



2023

REPORT KRAKÓW

corees

Commercial Real Estate

FOREWORD

I am very pleased to present our Krakow's market annual report for the year 2022.

In addition to the information on the office, co-working, industrial and logistics, retail and PRS market we also wanted to present a wider urban context including basic data on demographics, urban infrastructure and education.

I hope you find this small summary helpful and interesting.

I wish you a pleasant reading,

Marek Ciunowicz



**Marek Ciunowicz, SIOR
CEO in Corees Polska**

I am connected with commercial real estate market for nearly 30 years. I founded the real estate agency which provides comprehensive and competent support for a Client, where a person and their needs builds up for our priority.

Corees Polska is a boutique-format agency, which specializes in commercial real estate. We advise, negotiate, and back upon external assistance, considering Polish and European companies, independently from their size or location, in the field of office, industrial and logistics and retail spaces, valuation and investment advisory.

Corees Polska is a partner of The Instant Group, belongs to SIOR, CORFAC International and Pro Progressio.

KRAKÓW

Krakow, the former capital of Poland. In the rankings of world tourist websites, it is one of the highest-ranked European and even world cities. It attracts with its beautiful architecture, rich cultural offer and unique atmosphere. Administratively, it lies in the Lesser Poland Voivodeship. It is the second largest city in Poland in terms of the number of inhabitants – currently, it is inhabited by 802.8 thousand people. people (as of June 30, 2022), which is about $\frac{1}{4}$ of the total population of the Małopolskie Voivodeship.

In annual terms, the population of Kraków increased by 0.3 thousand. people. The city has a negative, but insignificant, birth rate (-0.93‰), which is still more or less at a similar level. The balance of internal migration for permanent residence year-on-year in 2022, in turn, decreased significantly. In 2021, it amounted to 2,525 people (previous year: 2,331), while at the end of June 2022, only 880.

Krakow is also the second city in Poland in terms of area. It extends to 326.91 km². There are several neighbouring small towns around Krakow, such as Skawina, Zabierzów or Wieliczka, and the borders between them are slowly blurring thanks to excellent transport connections, which allows their residents to freely use the infrastructure and employment in Krakow.



Labor market

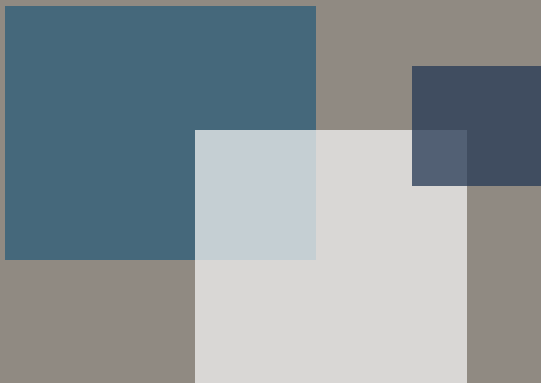
Krakow can boast of a thriving labor market. In June 2022, the unemployment rate in this city was only 2.3 percent, which is almost half less than the data from the entire province.

The average monthly gross salary in the enterprise sector amounted to PLN 7,405.33 in June 2022 and was 12.3% higher than in June 2021. than in the corresponding period of the previous year. The average employment in the enterprise sector amounted to 544.5 thousand. people, which is more than twice as many as in the same period of the previous year (in which, in turn, an increase of 12 percent was recorded).

An increase in the number of companies registered in Krakow is also successively recorded.

As at the end of June 2022, there were 168.2 thousand. entities of the national economy, i.e. by 5 percent. more than last year. They accounted for 36.3 percent. total number of entities entered into the register in the Małopolskie Voivodeship.

The number of registered natural persons conducting business activity amounted to 104 thousand. and increased by almost 3% compared to the same period last year.



A special economic zone has been operating in Krakow since 1997, which initially covered a total of 66 hectares, now it occupies as much as 949.66 hectares.

