only areas of expertise, drawing on the region's mechanical engineering tradition, but also trends in the fields of biomedicine, artificial intelligence, and quantum technologies. This is made possible by a comprehensive regional innovation strategy, supporting the innovation ecosystem, creating conditions for pursuing new business opportunities and motivating young people to exploit their full potential.

Explanation of the abbreviations used in the description of the domains of specialization:

FAV	Faculty of Applied Sciences of ZČU in Pilsen
FAV-NTIS	New Technologies for Information Society – Research Centre of the Faculty of Applied Sciences of the University of Applied Sciences in Pilsen
FEL	Faculty of Electrical Engineering of ZČU in Pilsen
FEL-RICE	Research and Innovation Centre for Electrical Engineering – Research Centre of the Faculty of Electrical Engineering of ZČU in Pilsen
FST	Faculty of Mechanical Engineering, ZČU in Pilsen
FST-RTI	Regional Technological Institute – Research Centre of the Faculty of Mechanical Engineering of the University of Technology in Pilsen
FZS	Faculty of Health Studies
NTC	New Technologies Research Centre of the University of Technology in Pilsen
ZČU in Pilsen	University of West Bohemia in Pilsen
Faculty of Medicine in Pilsen UK	Faculty of Medicine in Pilsen Charles University





Biomedicine and Healthcare Technology

The Biomedicine and Healthcare Technology specialization revolves around the long-term research priorities of the Biomedical Center of the Faculty of Medicine, Charles University in Pilsen, and the Faculty of Applied Sciences of the University of West Bohemia in Pilsen, as well as its New Technologies for the Information Society (NTIS) institute. These are areas with high potential for application, both on a global scale, and at the regional level, where the University Hospital Pilsen is a key partner. The prospects of these fields are mostly related to global megatrends associated with the ageing population and rising standards of healthcare services. These medical disciplines expand the technological competences emerging from the existing successful co-operation between the Biomedical Center and technical faculties and research institutes of the University of West Bohemia in Pilsen (e.g. the Faculty of Applied Sciences, the New Technologies Research Centre (NTC), the Faculty of Mechanical Engineering), and present potential for other research institutes, as well as for the commercial sector.

Which Fields Does the Specialization Include?

- oncology
- infectious diseases and antibiotic resistance
- multidisciplinary medicine
- reproductive medicine
- preventive medicine
- organ replacement
- medical diagnostics
- assistive technologies
- new forms of public social and health services
- materials in healthcare
- use of computer simulations and computer modelling in medicine
- advanced medical technologies

REGIONAL INNOVATION PLATFORM
BIOMEDICINE AND TECHNOLOGY IN HEALTHCARE

Cheirón ...dýcháme za Vás.

BIC Business Innovation Centre Plzeň

BIOMEDICÍNSKÉ CENTRUM

COMTES FHT Complete Technological Service - Forming, Heat Treatment

chpk

LÉKAŘSKÁ FAKULTA V PLZNI Univerzita Karlova

MarbleMat

RRA PLZEŇSKÉHO KRAJE

FAKULTA APLIKOVANÝCH VĚD ZÁPADOČESKÉ UNIVERZITY V PLZNI

ottobock.

FAKULTA ELEKTROTECHNICKÁ ZÁPADOČESKÉ UNIVERZITY V PLZNI

sampling HUMAN

FAKULTA ZDRAVOTNICKÝCH STUDIÍ ZÁPADOČESKÉ UNIVERZITY V PLZNI

VR Medical

FAKULTA APLIKOVANÝCH VĚD ZÁPADOČESKÉ UNIVERZITY V PLZNI

+NTIS

ZAT



Smart Mobility



The aim of the Smart Mobility domain is to support research, development, and innovation activities in the Pilsen Region in relation to transport as an integrating element of society, with a significant socio-economic effect, especially in terms of sustainable development, increased safety, efficiency, and fluidity of transport. The key drivers for transformation in the application sectors are the reduction of negative environmental impacts of transport, the use of progressive materials and technologies including digital and artificial intelligence, the development of new and alternative powertrains and propulsion units, and the promotion of electromobility. Opportunities for the use of automated and autonomous vehicles and unmanned systems, intelligent transport systems, co-operative intelligent transport systems, and new modes of transport involving a broader concept of mobility as a service, are expanding. Thanks to its industrial tradition, research capacities, and a well-developed public transport system, the Pilsen Region, and in particular its centre – the City of Pilsen – is an ideal setting for the demonstration and testing of new transport means and systems.

