





Education for Leadership, Intelligence and Taler Encouraging

NTU "KhPI" is a member of the most prestigious programs and projects funded by international organizations and foundations. It leads Ukrainian universities in the number of implemented TEMPUS projects (29 projects).

42 international projects are currently being implemented at the University.

The most outstanding projects of NTU "KhPI" are given below.

# ERASMUS +, KA2: Capacity-building in the Field of Higher Education 2015-2018

"University-enterprises cooperation in game industry in Ukraine" (GameHub)

### Project objective:

- to ensure employability and self-sustainability of HEI graduates, unemployed engineers as well as veterans of Anti-Terror Operation (ATO) in Ukraine by offering them the set of knowledge and skills demanded by digital game industry (GI) - a highly-networked one that impacts on global economy. GI strongly based on online work approach allows one to develop a highly technological field and, therefore, gross domestic product without large investments.

Official project website: gamehub-cbhe.eu Facebook group: www.facebook.com/groups/477292889122044

ERASMUS +, KA2: Capacity-building in the Field of Higher Education

# 2015-2018

# "Establishing Modern Master-level Studies in Information Systems" (MASTIS)

#### **Project objective:**

- to improve Master Programme in Information Systems according to the needs of the modern society; to bring the universities closer to changes in global labour market and world education sphere; to enable them to stay responsive to employers' needs; to give students an idea of various job profiles in the Information Systems domain; to ensure employability throughout graduates' professional and soft skills.

Official project website: http://mastis.pro

# Inconet Twinning Grant 2015-2016

Project objective:

- to carry out activities to support projects in the framework of H2020.

### "Creation of integrated technologies for industrial complexes of the Republic of Kazakhstan to ensure their energy supply efficiency and environmental safety" 2015-2017

#### **Project objective:**

- to develop integrated technologies allowing to identify specific ways of modernization of existing and construction of the optimal structure of new industrial complexes for processing raw materials and manufacturing of products.

# The Local Initiatives Fund of the Embassy of Finland in Ukraine «Gender mainstreaming in higher education institutions of Ukraine»

#### **Project objective:**

- to contribute to the achievement of gender equality and implementation of gender sensitive approaches at Ukrainian universities. The expansion of the practice of gender audit is expected to draw attention to the issue of gender equality at universities and motivate the administration to implement the policy of equal rights and opportunities for women and men, allowing each person, regardless of sex, to fully show one's worth at HEI.

## «FESK» project 2015-2016 "The first business school of NTU "KhPI""

#### **Project objective:**

- to develop innovation and entrepreneurial activities of students and Ph.D. students of NTU "KhPI" to enhance creativity and labour market competitiveness.

# German-Ukrainian network for gaining the Candidate of Sciences degree at Otto-von-Guericke University Magdeburg

# 2011-2016

# "Sustainable production and use of electric energy, development of electric cars"

#### Project objective:

- to gain the degree of Candidate of Sciences at Otto-von-Guericke University Magdeburg in electric cars development, sustainable production and use of electricity; bilateral scientific internships of Ph.D. students (12 Ukrainian and 3 German).

## Tempus IV 2013-2016

# "Education for Leadership, Intelligence and Talent Encouraging" (ELITE)

#### **Project objective:**

- to strengthen the role of Ukrainian HEIs in implementation of Public Policy on Human Resources Development (HRD) as engines for society progress through realization of services for leadership and organizational development (L&OD).

Official project website: http://www.elite-project.eu/

# Tempus IV 2013-2016

# "Berufliche und unternehmerische Selbständigkeit durch Entrepreneurship-Erziehung und Gründungsberatung" (BUSEEG)

#### **Project objective:**

- to develop and implement a life-long learning model for sustainable improvement of the vocational and entrepreneurial competences of students and graduates through entrepreneurship education and consulting at universities and vocational schools in cooperation with further training academies, regional chambers of commerce and ministries of education in Russia and Ukraine.