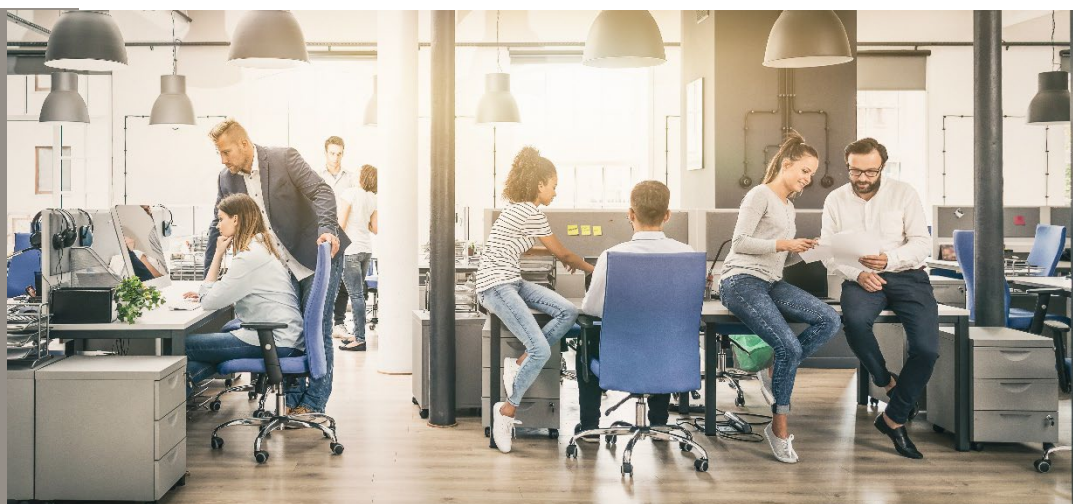
The SEZ allows companies located in its area to conduct business activity on preferential terms, e.g. to receive tax exemptions. This is aimed at accelerating the development of regions through e.g. attracting new investments, developing exports and creating new jobs. SEZ has been managed by a specialized business environment institution since 2004 known as Krakowski Park Technologiczny.

In addition, Kraków, through the activities of venture-capital funds, cooperation between business, universities and innovation incubators, supports start-ups.

Every year, there are organized over 500 startup and technology events, and the leading projects of this type have already attracted investments worth over PLN 500 million to the city.



Labor market



Investment market

Krakow is considered the Polish capital of business services. It has become an attractive place for outsourcing companies from all over the world, providing financial and accounting services (BSS). In the fDi's European Cities and Regions of the Future 2023 ranking, Kraków was awarded in the following categories: Top 10 Large European Cities of the Future 2023 - category: business friendliness - position 1, Top 10 Large European Cities of the Future 2023 - category: capital human and lifestyle - position 2, Top 10 Large European Cities of the Future 2023 - category: economic potential - position 6, Top 10 Large European Cities of the Future 2023 - overall - position 3 (compared to the previous year's ranking, this is an advancement by 1 place).

Investors have located 261 business service centers in Krakow, which employ 92,686 people, which is 23.2 percent. total employment in the modern business services sector in Poland (of which 43.1 thousand people work in the SSC/GBS industry, 17.9 thousand in the IT area and 19 thousand in BPO). 80% are owned by foreign entities. of them. Companies such as HSBC, PricewaterhouseCoopers, Capgemini, Shell, International Paper, UBS Business Solutions Poland and Universal Investment have located their centers or branches in Krakow.

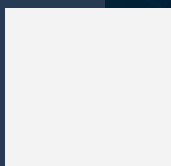
New investments include: Huntsman, Dyson, GlobalLogic, Infosys, and Kyndryl Global Services Delivery Center Polska. In total, 29 countries have their headquarters here, with the largest share of companies from the USA, Great Britain, France, Germany, Switzerland, the Netherlands and Sweden (a total of 64% of the total number of centres).

The apparently growing number of companies encourages new ones to invest in Krakow. Most centres were established in 2011-2016. With the advent of the COVID-19 pandemic, the number of new entries has decreased. Given the scale of the pandemic and the size of the shock caused by it, the sector has shown high resilience, despite a slight decrease in the number of centres in 2021.

