



# YURIY FEDKOVICH CHERNIVTSI NATIONAL UNIVERSITY



CHERNIVTSI, UKRAINE

[www.chnu.edu.ua](http://www.chnu.edu.ua)

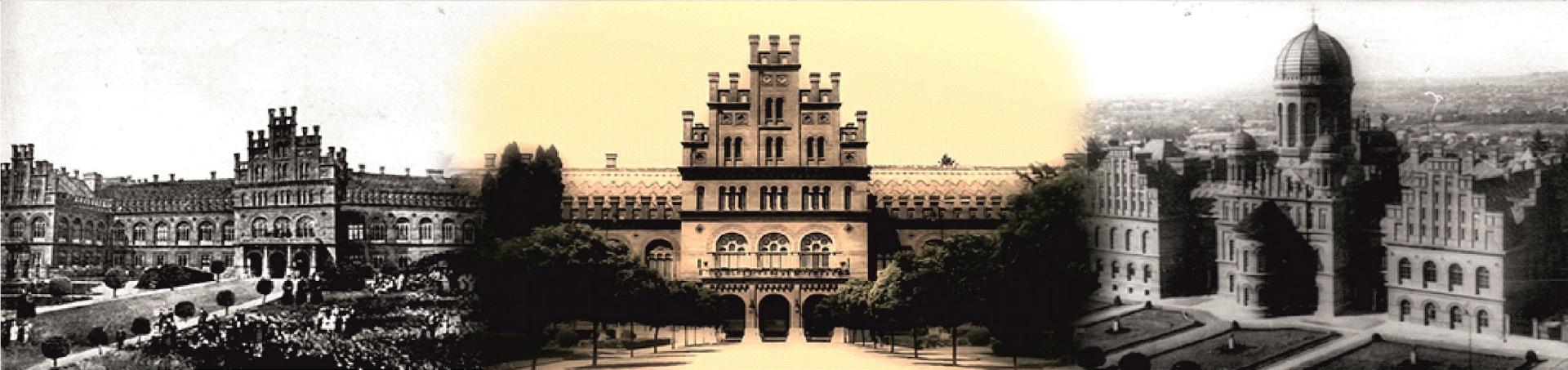




# ABOUT UNIVERSITY



Chernivtsi Yuri Fedkovych National University founded October 4, 1875. It has undergone a complicated development to become one of the leading centers of science, research and education in the state. In 1989 Chernivtsi University was named after a prominent Bukovyna writer Yuriy Fedkovich.



Given the high academic and scientific achievements during the 125th anniversary Chernivtsi University was awarded national status by the Decree of the President of Ukraine, September 11, 2000.

Yuriy Fedkovych Chernivtsi National University is an individual full member of the European University Association. It is also a significant learning, educational and scientific centre in Western Ukraine. The International Office started its official international cooperation in July 1977 when the Academic Cooperation Agreement with Saskatchewan University (Canada) was signed. Nowadays the International Office collaborates with more than 84 establishments of higher education in Europe, Asia, North and South America. International cooperation is annually expanded and improved.

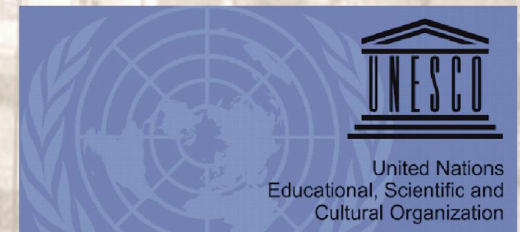


# ABOUT UNIVERSITY



At present time there are sixteen colleges enrolling about seventeen thousand students (full -time, part -time and external) in the Bachelor, Specialist and Master degree programs in 70 majors . The University faculty – 900 academics – constitutes 100 professors and over 500 candidates of sciences (PhDs), and associate professors. The University is accredited with the highest 4th category. There are 8 specialized Scientific Boards conferring the Candidate degree (PhD) and Doctorate degree ( DSc). The university is a full member of the International Association of Universities “Phi Beta Delta” (the USA).

On the 28th of June, 2011 which was the 15th anniversary of the Ukrainian Constitution, the Residence of Orthodox Metropolitans of Bukovyna and Dalmatia (Central Building of Chernivtsi National University) was included into the list of the World's Heritage (UNESCO) according to the results of a secret ballot voting of the members of UNESCO World's Heritage Committee at the 35th session in Paris).