Official project website: https://www.wu.ac.at/buseeg/

## The Seventh Framework Programme (FP7)

# "Distributed Knowledge-Based Energy Saving Networks" (DISKNET)

#### **Project objective:**

- to stimulate a long term research collaboration between academic organizations from the European Research Area (ERA) (Hungary, Greece and Croatia) and leading academic partners from third countries (Ukraine, Jordan and Morocco), in the area of energy systems engineering and energy supply chains.

Learn more about the project: http://cordis.europa.eu/project/rcn/102525 en.html

# The Seventh Framework Programme (FP7) 2012-2016

"Innovative Nondestructive Testing and Advanced Composite Repair of Pipelines with Volumetric Surface Defects" (INNOPIPES)

**Project objective:** 

- to improve existing and develop new methods for detection and repair of VSD based on lowfrequency ultrasonic testing with directional waves and advanced composite repair systems to bring efficiency of damaged section up to the level of undamaged pipeline.

Official project website: http://www.ims.rtu.lv/innopipes/en

# Tempus IV 2012-2015

# "Innovation Laboratories: using an open innovation learning platform and action research in enterprise education in order to enhance the engagement and innovative capabilities of Universities in Post-Socialist Societies" (INNOLAB)

#### Project objective:

- to develop a network of five innovation laboratories that will bridge the worlds of enterprise and academia, stimulate innovation and enrich the experience of students in Ukraine and Belarus.

Official project website: http://www.innolabs.org/uk/

### Tempus IV 2012-2015

# "Leading and Managing Change in Higher Education" (La MANCHE)

#### **Project objective:**

- to promote the modernization of the Higher Education (HE) in Armenia, Belarus, Georgia, Moldova and Ukraine by building governance and management capacities at the participating Higher Education Institutions (HEIs), initiating sustainable dialogue on the HE reforms among relevant interest groups, empowering students to become more actively involved in decision making at their HEIs.

Official project website: http://www.lamanche-tempus.eu/

## Tempus IV 2012-2015

# "Industrial Cooperation and Creative Engineering Education based on Remote Engineering and Virtual Instrumentation" (iCo-op)

#### **Project objective:**

- to empower university-enterprises partnerships in Armenia, Georgia, and Ukraine by modernizing engineering education based on remote engineering and virtual instrumentation enhanced with transversal knowledge and competences at universities; and offering contemporary methods of the vocational education and training for adults in enterprises.

Official project website: http://www.ico-op.eu/

### Tempus IV 2012-2015

# "Reformation of the Curricula on Built Environment in the Eastern Neighbouring Area" (CENEAST)

#### Project objective:

- to upgrade curricula of universities of Belarus, Russia and Ukraine with new modules on energetically and ecologically sustainable, affordable and healthy built environment in order to enhance the quality and relevance of education in PC universities to labour market needs. Official project website: http://www.ceneast.com/

# **TEMPUS IV 2011-2014** "EU-PC Double Degree Master Program in Automation / Mechatronics" (MPAM)

#### **Project objective:**

- to harmonize the Russian and Ukrainian engineering education with the EU one and provide mutual degree recognition through development and introduction the Double Degree Master Program in Automation/Mechatronics.

Official project website: <u>http://mpam-tempus.eu</u>

# **TEMPUS IV 2010-2013**

# "E-Internationalization for Collaborative Learning" (EICL)

#### Project objective:

- to give the system character to the internationalization processes of the universities' educational programs on the basis of common commitment to quality and using of information technologies.

- to create international open virtual platform «E-Learning Int. Clearing house» on the basis of WEB 2.0 for cross-cultural communications in academic community and develop skills of international on-line project teamwork.

-to improve the international teachers and students' interaction in learning process using e-tools of internationalization in pilot courses.

Official project website: http://eicl.kharkiv.edu/

## **TEMPUS IV 2009-2011**

# "Western-Eastern Teacher Education Network" (WETEN)

#### Project objective:

- to undertake an analysis of the pedagogic traditions, skills and competencies required for higher education teachers in accordance with European e-Learning strategy and e-Bologna action;

- to improve the quality of teaching and learning in HEI by providing teaching materials for eastern members of the network (5 modules, virtual repository of resources);

- to train circa 400 teachers and master degree students from eastern HEI and to implement by the end of the project life the new teaching methodologies for 6 subject area, including educational sciences.

