Development of the Double Degree Program at the Lviv Polytechnic National University with European universities

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Head of the Center for International Education
Dr. Khrystyna Barvinska, Assoc. Prof.,
responsible for DDD program
Internationalization Strategy

MISSION OF INTERNATIONALIZATION
To create an environment of mutual exchange of knowledge through the mobility of students and academic staff for personal growth and sustainable development of the University.

STRATEGIC OBJECTIVES OF INTERNATIONALIZATION
1. Ensure high quality of the educational process by introducing international experience into the educational activities, providing international recognition of the qualifications
2. Develop international research and innovation
3. Strengthen international academic cooperation in the field of culture, sports, and social activity
4. Inform the international community about Lviv Polytechnic National University
# LVIV POLYTECHNIC IN INTERNATIONAL AND NATIONAL UNIVERSITY RANKINGS

<table>
<thead>
<tr>
<th>Ranking</th>
<th>Place in the ranking 2021</th>
<th>Place Among the universities of Ukraine</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Times Higher Education World University Rankings:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• THE Engineering &amp; Technology</td>
<td>801-1000</td>
<td>3</td>
</tr>
<tr>
<td>• THE Physical Sciences</td>
<td>601-800</td>
<td>2</td>
</tr>
<tr>
<td>• THE Business &amp; Economics</td>
<td>301-400</td>
<td>2</td>
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<tr>
<td>• THE Computer Science</td>
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<tr>
<td><strong>Times Higher Education Impact Rankings</strong></td>
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<tr>
<td>• Times Higher Education Impact Rankings</td>
<td>401-600</td>
<td>1</td>
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<tr>
<td><strong>QS World University Rankings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Petroleum Engineering</td>
<td>101-150</td>
<td>1</td>
</tr>
<tr>
<td>• Computer Science and Information Systems</td>
<td>401-450</td>
<td>1</td>
</tr>
<tr>
<td>• QS EECA University Rankings</td>
<td>106</td>
<td>5</td>
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<td><strong>Webometrics Ranking of World Universities</strong></td>
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<tr>
<td>• Webometrics Ranking of World Universities</td>
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<tr>
<td><strong>UI GreenMetric World University Rankings</strong></td>
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</tr>
<tr>
<td>• UI GreenMetric World University Rankings</td>
<td>493</td>
<td>5</td>
</tr>
</tbody>
</table>
STRUCTURE

• 17 academic institutes (101 departments);
• 31 academic and laboratory buildings;
• 16 hostels (dormitories);
• 150 research, testing and branch laboratories;
• International Institute of Education, Culture and Diaspora Relations;
• Postgraduate Institute;
• 8 colleges;
• Polytechnic Project Construction Association;
• geodesic polygon and laboratory;
• scientific-technical library;
• publishing house;
• 4 recreational camps for students and teachers;
• Prosvita Cultural Association.

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## ACADEMIC INSTITUTES

| Construction, architectural and geodetic directions | Institute of Architecture and Design (IARCH)  
| | Institute of Building and Environmental Engineering (IBEE)  
| | Institute of Geodesy (IGD)  
| Engineering direction | Institute of Power Engineering and Control Systems (IPEC)  
| | Institute of Engineering Mechanics and Transport (IEMT)  
| | Institute of Telecommunication, Radioelectronics and Electronic Engineering (ITRE)  
| Information and computer technology directions | Institute of Computer Science and Information Technologies (ICSIT)  
| | Institute of Computer Technologies, Automation and Metrology (ICTA)  
| | Institute of Enterprise and Advanced Technologies (IEAT)  
| Chemical, ecological and natural directions | Institute of Chemistry and Chemical Technologies (ICCT)  
| | Vyacheslav Chornovil Institute of Sustainable Development (ISD)  
| | Institute of Applied Mathematics and Fundamental Sciences (IMFS)  
| Economical, managerial and socio-humanitarian directions | Institute of Economics and Management (IEM)  
| | Institute of Humanities and Social Sciences (IHSS)  
| | Institute of Jurisprudence, Psychology and Innovative Education (IJPIE)  
| | Institute of Administration and Postgraduate Education (IAPE)  

**also:**

- Institute of Distance Education (IDE)
- International Institute of Education, Culture and Diaspora Relations (IECDR)
Academic Institutes and departments