In addition, according to the report "Kraków IT Market Report 2022", approx. 50,000 are available in the capital of Małopolska. IT specialists and this number is systematically growing, e.g. thanks to 2.4 thousand graduates of computer science, leaving the walls of local universities every year.



Investment market



Nearly 60,000 people work in Wrocław's service centers. Growth in 2022 was greater than expected. 130 jobs were created daily, with an average of 75 of them being highly specialized jobs. The leading industries in the region are the automotive, household appliances, engineering, chemical and pharmaceutical sectors.

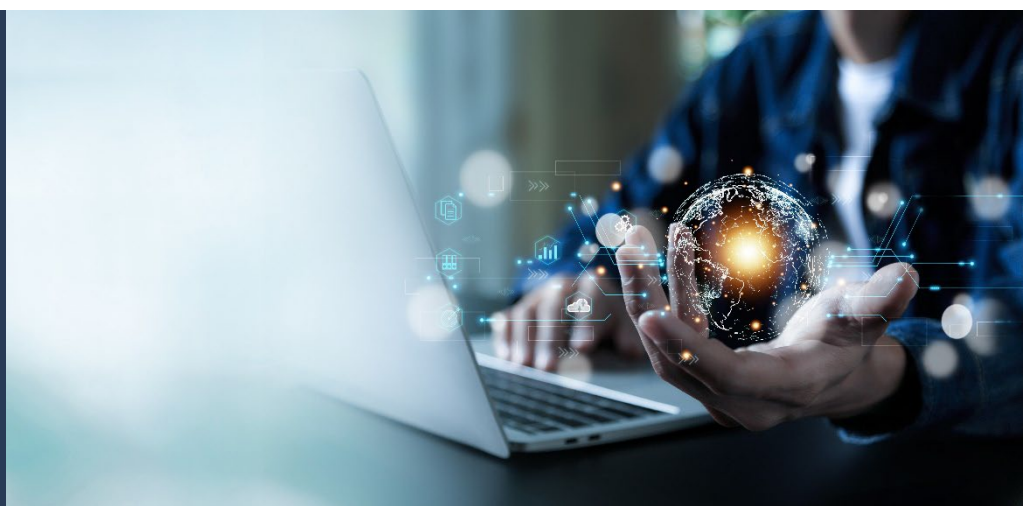
New investments in Wrocław include: Boehringer Ingelheim, GlobalLogic, Klika Tech. In Wrocław, there are e.g. McCain, Merck Business Solutions Europe, Nexer, Olympus Business Services, Parker Hannifin, PPG GBS, QIAGEN Business Services, Schaeffler Global Services Europe, Smith and Nephew, SoftServe, SSAB, Thaumatec, Toyota, UPM, UPS Global Business Services, Volvo, XL Catlin Services.

The capital of Lower Silesia is also one of the most important startup centers in Poland.

Wrocław is also a place of many important conferences, congresses and international events (including The Global Forum, the European Film Awards gala).



Investment market



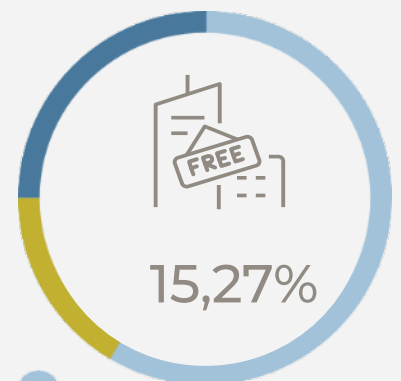
Office market in numbers



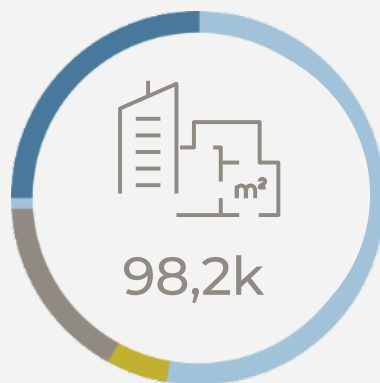
Base rent for office space
€/ sqm varied from
location