Official project website: http://www.weten.org/content/about-project

# TEMPUS TACIS 2009-2011

# "Support for high-tech and innovative enterprises, as well as technology transfer to business in Ukraine" (InnoEnterprise)

#### **Project objective:**

- to create conditions for accession of Ukraine to the European network of companies.

- to implement the concept of industrial parks and innovation clusters in regions of Ukraine according to international standards

- to launch the development of new innovative strategies.

Official project website: http://www.innoenterprise.com.ua

## **TEMPUS III 2007-2008**

# "Development of Strategy of UA Students International Mobility Using the ECTS Opportunities"

#### **Project objective:**

 to provide Ukrainian students from 12 regions with detailed information on the ECTS opportunities and to fulfill students practical requests on international mobility on the basis of the All-Ukrainian Network of ECTS regional consulting points.

Official project website: http://www.ects.kharkiv.edu/

# **TEMPUS III 2007-2008** "Practicum to Improve Ukrainian e-Learning System"

#### **Project objective:**

- to facilitate mobility of Ukrainian educational system by creating conditions for improvement of eLearning system at Ukrainian universities based on European standards and European experience.

Official project website: http://cde.kpi.kharkov.ua/tempus/

## **TEMPUS III 2007-2008**

# " Introduction of the Two-level System into Mechanical Engineering Specialty"

#### **Project objective:**

- to modernize basic documents of Ukrainian Higher Education such as: curriculum, specialty standards and other of specialty (direction) Mechanical Engineering for the transition from the three level system (Bachelor-Specialist-Master) to the two-level system (Bachelor-Master) of education.

### **TEMPUS III 2007-2008**

# " TUNING IV: Curricular Reform Taking Place. Learning Outcomes and Competences in Higher Education"

#### **Project objective:**

- to contribute significantly to the elaboration of a framework of comparable and compatible qualifications in each of the (potential) Bologna signatory countries, which should be described in terms of workload (ECTS credits), level, learning outcomes, competences and profiles for 3 cycles.

### **TEMPUS III 2007-2009**

# "Déploiement de dispositifs de coopération universités/entreprises en Ukraine de l'Est pour l'économie et la gestion"

- Mieux intégrer l'économie/gestion dans l'organisation universitaire des dispositifs de coopération Faciliter l'appropriation des "bonnes pratiques" de coopération universités /entreprises et de leurs dispositifs issus des expériences des universités européennes Contribuer au développement économique du territoire dans les nouvelles conditions économiques et améliorer l'insertion des jeunes diplômés dans les entreprises Déployer les fonctions et organes d'administation à l'appui de la professionalisation de l'enseignement, a travers les dispositifs existants ou créés.

## **TEMPUS III 2007-2009**

# "Computer Aided Industrial Design Training for Ukrainian Engineers"

#### Project objective:

- to establish a new curriculum of a Master Course "Computer Aided Industrial Design" (CAID), based on the European Universities experience, and introduce it in four Ukrainian Technical Universities.

- to create necessary conditions for the training of the CAID Master's students in Ukrainian Technical Universities in accordance with the European standards through the retraining of teaching staff, development of necessary teaching materials, creating the modern CAD laboratories, and adaptation of the EU teaching methodologies and technologies.

## **TEMPUS III 2006-2007**

# "Accreditation and standardization of distance education"

#### **Project objective:**

- to facilitate introduction of standards for distance education and a system for accreditation of distance education in Ukraine which is compliant with the European ones and requirements stated in the Bergen Communique.

## **TEMPUS III 2006-2007**

# "All-Ukrainian Network of Regional Consultation for European Credit-Module System (ECTS)"

#### Project objective:

- to create an ECTS regional consultants points (RCPs) in key regions of Ukraine on the bases of ten leading universities.

## **TEMPUS TACIS 2005-2008**

## "University-industry Centers: Model for Cooperation"

#### Project objective:

- to develop a "University-Industry Environment Cooperation Model"

- to stimulate and enhance the interactions between universities and industry.