Which Fields Does the Specialization Include?
- new concepts for vehicles, drives and systems
- infrastructure for electromobility
- autonomous mobility
- transport monitoring, control, modelling and planning

REGIONAL INNOVATION PLATFORM
SMART MOBILITY

amitia
BIC Business Innovation Centre Plzeň
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COMPTEQ
CZECHINVEST
FAKULTA ELEKTROTECHNICKÁ ZÁPADOČESKÉ UNIVERZITY V PLZNI
edip
chpk
FAKULTA STROJNÍ ZÁPADOČESKÉ UNIVERZITY V PLZNI
elBlesk ELEKTROMOBILY
IDPK
NOVÉ TECHNOLOGIE VÝZKUMNÉ CENTRUM ZÁPADOČESKÉ UNIVERZITY V PLZNI
RoadTwin
nvias Impulse to create
FAKULTA APLIKOVANÝCH VĚD ZÁPADOČESKÉ UNIVERZITY V PLZNI
+NTIS
ŠKODA | Škoda Group
Správa informačních technologií Plzeň
FAKULTA ELEKTROTECHNICKÁ ZÁPADOČESKÉ UNIVERZITY V PLZNI
RICE
WIKOV
Plzeňské městské dopravní podniky PMDP
ZAT
RRA PLZEŇSKÉHO KRAJE
FAKULTA STROJNÍ ZÁPADOČESKÉ UNIVERZITY V PLZNI
REGIONÁLNÍ TECHNOLOGICKÝ INSTITUT
ZF | OPENMATICS
Techmania Science Center
ZÁPADOČESKÁ UNIVERZITA V PLZNI



Intelligent Manufacturing Systems



The domain of the Intelligent Manufacturing Systems specialization stems from the nature of the region, where the manufacturing industry has a decisive share in the regional economy. Therefore, the domain aims to support the development of capacities and collaboration in research, development, and innovation in the region, in order to exploit trends related to Industry 4.0 or 5.0 in the region's core sectors, especially in manufacturing companies. The region has a long-standing tradition of higher education and research in this area.

Therefore, through activities in research, development, and innovation, it is possible to facilitate the restructuring of production, higher labour productivity, and thereby global competitiveness. Among other things, the aim is to use R&D&I capacities to develop more economical, greener, more energy-efficient manufacturing processes, and new production models, in line with the trend towards reducing the consumption of primary resources, and decreasing energy and material dependence.

Which Fields Does the Specialization Include?

- sensors and sensor systems
- advanced diagnostics and predictive maintenance
- intelligent production process control
- robotics, collaborative systems
- embedded intelligence, prediction using data analytics
- virtual and augmented reality
- big data, data analytics, and machine learning
- models, control, trends
- modular IVS and integration of IVS components
- IVS cyber and energy security
- adaptable solutions (customization) of services and products
- eco-friendly and energy-efficient production processes

REGIONAL INNOVATION PLATFORM
INTELLIGENT MANUFACTURING SYSTEMS

aimtec
PEŠEK MACHINERY
CZECHINVEST
FAKULTA APLIKOVANÝCH VĚD ZÁPADOČESKÉ UNIVERZITY V PLZNI
amitia
SAFRAN
Klastr MECHATRONIKA
FAKULTA ELEKTROTECHNICKÁ ZÁPADOČESKÉ UNIVERZITY V PLZNI
BLUMENBECKER
WE DELIVER SOLUTIONS
SIEMENS
Správa informačních technologií Plzeň
FAKULTA STROJNÍ ZÁPADOČESKÉ UNIVERZITY V PLZNI
COMPTEQ
SMT SINCE 1911
RRA PLZEŇSKÉHO KRAJE
COMTES FHT Complete Technological Service • Forming, Heat Treatment
STREICHER
NOVÉ TECHNOLOGIE VÝZKUMNÉ CENTRUM ZÁPADOČESKÉ UNIVERZITY V PLZNI
DOOSAN Škoda Power
STRKAN
FAKULTA APLIKOVANÝCH VĚD ZÁPADOČESKÉ UNIVERZITY V PLZNI
NTIS
Extended Reality Institute
VZÚ PLZEŇ
FAKULTA ELEKTROTECHNICKÁ ZÁPADOČESKÉ UNIVERZITY V PLZNI
RICE
GTW
WIKOV
FAKULTA STROJNÍ ZÁPADOČESKÉ UNIVERZITY V PLZNI
REGIONÁLNÍ TECHNOLOGICKÝ INSTITUT
KONPLAN KRONES GROUP
ZAT
ZÁPADOČESKÁ UNIVERZITA V PLZNI
HOFMEISTER
ZF OPENMATICS