# COLLEGES of UNIVERSITY

Today the University comprises 2 institutes and 10 colleges:

The Institute of Physical, Technical and Computer Sciences (PTCSI);

The Institute of Biology, Chemistry and Biological Resources;

The College of Geography;

The College of Economics;

The College of Modern European Languages;

The College of History, Political Science and International Relations;

The College of Applied Mathematics;

The College of Pedagogy, Psychology and Social Work;

The College of Physical Training and Human Health;

The College of Philology;

The College of Philosophy and Theology;

The College of Law;







# Institute of Physical, Technical and Computer Sciences (PTCSI)

Chernivtsi National University



Director of the PTCSI Institute of Yuriy Fedcovich Chernivtsi National University, Academician of University Association of Ukraine, President of Ukrainian Society of Pure and Applied Optics (National branch of EOS), IGO Galileo Galilei Award, FELLOW of SPIE, FELLOW of OSA, FELLOW of Institute of Physics UK, Doctor of science, professor Oleg V. Angelsky.

Institute of Physical, Technical and Computer Sciences (PTCSI) in Chernivtsi National University has been organized in September 2013 by amalgamating three colleges, viz. Technical/Engineering, Physical and Computer Sciences.

The PTCSI now is the powerful training and research structure including more than 2,000 students, more than 50 PhD students and 5 DSc candidates. 46 DSc, professors, 81 PhD, associate professors, 81 assistant professors are employed at 13 departments of the Institute. Our Staff is highly qualified. Training is provided on 15 specializations.

We are waiting of talented university entrants for which the sufficient conditions will be provided to obtain high-level education and competitiveness of graduates of the Institute on labor-market both in Ukraine and abroad.





# Fields of training and specialities



The University and Institute provide continuity of higher engineering education:  
**Bachelor – Master – Post Graduate education**

The Institute provides training on the following Bachelor Degree Programs for foreign citizens :

- Optotechnics
- Telecommunications

The Institute provides training on the following Masters Degree Programs for foreign citizens :

- Photonics and optoinformatics
- Laser and Optoelectronic devices
- Communication Networks

“Optotechnics ” includes “Photonics and optoinformatics” and “Laser and Optoelectronics technique ”;  
“Telecommunications” includes “Communication Networks” of the specialist’s educational level.





# Fields of training and specialities



**Bachelor Degree Program:**  
**6.051004 "Optotechnics"**

**Master Degree Program on specialities:**  
**8.05100405 "Optical and optoelectronic devices"**  
**8.05104403 "Photonics and optoinformatics"**

The students receive fundamental training on designing and "know-how" of various optical and optoelectronic instruments and devices; on using modern methods of searching for the technical solutions, methods of the theoretical and experimental researches; on programming on computers, mathematical modelling, basic knowledge of patent and license work; manufacture organization, economy, fundamentals of production management and marketing.

For graduate students the courses offered include geometrical and physical optics, theory of optical systems, lens and system design, quantum optics, laser optics, nonlinear optics, optical engineering, diffractive and Fourier optics, optical measurement, optical information processing, optical fibres and communications, biophotonics, optoelectronic systems, sources and detectors of optical radiation, optical measurements, holography, spectroscopy, integrated optics, physics and technology of optical materials, physics of technological processes.

## The basics directions of education are:

Optical and optoelectronic system design.  
Medical system design.  
Development of the software for optoelectronic system design.

Application of devices in optics and optoelectronics.  
Communication system engineering.  
Optical measurements.





# Fields of training and specialties

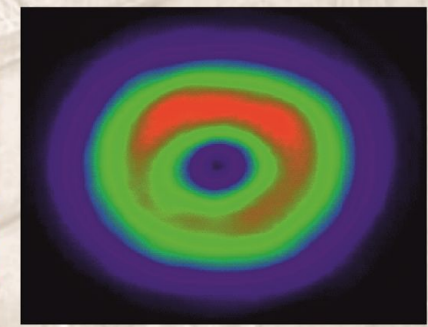
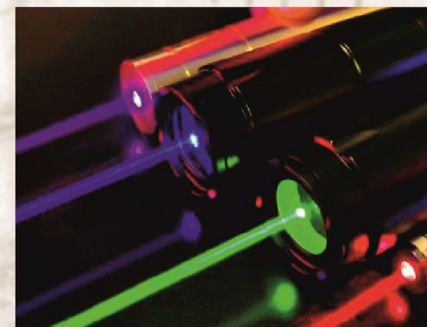
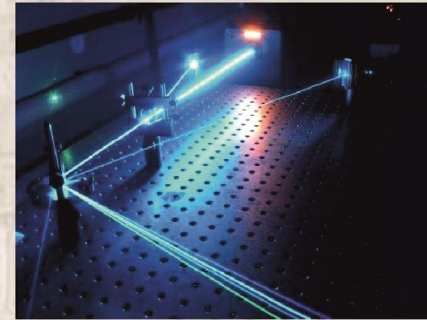


