Department of Information Technology Publishing

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Department of Information Technology Publishing (ITVS) - a teaching and research unit of the Institute of Computer Science and Information Technologies of Lviv Polytechnic, which was established in 2011 based on a group of teachers of the department "Automated control systems".

Department of Information Technology Publishing	
unit Type	chair
Abbreviation	ITVS
Date of foundation	2011
Founders	National University "Lviv Polytechnic"
Membership	Institute of Computer Science and Information Technology
Predecessor	Department of automated control systems
Head of Department	prof. Peleshko Dmitri (Acting)
Location (address)	st. St.Bandery 28, 79013, Lviv; 5 building, room. 908
On page lp.edu.ua	http://lp.edu.ua/itvs
Own site	http://itvs.lp.edu.ua

Content

general information

The department trains bachelors in the direction 0515 "Publishing Business", and masters - in accordance with the specialties 7.051501 and 8.051501 "Computer technologies and systems of publishing and printing industries."

History Department

In 1998, the department "Automated control systems" (ACS) launched bachelors basic direction "Light industry", which in 2001 was renamed "publishing and printing" (BBC, code 051501). Every year set a freshman stationary form of education constituted a group of budget and commercial contingent.

In 2002 at the department "Automated control systems" made the first bachelors on direction "Publishing Business", which in 2002/2003 BC. g. continued training in the specialty "Computer technologies and systems of publishing and printing industries' (KTSIPP, code 7-8.051501). In 2003 ACS Department received accreditation to graduates on this specialty.

By order of the rector of the National University "Lviv Polytechnic" to continue providing training in the field of "Publishing Business" in 2011, the Department ACS established a new structural unit - Department "Information technology publishing" (ITVS).

Head:

- 2011-2014 biennium. - PhD, Professor Rashkevych Yuri
- 2015 - PhD, Professor Peleshko Dmitri (Acting)

In 2011, the department ITVS the first graduates / masters in KTSIPP, and in 2012 - the first issue of the bachelors in the direction of the Air Force.

Teaching

Students studying the direction of "Publishing Business" get necessary knowledge for prepress printing media, design, design and development of multimedia and others. Experts in publishing and printing have the necessary expertise in developing and providing promotional marketing campaigns. The scope of their activities is both traditional and operational printing.

During training, students master modern technologies and software systems for image processing (Adobe PhotoShop, Adobe Illustrator, CorelDraw), pre-press (PageMaker, InDesign, Quark XPress), creation of multimedia (Flash, Maya) and others. Future specialists able to design and develop a modern Web-sites and portals using the latest technologies (HTML, DHTML, XML, Java, JavaScript, Php, .NET) and software (Macromedia Dreamweaver, Microsoft Visual Studio). In design students get all the necessary knowledge to design corporate typefaces, corporate identity development (brandbook) and animated presentation (Macromedia Director, Authorware).

All the theoretical knowledge absorbed in practical and laboratory studies using modern hardware and software. For this purpose not only used Wintel platform, but computers based on Mac OS.

Bachelor in "Publishing Business" provides an opportunity to continue their education in the second cycle (specialist or master), specialty "Computer technologies and systems of publishing and printing industries."

Department Partners

Teaching staff

Research Department

The department is actively developing two research areas:

1st - **"Information technology analysis, transformation and synthesis of audio and video signals"** (Science. Coeur. - prof. Rashkevych YU.M .). Scientific Group (Ph.D., Assoc., Prof.kaf. Peleshko DD , Ph.D. Assoc. Kustra N.O ., PhD. Lotoshynska ND . , Ph.D. Assoc. Nazarkevych MA , senior teacher. Kovalchuk AM) is working on the problems of digital processing of one- and two-dimensional signals with subsequent formation and improve the theory and practice of interactive control systems. Research in these areas (prof. Rashkevych Yu , Ph.D. Lotoshynska ND) allow to improve the capacity efficiency of interactive control systems considered in the management of the state operator, using modern technology hardware and parallel signal processing. D.Sc. Peleshko D . and Ph.D. H Kustra . researching the pre-processing of images (two-dimensional signals) for solution mining in real-time. Another type of problem to be solved within this area is to protect information. Developed modification algorithm RSA (Ph.D. Peleshko D., Art. Off. Kovalchuk A) can solve the problem for the securing of two-dimensional and one-dimensional signals from unauthorized access with enhanced strong cryptography. Based Ateb-developed information technology functions effective protection of printed products, including Accounting documents (Ph.D. Nazarkevych MA).

Based on the results of the system of automated bread bakeries and a system for detecting the movement of objects. In collaboration with the Department. ACS built Web-based learning management system, the system of automated electricity metering, automatic process control system of oil production, subsystem parallelizing processing for SCADA system TraceMode.

2nd - **"Development of methods and tools for data mining models based on geometric transformations"** (Science. Coeur. - prof. Tkachenko RA). Scientific Group (Ph.D. Assoc. Kynashiv JE , PhD. Ripper OJ , Dr. Al. Miyushkovych JG, graduate Andriyetskyy B. , Demyanchuk C) carried out work on developing the basic components of information technology for input images with high resolution and sensitivity, rapid adaptive analysis, recognition, compression, archiving and retrieval of audio-video imagery to a computer.

Ongoing research on the subject of research "Neural structure geometric transformations such hardware for robotic systems and facilities"; carried out exploratory work on the use of neural models of geometric transformations to manage vitroheneratornymy settings. The research results will be used in training courses "Artificial Intelligence" and "Mathematical Foundations protect documents from unauthorized access."

Contacts