Modern Energy Industry

The Modern Energy Industry domain builds on the substantial capacities of research organizations in the region, as well as on corporate R&D. The Pilsen Region has a long-standing tradition in the field of power engineering, high-current electrical engineering, the development of control and regulation systems, and in other areas related to energy security and production, and energy distribution in general.

The common goal of interdisciplinary collaboration in research, development, and innovation is to secure affordable energy through reliable, flexible, low-emission, and sustainable power. The domain responds to the current and projected development of the energy mix in the Czech Republic, and by extension in the Pilsen Region, as the economy is facing, among other things, a critical shortage of energy resources and increasing costs for their provision and distribution. At the same time, research, development, and innovation activities need to respect the requirements of environmental protection standards, and bring innovative solutions in the corporate and public sectors.

The subject matter of this domain permeates all fields of the economy, and is linked to other domains of specialization in research, development, and innovation of the Pilsen Region. A fundamental prerequisite for the development of a modern energy industry is the emphasis on the education of experts for future activities in the areas of this specialization domain.

Which Fields Does the Specialization Include?
- safe, reliable, and flexible energy sector
- energy networks
- decarbonising the energy sector
- nuclear energy
- renewable energy
- district heating and cogeneration
- energy storage
- energy savings and energy efficiency improvements
- digitisation of the energy sector
- regional and community energy

