



giz Deutsche Besellschaft für Infernationale Zusammerarbeit (BIZ) Brobe

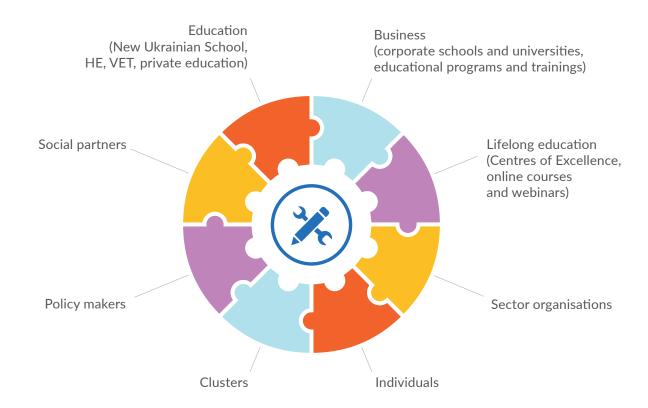




## **CROSS-SECTOR OVERVIEW**

Ukraine has a high level of educational attainment: many university students, high literacy rate and significant number of graduates who contribute to industrial and scientific progress. However, in the increasingly fast-paced world employers become more demanding, so the need for the development of new skills is growing rapidly.

# SKILLS DEVELOPMENT ECOSYSTEM



## WHY UKRAINE



#### **KEY FIGURES**



1,44 mln

students at universities, academies, institutes



100+ R&D centres



**333,6k** graduates from universities, academies, institutes in 2019



99% literacy



**50,2k** graduates from colleges and technical schools



73% Ukraine's labor force with advanced education in 2018



281

universities, academies, institutes



**75,3%** Gross enrolment ratio, tertiary education in 2018



338

colleges and technical schools



Member of the PISA



Around 900 state-owned VET providers



Member of the Bologna Process



Around 2 000 private VET providers



Member of the Torino Process



Around 20 private business schools

# **UKRAINE IN GLOBAL RANKINGS**

Ukraine shows an overall increase in 2020's Global Innovation Index. The country has significantly improved in education (20 ranks up) and R&D (10 ranks up)

Ranked 45<sup>th</sup> among 131 countries by Global Innovation Index 2020



Ranked 45<sup>th</sup> among 139 countries by Global Creativity Index

23<sup>rd</sup> in Knowledge creation sub-index

**32**<sup>nd</sup> in Knowledge diffusion sub-index

45<sup>th</sup> in Knowledge impact sub-index



**Top-1000** in QS World University Rankings 2021



23<sup>rd</sup> in Education sub-index

32<sup>nd</sup> in Tertiary education sub-index



Regularly highly ranked at the annual International Mathematical Olympiad

44<sup>th</sup> in R&D sub-index

23<sup>rd</sup> in Intangible assets sub-index

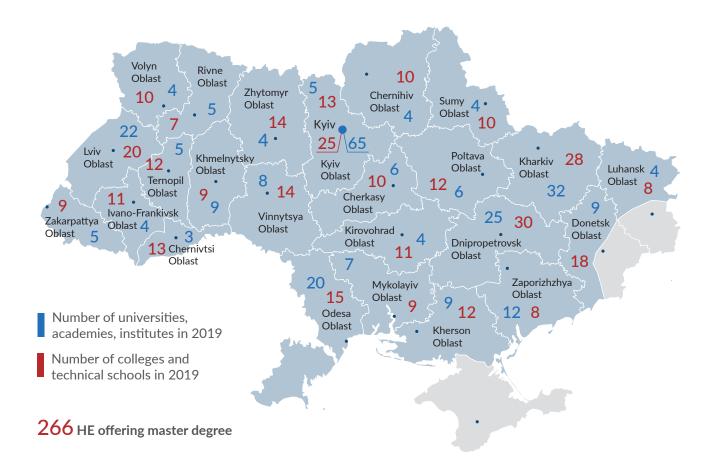
39<sup>th</sup> in Online creativity sub-index



Gradually improving in the Doing Business ranking

# **MAJOR HE and VET INSTITUTIONS**

Specialty



Management and administration	(F)	199	Mechanical engineering		57	
Social sciences		166	Electrical engineering	7	55	
Information technology		109	Architecture	開	53	
Law		103	Journalism		48	
Public administration		95	Transport		45	
Education/pedagogy	•	93	Mathematics and statistics	<b>***</b>	37	
Natural sciences	A	91	Electronics and telecommunications		37	
Humanities		87	Civil security		37	
Culture and art	X	80	Chemical and bioengineering	A	36	
Service sector	Marie 1	69	Agricultural sciences	B	34	
International relations		64	Biology		31	
Automation and instrumentation		63	Veterinary medicine		14	
Health care		63	Theology	Ţ	6	