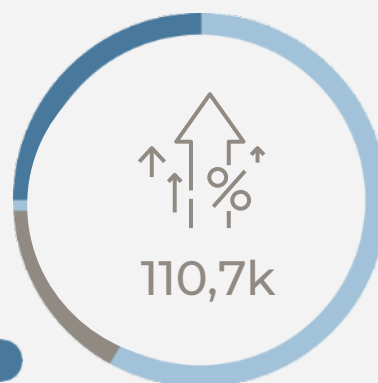
Total office space (sqm)



Vacancy rate is
1,4 pp lower vs last year



Office space (sqm) delivered in
2022



Projects under construction
(sqm)




Office market

The office market in Krakow is developing dynamically. The increased dynamics of the development of the office market in Krakow date back to 2014, and since then, each year, an average of over 150,000 new jobs have been added to the city. m2 .

The total office space at the end of the fourth quarter of 2022 amounted to 1.708 million m2 in 235 buildings (for comparison - at the end of 2019: 1.3 million, 2017: 1.1 million m2), of which 97.5 thousand. m2 constituted new supply, realized in 9 projects. The completed projects include: The Park Cracow 1 (12,500 m2, White Star Real Estate and Cain International), Brain Park A and Brain Park B (total area 31,100 m2, Echo Investment), Fabryczna Office Park B4 and H1 (21,800 m2, Inter-Bud), Aquarius (10,500 m2, ABP Investment), MK29 (11,200 m2, Caishen Capital Group) and the last building in the complex HighFive (11,100 m2, Skanska Property Poland).

Currently, a further 110.7 thousand are under construction. m2 of surface. Projects under construction include building C of the Brain Park complex, Fabryczna Office Park B5, Mogilska 35 (13,400 m2, Warimpex Finanz- und Beteiligungs AG), Ocean Office Park B (26,500 m2 ., Cavatina Holding), The Park Cracow 2 (11,000 m2) and Kreo (23,000 m2, Ghelamco Poland).

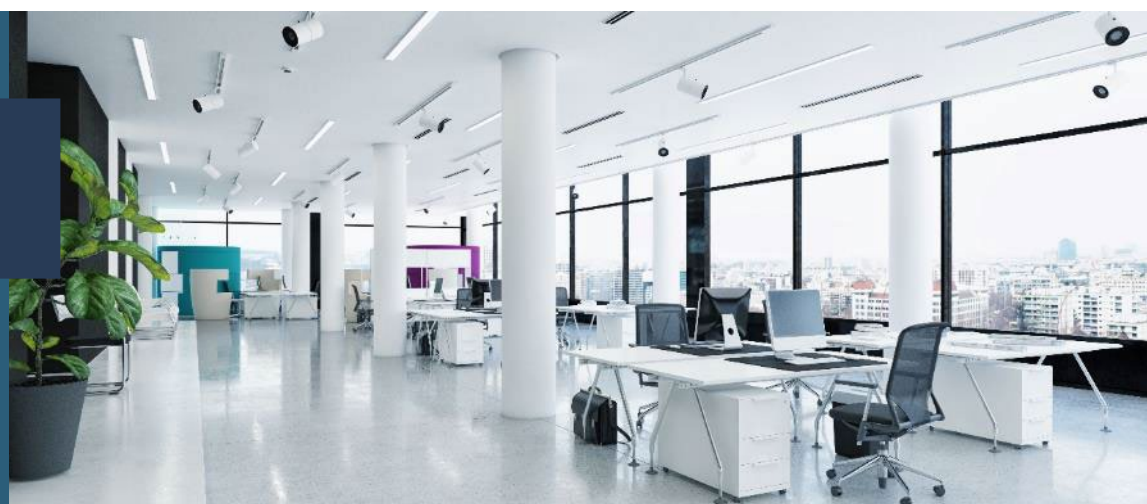


In 2022, 198,000 sqm were leased in Kraków. m2, i.e. by 27 percent. more than a year earlier (for comparison: in 2021 - 156,000 m2, in 2017 - 200,800 m2). The highest share, as much as 69%, in the structure of demand was attributed to new contracts, renegotiations and extensions of existing contracts accounted for 29%. registered demand, and expansions for 2 percent.