REGIONAL INNOVATION PLATFORM
MODERN ENERGY INDUSTRY

Skupina ÚJV
LIDÉ I INOVACE I TECHNOLOGIE

ŠKODA JS

BIC Business Innovation Centre Plzeň

FAKULTA APLIKOVANÝCH VĚD
ZÁPADOČESKÉ UNIVERZITY
V PLZNI

CVŘ Centrum výzkumu Řež

ŠKODA | Škoda Group

CZECHINVEST

FAKULTA ELEKTROTECHNICKÁ
ZÁPADOČESKÉ UNIVERZITY
V PLZNI

COMTES FHT
Complete Technological Service - Forming, Heat Treatment

ÚJV

RRA
PLZEŇSKÉHO KRAJE

FAKULTA STROJNÍ
ZÁPADOČESKÉ UNIVERZITY
V PLZNI

DOOSAN Škoda Power

EnergyCloud

VZÚ PLZEŇ

NOVÉ TECHNOLOGIE
VÝZKUMNÉ CENTRUM
ZÁPADOČESKÉ UNIVERZITY
V PLZNI

elBlesk
ELEKTROMOBILY

WIKOV

FAKULTA APLIKOVANÝCH VĚD
ZÁPADOČESKÉ UNIVERZITY
V PLZNI

+NTIS

ZAT

FAKULTA ELEKTROTECHNICKÁ
ZÁPADOČESKÉ UNIVERZITY
V PLZNI

RICE

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ZF OPENMATICS

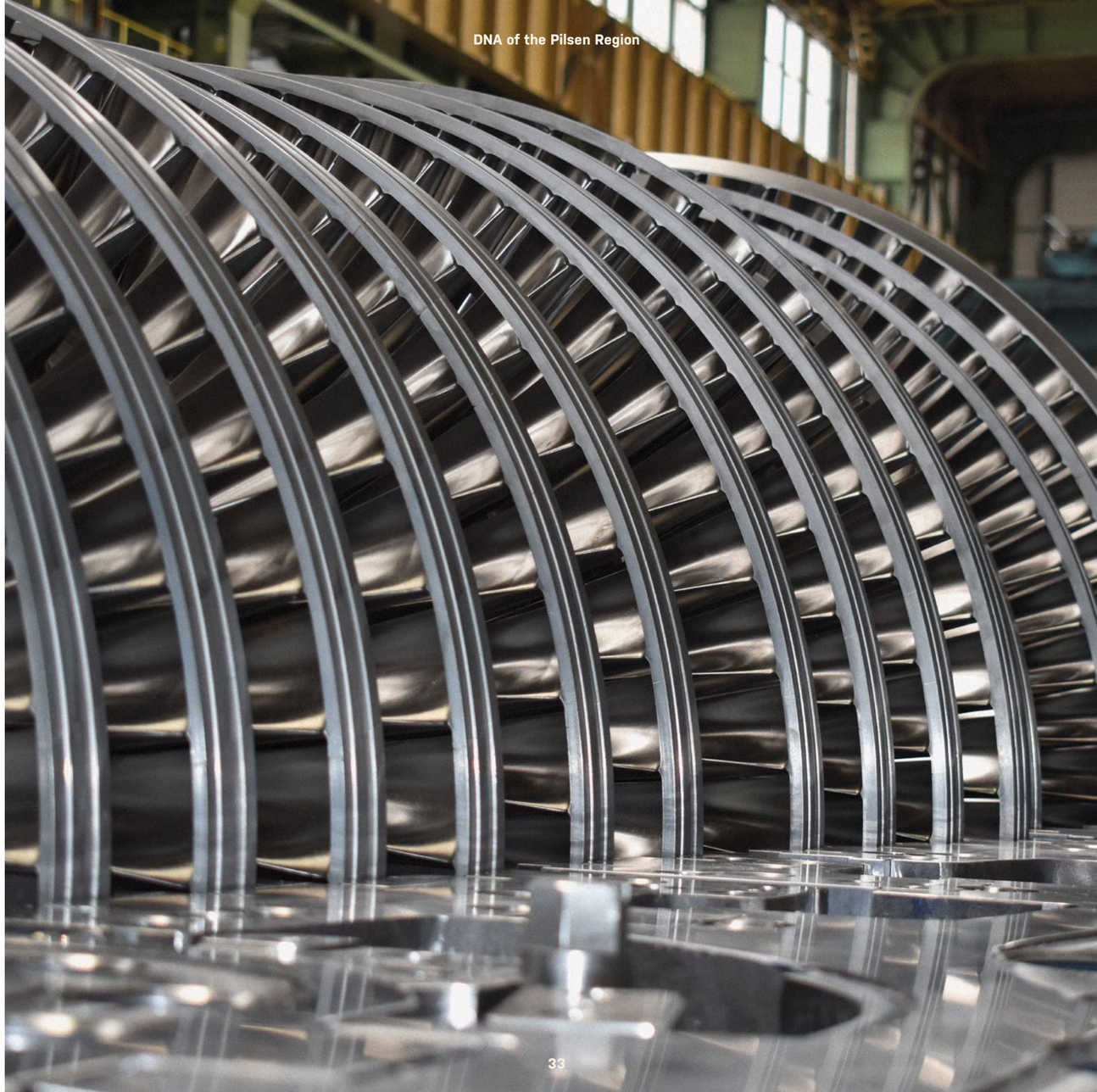
FAKULTA STROJNÍ
ZÁPADOČESKÉ UNIVERZITY
V PLZNI

REGIONÁLNÍ
TECHNOLOGICKÝ
INSTITUT

pinflow
energy storage

ZÁPADOČESKÁ
UNIVERZITA
V PLZNI

PLZEŇSKÁ TEPLÁRENSKÁ
Více než energie





New Materials and Technologies

The New Materials and Technologies domain aims to use the capacity of the research centres of the University of West Bohemia in Pilsen, as well as other research organizations in the region, such as COMTES FHT a.s. and the Research and Testing Institute Pilsen. An important aspect is their co-operation with the application sphere, especially with manufacturing companies, as well as multidisciplinary collaboration, e.g. for applications in healthcare. The implementation of the results of R&D is particularly important in the manufacturing industry, which is of key importance for the region's economy. R&D brings improved materials and technologies that offer advantages over traditional ones. This allows, among other things, more cost-effective solutions in production, in products, reducing the energy and material intensity of production, recycling, and reducing the carbon footprint.

Which Fields Does the Specialization Include?