- Institute of Architecture (architecture and construction, arts and culture).
- Institute of Building and Environmental Engineering (architecture and construction, civil safety).
- Institute of Geodesy (geodesy, land planning, and Earth sciences for environmental monitoring using geodynamics, remote sensing and modeling).
- Institute of Power Engineering and Control Systems (electrical engineering, automation and instrument making).
- Institute of Computer Science and Information Technologies (information technologies, social sciences, manufacturing and technologies)
- Institute of Computer Technologies, Automation and Metrology (information technologies, automation and instrument making).
- Institute of Applied Mathematics and Fundamental Sciences (social and behavioral sciences, natural sciences, mathematics and statistics, information technologies).
- Institute of Telecommunication, Radiotechnology and Electronic Engineering (automation and instrument making, electronics and telecommunication).
- Institute of Chemistry and Chemical Technologies (chemical bioengineering, mechanical engineering, manufacturing and technologies, healthcare).
Academic Institutes and departments

- **Institute of Humanities and Social Sciences** (information technologies, social and behavioral sciences, arts and culture, social work).
- **Vyacheslav Chornovil Institute of Ecology, Nature Protection and Tourism** (natural sciences, manufacturing and technologies, management and administration, service sector, social and behavioral sciences).
- **Institute of Economics and Management** (social and behavioral sciences, management and administration).
- **Institute of Jurisprudence and Psychology** (of social and behavioral sciences, law and journalism).
- **Institute of Administration and Postgraduate Education** (provides programs for students of Bachelor, Specialist and Master degrees and professional development courses for specialists in all fields and specialties licensed at the University)
- **Institute of Distance Education** provides an opportunity for students to gain basic higher education on-the-job; education process is conducted by using distance learning technologies such as video classes with electronic textbooks, manuals and other methodological support.
- **International Institute of Education, Culture and Diaspora Relations** was established for developing cooperation with higher education institutions, strengthening educational and cultural relations with the Ukrainian diaspora.
Over **33,000** students.

Over **2,300** scientific and pedagogical personnel:

- over **790** hold the degree of doctors of science, professors;
- over **1,200** – PhD, Associated Professors
MAIN SCIENTIFIC RESEARCH AREAS

- Architecture and design;
- Civil and environmental engineering;
- Power engineering and control systems;
- Geodesy;
- Computer sciences and information technologies;
- Computer technologies, automation and metrology;
- Nanotechnologies, advanced materials and production technologies;
- Telecommunications, radio and electronic engineering;
- Chemistry and chemical technologies;
- Biotechnology;
- Mechanical engineering and transport;
- Applied mathematics and fundamental sciences;
- Humanities and social sciences;
- Law and psychology;
- Economics and management.
The number of educational and educational-scientific programs (24.11.2022)

<table>
<thead>
<tr>
<th>Education level</th>
<th>UA</th>
<th>En</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor program</td>
<td>67</td>
<td>8</td>
</tr>
<tr>
<td>Master's program</td>
<td>181</td>
<td>23</td>
</tr>
<tr>
<td>PHD program</td>
<td>54</td>
<td>7</td>
</tr>
</tbody>
</table>
# Academic specialties taught in English

<table>
<thead>
<tr>
<th>Bachelors (4 years)</th>
<th>Masters (1.5 - 2 years)</th>
<th>Ph.D. (4 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction and Civil Engineering</td>
<td>Industrial and Civil Construction</td>
<td>Cyber Security</td>
</tr>
<tr>
<td>Applied Mechanics</td>
<td>Building Constructions, Products and Materials Technologies</td>
<td>Public management and administration</td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>Robotics Systems and Complexes</td>
<td>Architecture and urban planning</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Wheeled and Tracked Vehicles</td>
<td>Construction and civil engineering</td>
</tr>
<tr>
<td>Management</td>
<td>Artificial Intelligence</td>
<td>International relations, public communications and regional studies</td>
</tr>
<tr>
<td>Public Management and Administration</td>
<td>Information Technology Design</td>
<td>International economic relations</td>
</tr>
<tr>
<td>Architecture</td>
<td>Information Systems and Technologies</td>
<td>Management</td>
</tr>
<tr>
<td>Pedagogy</td>
<td>Economics and Construction Management</td>
<td>Applied mechanics</td>
</tr>
<tr>
<td>-</td>
<td>Management of Foreign Economic Activity</td>
<td>Computer science</td>
</tr>
<tr>
<td>-</td>
<td>International Economics</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>Marketing</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>Architecture and Urban Planning</td>
<td>-</td>
</tr>
<tr>
<td>-</td>
<td>etc</td>
<td>-</td>
</tr>
</tbody>
</table>