The main tenants are companies from the BPO/SSC and IT sectors (30%). The largest transactions include a pre-lease agreement with a confidential tenant from the IT sector in the Ocean Office Park D building in Krakow (4,700 m2) and the renewal of the Epam agreement in the O3 Business Campus office building. The vacancy rate fell by less than 1 percentage point. during the year and at the end of 2022 it was 15.27 percent.

Over 70 percent of office space is located outside the city center. Mostly in its southern part. Asking rents average EUR 13.5/sqm/month for class A offices, ranging from 11-13.3/sqm/month in the north-east, 12-14.5/sqm/month in the north-east and south to 15.3/m2/month in the city center. The large number of newly built office buildings also makes the Krakow office market very young - more than half of the buildings are no more than 5 years old.

Rynek biurowy



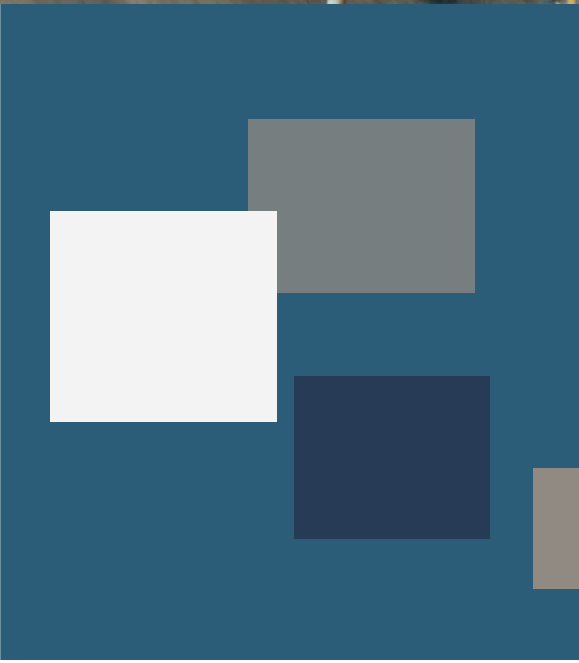
Co-working market

Kraków is also developing rapidly in terms of the availability of coworking spaces and serviced offices. It boasts the highest share of flexible areas in Poland — 47,000 sqm. m2 of flex offices is 2.9 percent. office space in Krakow. They are located throughout the city, among others in some of the best class-A office buildings. The largest concentration of coworking spaces is definitely in the city center and in locations with relatively good transport connections.

The largest number of flexible spaces in Krakow is offered by Regus Spaces, followed by Loftmill, Cluster Offices, Office & Cowork Centre. Other coworking spaces are offered by AT Office, Business Link, Bizneslab, CitySpace, Chillispaces, Mogilska43, Cowork, QuickWork and a number of private micro-entrepreneurs. In Kraków, the flexible form of lease is so popular that currently a very large part of the space is almost fully leased.

The average cost of one workstation in a serviced office or coworking space in Krakow is EUR 350 per month. Customers of flexible offices more and more often report the need for more than 50 positions.

The main users of coworking are technology companies, especially cloud-based solution providers, software producers and game developers.



PRS market

Although the PRS market is only at an early stage of development in Poland, Krakow is already among the top Polish cities in terms of its resources.

About 1.5 percent of flats for rent are PRS resources. In 2022, the largest number of apartments has been completed so far since the PRS segment was launched in Kraków.

Over 700 new units were completed in 4 buildings, doubling the total supply of apartments for institutional rental in the city.