- materials with enhanced properties
- materials and technologies for additive manufacturing
- special steels
- research and development of methods, tests for standardization activities, and non-standard verification and measurement of the properties of materials and technologies
- modern material manufacturing and processing technologies

REGIONAL INNOVATION PLATFORM
NEW MATERIALS AND TECHNOLOGIES

CVŘ Centrum výzkumu Řež

CZECHINVEST

FAKULTA APLIKOVANÝCH VĚD ZÁPADOČESKÉ UNIVERZITY V PLZNI

COMPOTECH Carbon Composite Components

Klastr MECHATRONIKA

FAKULTA ELEKTROTECHNICKÁ ZÁPADOČESKÉ UNIVERZITY V PLZNI

COMTES FHT Complete Technological Service - Forming, Heat Treatment

RRA PLZEŇSKÉHO KRAJE

FAKULTA STROJNÍ ZÁPADOČESKÉ UNIVERZITY V PLZNI

DOOSAN Škoda Power

NOVÉ TECHNOLOGIE VÝZKUMNÉ CENTRUM ZÁPADOČESKÉ UNIVERZITY V PLZNI

HOFMEISTER

FAKULTA APLIKOVANÝCH VĚD ZÁPADOČESKÉ UNIVERZITY V PLZNI

NTIS

ŠKODA | Škoda Group

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RICE

VZÚ PLZEŇ

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REGIONÁLNÍ TECHNOLOGICKÝ INSTITUT

WIKOV

ZÁPADOČESKÁ UNIVERZITA V PLZNI

ZF | OPENMATICS



GoHigher! A Place to Find Yourself.









The Pilsen Region has been supporting gifted and talented students for more than 14 years, organizing a range of leisure activities in youth centers, as well as district and regional rounds of knowledge competitions for gifted primary and secondary school students. The Smart Accelerator of the Pilsen Region III project has given the region the opportunity to widen the scope and range of such activities even further.

The successful pilot project Building a Community of Talent for Research, Development and Innovation became known as GoHigher. The project started with a modest group of 15, but as of January 2025, it brought together 260 students from 19 secondary schools in the Pilsen Region who had at least two things in common: talent, and the desire to pursue it.

Over two years, the project has involved 28 events and 8 partner events to which talented GoHigher members were invited. It has led to the creation of teams across schools and a network of GoHigher student ambassadors who promote the program in schools.

In addition, the program also supports those teachers, experts and professionals who are already working with gifted students, and seeks others willing to do the same.

Building a community of talent is in line not only with the Regional Innovation Strategy, but also with the Strategy for Supporting Talent in the Pilsen Region. It is a great way to show that we do not have to worry about the future.

Go Higher

INNOVATION ECOSYSTEM

Educational institutions
Universities
Research organizations
Support institutions
Public institutions
Inspiring environment
Companies
People
Communication
Networking

aimtec
EnergyCloud
PEŠEK MACHINERY
amitia
Extended Reality Institute
pinflow energy storage
BLUMENBECKER
WE DELIVER SOLUTIONS
PLZEŇSKÁ TEPLÁRENSKÁ Více než energie
CVŘ Centrum výzkumu Řež
HOFMEISTER
RoadTwin
COMPTEQ
Cheirón ...dýcháme za Vás.
SAFRAN
COMPOTECH Carbon Composite Components
KONPLAN KRONES GROUP
sampling HUMAN
COMTES FHT Complete Technological Service • Forming, Heat Treatment
MarbleMat
SIEMENS
DOOSAN Škoda Power
Medical
SMT SINCE 1911
edip
OMEXOM
STREICHER
elBlesk ELEKTROMOBILY
ottobock.
STRKAN