- Development of the Double Degree Program at the Lviv Polytechnic National University with European universities
EDUCATIONAL AND SCIENTIFIC LABORATORIES WITH INTERNATIONAL COMPANIES

GERZ HOLDING
### Project activity

<table>
<thead>
<tr>
<th>Program</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erasmus KA1</td>
<td>50+</td>
</tr>
<tr>
<td>Erasmus+ KA2</td>
<td>5</td>
</tr>
<tr>
<td>Erasmus+ Jean Monnet Chairs</td>
<td>3</td>
</tr>
<tr>
<td>Erasmus+ Jean Monnet Module</td>
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<tr>
<td>Horizon 2020</td>
<td>2</td>
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<tr>
<td>USAID</td>
<td>1</td>
</tr>
</tbody>
</table>
INTERNATIONAL COOPERATION

100+ international grants and projects annually

240+ international agreements on cooperation with foreign institutions

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The number of students who studied under the double degree program

![Bar chart showing the number of students per year]

Institutional standard for ensuring the quality of educational activities and higher education:
“The procedure for organizing the education of students under international double degree programs”
Double Diploma programs

34 agreements on Double Diploma programs:

- 23 – with Polish HEIs;
- 3 – with German HEIs;
- 4 – with Italian HEIs;
- 1 – with English HEI;
- 1 – with French HEI;
- 1 – with Slovak HEI.

1. Université de Wurtzbourg (Julius-Maximilians-Universität Würzburg,
2. Neubrandenburg University of Applied Sciences (Hochschule Neubrandenburg),
2. Ilmenau University of Technology)
Specialities of DDDP

- Hydrotechnical construction, water engineering and water technologies;
- Restoration of architectural and urban monuments, reconstruction of architectural objects;
- Accounting and auditing, Finance and credit;
- Management, International economic relations;
- Management of innovative activities,
- Management of foreign economic activity,
- Logistics,
- Administrative management,
- International economy;
- International political and economic relations;
- Information technology design/ System design;
- Geodesy, Geomatics;
- Industrial and civil construction, Heating and gas supply and ventilation;
- Tourism;
- Mechanical engineering;
- Computer engineering, Artificial intelligence systems, Applied mathematics;
- Engineering power systems etc.
The main stages of the initiation and implementation of the DDD Program:

- Contact with partner University;
- Concluding a framework Agreement on cooperation;
- Conclusion of the Agreement on student training under the Program;
- Competitive selection of students to study under the Program and their registration at partner higher education institutions;
- Referral of students to study under the Program at partner higher education institutions;
- Training of students according to the Program;
- Mutual recognition by the University and partner HEIs of the results of studies under the Program;
- Protection of qualification works (projects) or qualification examination (hereinafter – Attestation);
- Assigning qualifications and issuing documents on higher education.
- in addition to mandatory subjects from the curriculum at the partner higher education institution, students have the right to independently choose additional subjects that will be included in the supplement to the diploma;

- at the University, students are required to acquire at least 1/3 ECTS credits, which are required to obtain a University diploma in the chosen educational program;

- in the partner higher education institution, students are recommended to gain no more than 75% of the amount of ECTS credits provided for in the curriculum per semester.
How to participate in DDD Program?

- You should be a student of LPNU;
- The studying rating must be at least 71 points;
- Language skills must be in high level B2, as it's mentioned in Agreement;
- The selection of participants is carried out by the relevant Department and representatives of the Dean's office and the Center of International Education.
Challenges

1. Financial support for students to participate in the program.
2. Coordination of the procedure for recognition of disciplines to reduce the number of ECTS credits.
3. Low motivation of IT students to participate in the program.
ВІЗУАЛЬНА ІДЕНТИФІКАЦІЯ ЛЬВІВСЬКОЇ ПОЛІТЕХНІКИ 23
Z cyklu obrazów J. Matejki z auli Politechniki we Lwowie.
THANK YOU FOR YOUR ATTENTION!