The largest PRS investment in Krakow is the project of the developer Echo Investment at al. 3 Maja, operated by Resi4Rent. The investment was commissioned in the fourth quarter of this year.

There are over 380 apartments in the building and about 80 percent of them is commercialized and are already occupied.

At the end of 2022, a total of 900 premises were ready in the capital of Małopolska, and another 1.2 thousand is under construction.

Half of them are to be delivered to Heimstaden in Nowe Czyżyny and managed by Leach & McGuire (the start of the lease is planned for the first quarter of 2023).



Other PRS investments under construction include Resi4Rent (387), AFI Europe (132) and Atrium Real Estate (109). It is estimated that by the end of 2023 this number will exceed 1.5 thousand. premises.

The largest players on the Krakow PRS market are EchoInvestment (530 pcs.), Catella (293 pcs.), PFRN (251 pcs.), Zeitgeist (157 pcs.), Resi4Rent (149 pcs.) and Van der Vorm (36 pcs.) .

The market of private dormitories is also developing dynamically in Krakow.

Kraków is the leader of Polish cities, with a total of 2.2 thousand. seats. This is 600 more places than in Warsaw, which has a larger number of students.

PRS market



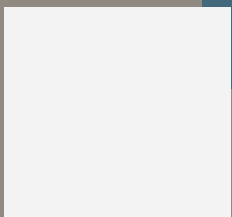
Retail market

Despite the continuous development of e-commerce, the interest in renting space in existing shopping centers does not decrease.

Currently, modern retail resources in Krakow and its vicinity account for 803.6 thousand sq m. m2, which consists of 19 shopping centers or retail parks of various scale (from not exceeding 10,000 m2 to 90,000 m2) in Krakow itself and three neighboring towns. Saturation with the area is 476 m2/1 thousand. residents of Krakow.

In 2022, two retail parks with a total area of 48,000 sq m were commissioned. m2: Atut Ruczaj 2/ Kraków (KG Group, 25,000 m2), Atut Galicyjska/ Kraków (KG Group, 23,000 m2).

ATUT Nowohucka (23,000 m² GLA) remains under construction, including Designer Outlet Kraków with an area of 20,000 sqm. m2, and Galeria Wieliczka (42,000 m2). They are scheduled to be commissioned in 2024.



In addition to the construction of new facilities, demolition work is underway in Krakow for one of the first shopping centres in the city, which has been closed since 2021 - Krakow Plaza, owned by Strabag Real Estate. The gallery will disappear from the city map in the second quarter of 2023. Currently, analyses of possible development variants are underway. A complex of office and service buildings or office and service buildings and a hotel is considered.

Krakow's retail space enjoys constant interest. There are no tenants in Kraków, only 1.8 percent. of them. One of the largest transactions in 2022 is the signing of a lease agreement for a 1,000 sqm store. m2 in Atut Kraków by the German brand Woolworth (planned opening in May 2023).

Rents in operating centres are kept at a constant level. The cost of monthly rental of premises in the best shopping centers in Krakow (up to 100 m2 for the fashion sector) varies between EUR 35 and 70 per 1 m2. The difference depends mainly on the location, the tenant's brand, the size of the premises, and the location on the map of the centre.

Rynek handlowy



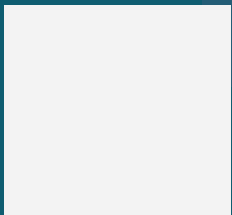
Industrial and logistics market

The Krakow warehouse market is divided into several zones. The highest concentration of warehouses is located beyond the eastern border of the city - in Kotowo and to the south-west – in Skawina. Thanks to the completion of the eastern bypass of the city on the S7 section, Nowa Huta is becoming an interesting location.

The number of warehouse spaces in Kraków was estimated at the end of 2022 at 828.3 thousand square meters. m².

However, the Krakow warehouse market, although it is developing systematically, still lags behind other Polish markets, including the very well-functioning Silesian market located in close proximity (this is associated, among others, with very high prices of land to be used for warehouse space , and thus the most expensive rental prices right after Warsaw).