Skupina ÚJV LIDÉ I INOVACE I TECHNOLOGIE
BIC Business Innovation Centre Plzeň
FAKULTA APLIKOVANÝCH VĚD ZÁPADOČESKÉ UNIVERZITY V PLZNI
ŠKODA Škoda Group
CZECHINVEST
FAKULTA ELEKTROTECHNICKÁ ZÁPADOČESKÉ UNIVERZITY V PLZNI
ŠKODA JS
Klastr MECHATRONIKA
FAKULTA STROJNÍ ZÁPADOČESKÉ UNIVERZITY V PLZNI
chpk
ÚJV
NOVÉ TECHNOLOGIE VÝZKUMNÉ CENTRUM ZÁPADOČESKÉ UNIVERZITY V PLZNI
IDPK
VZÚ PLZEŇ
nvias Impulse to create
FAKULTA APLIKOVANÝCH VĚD ZÁPADOČESKÉ UNIVERZITY V PLZNI
NTIS
WIKOV
Správa informačních technologií Plzeň
FAKULTA ELEKTROTECHNICKÁ ZÁPADOČESKÉ UNIVERZITY V PLZNI
RICE
ZAT
Plzeňské městské dopravní podniky PMDP
FAKULTA STROJNÍ ZÁPADOČESKÉ UNIVERZITY V PLZNI
REGIONÁLNÍ TECHNOLOGICKÝ INSTITUT
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Techmania Science Center

Smart Accelerator of the Pilsen Region III

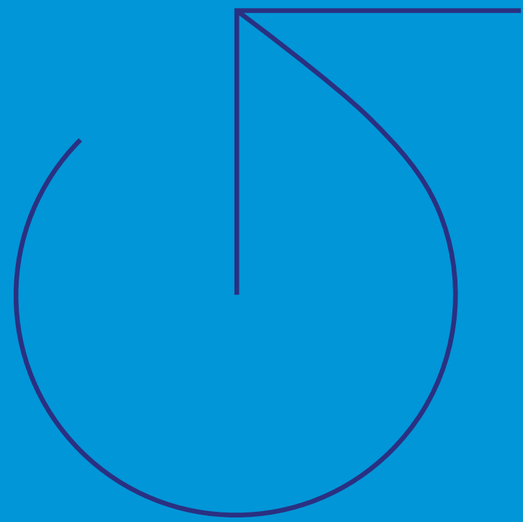
- Better-coordinated development of the innovation environment in the region, with emphasis on regional and international cooperation.
- Improving the connections and cooperation between representatives of the corporate, academic, public and civil sectors.
- Preparation of financial and support instruments, especially with regard to new innovative companies.

These are the goals of the Smart Accelerator of the Pilsen Region III. Lasting from 1 January 2023 to 31 December 2025, the project is funded by the European Union and focuses on implementing the Regional Innovation Strategy of the Pilsen Region. It was preceded by two projects of the same name, designated as Smart Accelerator I and II (from 1 January 2017 to 31 December 2019, and from 1 January 2020 to 31 December 2022), and should be followed by Smart Accelerator IV.

The repeated renewals indicate that the project is definitely meaningful, it has proven successful, and the Pilsen Region sees its potential in the future as it strives to be more and more smart.

The Smart Accelerator of the Pilsen Region III consists of 7 key activities:

- **Project Management** – The purpose is to ensure that the project's objectives and deliverables are met.
- **Core Team** – Comprehensive support for the development of the region's innovation environment in relation to the Regional Innovation Strategy of the Pilsen Region; communication between key players in the region; networking and support for the creation of new strategic projects.
- **Training** – Developing the required competences of the project team and experts involved in the implementation of the Regional RIS3 Strategy in the region.
- **Mapping** – Monitoring, analyzing and evaluating the development and current state of the innovation environment in the region and identifying its needs. This involves the collection of primary and secondary data and their systematic analysis and evaluation.
- **Assistance** – The aim is to utilize vouchers to support the preparation of strategic projects in the region aimed at fulfilling the objectives of the RIS3 strategy of the Pilsen Region. As part of this activity, a new grant program of the Pilsen Region has been prepared and launched.
- **Pilot Verification** – Verification of an innovative solution to a topic that has not yet been comprehensively addressed in the region. For the SA III project, the topic is *"Building a Community of Talent"* (see page 38) and the activities implemented are aimed at a systematic approach to the talent community, as well as the networking of talent and support organizations, innovative companies and researchers.
- **Marketing** – Within the framework of the Marketing and Communication Strategy activity, which is one of the key activities in the region, we continue to work to ensure that the Pilsen Region is perceived as an innovative region full of excellent experts and innovators, promising regional companies and interesting study programs with excellent employment opportunities.





#pilsenregion

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LinkedIn **Smart Pilsen Region**
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www.pilsenregion.cz

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MINISTRY OF EDUCATION YOUTH AND SPORTS

PILSEN REGION

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