Military sciences, national security,

state border security

58

58



5

Social work

Production and technology

#### Top 10 specialties 2020 by number of applications

42 379	Marketing	Law	116 689
43 791	Psychology		
46 844	Finance, banking and insurance	Management	92 147
47 038	Software engineering	Philology	76 708
50 841	Economics		
62 676	Pedagogy	Computer science	63 410

### Top 10 most popular HE institutions by number of applications



- Taras Shevchenko National University of Kviv 1
- National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"
- Ivan Franko National University of Lviv
- Lviv Polytechnic National University
- Kyiv National University of Trade and Economics

- **National Aviation University**
- Kyiv National Economic University named after Vadym Hetman
- V. N. Karazin Kharkiv National University
- National Pedagogical Dragomanov University
- 10 National University of Life and **Environmental Sciences of Ukraine**

#### **CLUSTERS and HE/VET COOPERATION**

Ukrainian clusters engage advanced companies in development of the national education system. They aimed to create and modernize innovational tech programs through cooperation between companies and universities.



Kyiv IT Cluster cooperates with National Technical University of Ukraine Igor Sikorsky Kyiv Polytechnic Institute, Kyiv Academic University, National University of Kyiv-Mohyla Academy, State University of Telecommunications, Kyiv National Economic University named after Vadym Hetman and European University



**Lutsk IT Cluster** cooperates with Lesya Ukrainka Eastern European National University, Lutsk National Technical



University and ITEA courses **Precarpathian Eco-Energy Cluster** cooperates with Vasyl Stefanyk Precarpathian National University

and Ivano-Frankivsk National Technical University of Oil and Gas



Ivano-Frankivsk IT Cluster cooperates with Ivano-Frankivsk National Technical University of Oil and Gas and Vasyl Stefanyk Precarpathian National University



**Cherkasy IT Cluster** cooperates with Cherkasy State Business College



**Chernihiv IT Cluster** cooperates with Chernihiv Polytechnic National University



Vinnytsia IT Cluster cooperates with Vasyl' Stus Donetsk National University, Vinnytsia National Technical University, Vinnytsia State Pedagogical University, Vinnytsia Technical College, Beetroot Academy and Rainbow School



Lviv IT cluster closely cooperates with Ivan Franko National University of Lviv, Lviv Polytechnic National University, and in 2017-2019, cluster worked on the construction of innovational student labs



**Lviv Publishing and Printing Cluster cooperates** with Stavropigion Higher Vocational School of Lviv and Ukrainian Academy of Printing



IT Cluster Konotop cooperates with Classical Vocational College of Sumy State University, Konotop Institute of Sumy State University and Konotop Industrial and Pedagogical Professional College of Sumy State University



KHARKIV KHARKIV IT Cluster cooperates with National Technical University "Kharkiv Polytechnic Institute", V. N. Karazin Kharkiv National University and Kharkiv National University of Radio Electronics

> In 2019, 950 Ukrainian organizations carried out R&D work, of which 43.1% refer to the public sector; 42.9% - to business; 14% - to HE.



## CROSS-SECTOR EXPORT STRATEGY SKILLS DEVELOPMENT IN UKRAINE

Vision

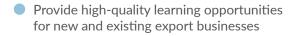
Development of highly skilled workforce supported by initial and continuous industry-relevant learning programs leading to export competitiveness and growth

# Strategic Objectives





Facilitate entrepreneurial spirit among the youth and help SMEs develop managerial skills

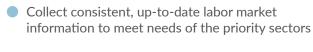




 Enhance collaboration between the industry, HE and VET



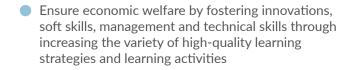
Align educational offering to business needs, in particular SMEs



- Provide market-oriented information on labor offering and needs to meet aspirations of young people and track jobs in high demand by export sectors
- Establish a national platform for communication between government and business aimed at collaboration, planning and development of skills necessary to enhance exports and competitiveness



Develop a national cluster program for collaboration and development of skills necessary to facilitate export growth and competitiveness



- Ensure that flexible and diverse HE and VET offerings are available, which will help develop a vibrant and responsive HE and VET ecosystem
- Develop a knowledge base of cluster initiatives
- Launch a cluster development program