- to implement model components at NAU "KhAI" and NTU "KhPI" to adapt their curriculum and educational services to the Ukrainian labor market needs.

# **TEMPUS TACIS 2005-2008**

# "European Integration Training Programmes for Public Administration in Ukraine"

Project objective:

- to strengthen training capacities of Developmental Training Centers at regional institutes of National Academy of Public Administration in the area of European Studies/ European integration.

### **TEMPUS III 2005-2006**

# "Tuning Educational Structures in Europe - Phase III: Validation, Dissemination and Further Development "

#### **Project objective:**

- to include new Bologna signatory states in the project "Tuning Educational Structures in Europe Europephase III: Validation, Dissemination and Further Development" and thus actively involve HEIs and countries directly in the work done to carry out the Bologna declaration at University level and contribute to the development of one European Higher Education Area.

# **TEMPUS III 2004-2005** "Development of University policy in quality assurance"

#### Project objective:

- Self-assessment of management education at NTU "KhPI" on the basis of generally accepted quality criteria;

- development of strategic plan of education quality assurance in the area of management - training of administration and faculty members to apply quality management principles in their work.

### **TEMPUS III 2004-2005**

## "Angleichung der Ingenieurausbildung in der Ukraine"

- Erarbeitung eines Konzepts zur Angleichung der universitären Ingenieurausbildung in der Ukraine an den mit der Deklaration von Bologna eingeleiteten Prozess mit dem Ziel der Harmonisierung der europäischen Hochschulbildung, der Anerkennung und Vergleichbarkeit von Studienabschlüssen und der Förderung der Mobilität der Studierenden.

### **TEMPUS TACIS 2003-2006**

### "Former des spécialistes en études européennes"

- Mettre en place une formation en études européennes; Développer les liens entre les universités ukrainiennes et le monde économique; Constituer un réseau entre les trois universités ukrainiennes

- to provide Ukrainian enterprises with professionals focusing on the European integration models of development, international communications;

- to create the information resource center of business education.

### **TEMPUS TACIS 2001-2004**

# "Mise en place d'un système de recyclage des spécialistes des services écologiques des Collectivités ukrainiennes"

- Recyclage des fonctionnaires des Collectivités ukrainiennes (niveau municipal et régional) dans ledomaine de la gestion de l'environnement et de la sécurité écologique grâce à la mise en placed'un Centre de recyclage (Formation Permanente)

## **TEMPUS TACIS 2001-2004**

# "Formation post-diplôme des ingénieurs en économie appliquée"

- Permettre aux ingénieurs en Formation post-diplôme en économie appliquée de complèter leurformation suivie en Russie/Ukraine par l'acquisition de savoir-faire et compétences dans le cadre des périodes de mobilités en UE, centrées sur les pratiques professionnelles en entreprises et surl'obtention à l'issue du programme du double diplôme national et français

### TEMPUS TACIS 2001-2004

### "Training Curricula for Quality and Environmental Management"

#### Project objective:

- to create new curricula for training of skilled highly qualified staff to help Russian and Ukrainian enterprises to address efficiently Quality and Environment Management issues.

## **TEMPUS TACIS 2000-2001**

# "Establishment of regional energy management training centers network"

#### Project objective:

- to create a national information network on energy efficiency (7 centers) for the collection and dissemination of information to increase the efficiency of energy use by enterprises and organizations of Ukraine.

# **TEMPUS TACIS 1999-2001**

### "Aufbau eines Hochschulkonsortium EU - Ukraine"

- Vernetzung der ukrainischen TU's mit der EU, Aufbau eines ständigen Koordinationszentrums des Konsortiums mit späterer Eigenfinanzierung.

## **Tempus II TACIS 1998-2000** "Formation Post-Diplôme d'Ingénieurs Kharkov"

- Former des ingénieurs débutants et confirmés dans deux spécialités (Economie des Systèmes Industriels et Management de l'Environnement) en langue francaise et mettre en place une formation équivalente en langue locale