As a consequence, Kraków is one of the leading Polish regions in terms of the amount of vacant warehouse space. In 2022, it was only 1.2 percent, i.e. 1.1 pp. less than a year earlier (only the Pomeranian Voivodeship is ahead of them with the availability of only 0.9%).



Currently, 89.4 thousand sq.m. are under construction. m² of warehouse space, including Panattoni Park Kraków North, which is ultimately to reach 55,000 sqm. m² of surface.

The entire facility will be commissioned in mid-2023, but the first building with an area of 30,000 sqm will be completed at the beginning of the year. m², where most of the space will be occupied by Trivium Packaging.

In turn, in the western part of the region, Panattoni is implementing another investment, which will cover nearly 9,500 sq m. m² in the BTS facility, which the developer will deliver in the third quarter of 2023. Another project has started in Skawina, 20 km from Kraków - Panattoni Park Kraków West III.

The average rental rates in 2022 on the warehouse market in Kraków amounted to 3.8 - 4.51 in EUR/m²/month.

Industrial and logistics market





Infrastructure market

Krakow boasts one of the best-developed public transport in Poland.

The network of connections, allowing for easy movement between distant parts of the city, plus modern rolling stock, make Krakow one of the highest in the country in terms of communication. In addition, the currently reconstructed and renovated infrastructure of the Polish State Railways has also contributed to the renewal of connections in the city itself and the improvement of railway communication with neighbouring communes.

In addition, Krakow is perfectly connected with other parts of the country - the city is located in a straight line between Germany and Ukraine as well as Slovakia and the border on the Baltic Sea.

A direct railway connection with the capital of the country, supported by a high frequency of comfortable and fast trains, allows you to travel freely between cities and is conducive to business development in both regions.



Krakow is also one of the Polish cities that can boast air connections from a large international airport, which annually serves about 6 million passengers from around the world (in 2022, the number was a record 7.4 million people and it was the second result in the history of the airport .), 24 scheduled airlines and 5 charter airlines.

The network of direct connections to Krakow in 2022 will include 84 airports in 30 countries, as far away as the United States or Dubai.

The airport, in turn, is perfectly connected to the center of Krakow, thanks to which you can get from it in 20 minutes (by taxi, city bus or fast train) to the Old Town.

Rynek infrastruktury



Education market

Krakow is also the first Polish and one of the first European cities that can boast of an Alma Mater and is still one of the largest European academic centres.

Currently, there are 23 higher education institutions in Krakow, of which as many as 10 are public universities, and 5 of them have the status of universities. The most famous university in Krakow is Jagiellonian University, which ranks ex aequo with the University of Warsaw in the ranking for the best Polish university. The AGH University of Science and Technology, on the other hand, boasts the title of the best and largest technical university in Poland, winning high places in the rankings of world technical universities.

In the academic year 2021/2022, 144.4 thousand students studied at universities located in the Małopolskie Voivodship. people (including 7.9 thousand foreigners). In 2021, 37.0 thousand students received a diploma of graduation. people. Compared to the previous year, the number of students increased by 0.1 thousand, and the number of graduates - by 0.5 thousand. The largest academic centre was Kraków, where 129.2 thousand students studied at the higher level. people (including 7.6 thousand foreigners).

Among Krakow students, the largest group is made up of students of technical universities (about 1/4 of all students), the second largest group, not much different in terms of numbers, is made up of people studying at the Jagiellonian University (apart from the humanities, which also offers medical and technical faculties).

A large proportion of students, about 15 percent, study at economic schools. Every year, between 55,000 and 60,000 students graduate from Krakow's universities. graduates, among whom the largest number of people graduate from the fields of study belonging to the following groups: technology, industry and construction, followed by business, administration and law, and social sciences, journalism and information.

Research shows that only a small proportion of graduates return to their hometowns. Most of them stay in Krakow, looking for employment and, consequently, settling down for a longer period of time or even permanently.

Education market





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