## Bachelor Degree Courses

The Correlation Optics department turns out specialists on the direction 6.051004 "Optotechnics" with professional skill "Bachelor of Science in Optical Engineering". The term of bachelors training for the daily studying is 4 years.

### Applied disciplines

?	Name	Credits/Hour
1	Design in Optical Instrument Engineering	6/216
2	Technology of Production of Elements of Optical Devices and Systems	6/216
3	Assembling and Adjustment of Optical Devices	4/144
4	Spectral Technology and Optical Measurements	4/144
5	Applied Optics	4/144
6	Waveguide Optics	3/108
7	Holography	4/144
8	Optical and Computer Image Processing	4/144
9	Laser Industrial Technology and Microtechnology	4/144
10	Application of Packets of Applied Software	4/144







# Fields of training and specialties



**Bachelor Degree Program:**

**6.050903 "Telecommunications"**

**Master Degree Program:**

**8.0500402 "Communication Networks"**

The specialist in the field of telecommunication engineering must be able to apply knowledge and skills to solve problems of professional activity which concern the maintenance of the equipment of the network and the electric communication of the station, control and ensuring the information security in telecommunication systems. The specialist must also be able to design new and to modernize existing systems of transmission, telecommunication and informational networks, systems of cell phone (mobile) communication.

The Bachelor in Telecommunication can continue his/her training in a university in the second level of higher education  
Master/Specialist in the specialty of **Communication Networks**.

**The basics directions of education are:**

- |   |   |
|---|---|
| <ul style="list-style-type: none"><li>➤ Technologies of maintenance for telecommunication and informational networks, etc;</li><li>➤ Main theories of electric signals and electric circuits;</li><li>➤ Modern systems of power supply.</li></ul> | <ul style="list-style-type: none"><li>➤ Main postulates of the theory of electric communication, propagation of radio-waves, metrology in the branch of telecommunication, internet- technologies;</li><li>➤ Main principles and rules of safety in vital activity.</li></ul> |
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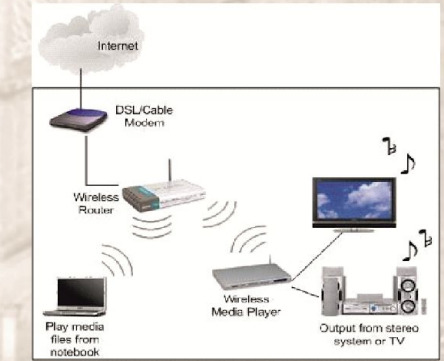
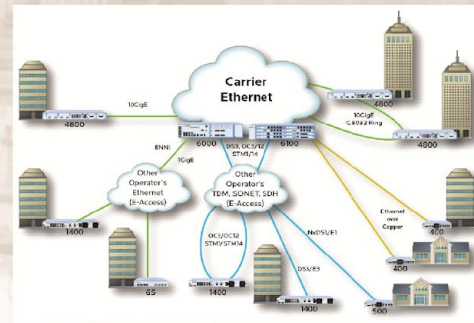
# Fields of training and specialties



## Bachelor Degree Courses

The Correlation Optics department turns out specialists on the direction **6.050903 "Telecommunications"** with professional skill **"Bachelor of Science in Telecommunications"**. The term of bachelors training for the daily studying is 4 years.

?	Name	Credits/Hour
1	Theory of Electrical Circuits	8,5/306
2	Physical Fundamentals of Optical Communication	7/252
3	Theory of Electrical Communication	8/288
4	Switching Systems	5,5/198
5	Fiber-Optic Communication Lines	6/216
6	Wireless Communication	4,5/162
7	Telecommunication and Computer Networks	5/216
8	Information Security in Telecommunication Systems and Networks	5/180
9	Software Packets Application	4/144
10	Electric Power Supply of Devices and Systems	2/72







# Documents required for admission



## Foreign citizens have to submit the following documents:

1. Completed application form.
2. A copy of document of education with list of studied courses (subjects) and received grades (points) –high secondary school diploma and transcripts or college/university diploma and transcripts.
3. A copy of the passport.
4. The medical certificate of the state of health certified by an official health care authority of a country, where a foreigner has come from, and issued at least two months prior to the entrance into Ukraine for education.
5. The document evidencing the absence of HIV –infection, unless otherwise for by international agreements of Ukraine.
6. The insurance policy for emergency medical care (except for foreigners arrived from countries, with which agreements on free provision of emergency medical care are concluded).
7. A copy of the birth certificate.
8. 6 photographs having the size of 6\*4 cm.
9. Air ticket valid for one year with an open date for the applicant's return to his/her home country.

## Training term:

- Bachelor Degree Program – 4 Years;
- Masters Degree Program – 1 Years  
(after 3 Years of Education on Bachelor Program) ;
- PhD Program – 3 Year

## Tuition fees

Tuition fees are specified by the Ministry of Education and Science of Ukraine:

\$2800 USD per Year – Bachelor Degree Program;

\$3200 USD per Year – Masters Degree Program;

\$4000 USD per Year – PhD Program.





# Students Scientific Life



Along more than 15 years, the student chapters of the Optical Society of America (OSA), The Society of Photo-Optical Instrumentation Engineers (SPIE), Institute of electrical and electronics engineers and the Cisco Networking Academy are successfully functioning.

**SPIE** is a not-for-profit international professional society for optics and photonics technology, founded in 1955. It organizes technical conferences, trade exhibitions, and continuing education programs for researchers and developers in the light-based fields of physics, including, but not limited to: optics, photonics, and imaging engineering

**The Optical Society (OSA)** is the leading professional association in optics and photonics, home to accomplished science, engineering, and business leaders from all over the world. Through world-renowned publications, meetings, and membership programs, OSA provides quality information and inspiring interactions that power achievements in the science of light.







# Students Scientific Life



**Institute of electrical and electronics engineers (IEEE)** is the world's largest professional association dedicated to advancing technological innovation and excellence for the benefit of humanity. IEEE and its members inspire a global community through IEEE's highly cited publications, conferences, technology standards, and professional and educational activities.

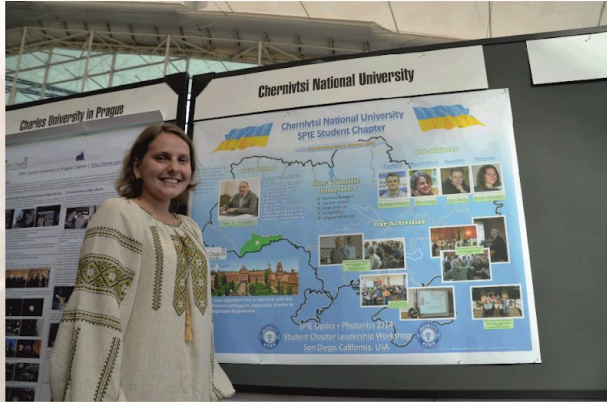
**Cisco Networking Academy.** Every year, hundreds of thousands of Networking Academy students worldwide gain the skills needed to build, design, and maintain computer networks; improving their career prospects while filling the global demand for networking professionals. With 9,000 academies in 170 countries, Networking Academy helps individuals prepare for industry-recognized certifications and entry-level information and communication technology (ICT) careers in virtually every type of industry. Students develop foundational skills in ICT while acquiring vital 21st-century career skills in problem solving, collaboration, and critical thinking.







# Students Scientific Life







# Foreign partners of the Institute



## Our partners:



European Physical Society  
www.eps.org



INTERNATIONAL COMMISSION FOR OPTICS  
COMMISSION INTERNATIONALE d'OPTIQUE

**HZB** Helmholtz  
Zentrum Berlin

**EOS**

European Optical Society



**MOSCOW STATE  
UNIVERSITY**



Our graduated students successfully work in prestigious scientific institutions in USA (Florida), Canada (Quebec), Germany (Jena), Great Britain (London), China (Beijing), Czech Republic (Prahá, Olomouc), Romania (Bucharest), etc.





# Welcome to Chernivtsi







# Contacts



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