

Department of Economic Cybernetics and Marketing Management NTU KhPI

General Information and Research Activities

General Information

- ◆ Specialty: Economics
- ◆ Grants Bachelor and Master Degrees on two specializations:
 - Digital Economy
 - Marketing Management
- ◆ Faculty:
 - 3 D.Sc., full professors
 - 7 Ph.D., associate professors
- ◆ Head:
Viktor Zaruba, vza@kpi.kharkov.ua
- ◆ Contact person:
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- ◆ Web site: <http://eim.kh.ua/ekmm/>

Research Areas

Economics

- ◆ Auction theory and incentive-compatible mechanisms for efficient resource allocation
- ◆ Public procurement mechanisms, policies, and regulation
- ◆ Group behavior models
- ◆ Estimating the size and development of shadow economy
- ◆ Modeling of the tax-paying behavior
- ◆ Financial and budgetary regulation of the regional development
- ◆ Differentiated products demand systems
- ◆ Dynamic structural models in industrial organization

Management

- ◆ Multi-level resource allocation and management of the organization potential
- ◆ Marketing of the partnership relations
- ◆ Strategic management of marketing activities of the firm
- ◆ Management of innovations
- ◆ Economic security of the enterprise
- ◆ Market infrastructure
- ◆ Consumer behavior
- ◆ Industrial marketing
- ◆ Risk management

International Projects

- ◆ “Innovation Laboratories: using an open innovation learning platform & action research in enterprise education in order to enhance the engagement & innovative capabilities of Universities in Post-Socialist Societies” (№530429-TEMPUS-1-2012-1UK-TEMPUS-JPHES)
- ◆ Duration: 2012-2015
- ◆ Main Results:
 - Innovation Laboratory was created at NTU KhPI on the basis of the Department of Economic Cybernetics and Marketing Management
 - “IdeasMarket” online business game was developed and integrated into the curriculum
 - Innolab Web platform was developed for enhancing cooperation between the university and local enterprises
 - Student textbook “Innovation Entrepreneurship: Creativity, Commercialization, Ecosystem” was prepared and published
- ◆ Partners:
 - University of Bradford, UK
 - Aristotle University, Greece
 - Tallinn Technological University, Estonia
 - University of Grodno, Belarus
 - Kiev-Mohyla Academy, Ukraine, and others.

Selected Publications

- ◆ V. Zaruba. System-resource approach to enterprise management. – Models of estimation and analysis of complex social and economic systems. Ed. by V.S.Ponomarenko et al. – Kharkiv: INZHEK, 2013. – pp.354-371. (in Russian)
- ◆ N. Kuz'mynchuk. Financial and Budgetary Regulation of Regional Development: Approaches, Methods, and Implementation. – Lviv: Institute of Regional Studies of the Ukrainian Academy of Sciences. - 2012. — 624 p. (in Ukrainian)
- ◆ D. Raiko. Development of Strategic Management of Marketing Activity of an industrial enterprises. – Lviv: Scientific Bulletin of Lviv Polytechnic University. – 2014 -№811. – pp. 287-292.
- ◆ O. Melnikov. Demand for Differentiated Durable Products: The Case of the U.S. Computer Printer Market. – Economic Inquiry. – Vol.51, No. 2, April 2013. – pp.1277-1298.
- ◆ G. Grinberg, L. Lyubchuk. Nonlinear dynamic system kernel based reconstruction from time series data. XXVII International Conference "Problem of decision making under uncertainties", May 23-27, 2016, Tbilisi-Batumi, Georgia.
- ◆ T. Kutsenko., O. Zhyhor. Providing of innovative development of regions of Ukraine: financial aspect. - International Journal of Sustainable Development. – 2014. – №17. – p. 69-75.

Potential for Joint Projects

We see a great potential for cooperation in the following fields:

- Public Economics
- Applied Economics
- Operations Management
- Marketing
- Digital Economy

in areas such as:

- Joint research projects
- Capacity building in economic education on the undergraduate and graduate levels
- Academic mobility of students and teachers

through various international and national programs, such as Horizon2020, Erasmus KA1 and KA2, DAAD, and others.

Possible Topics for Joint Projects

Research Topics:

- ◆ Management of Regional Industrial Development: Economic and Social Dimensions
- ◆ Enhancing Efficiency of Public Procurement Mechanisms in Digital Age
- ◆ Strategic Management of Marketing Activities of the Enterprise

Capacity Building in Economic Education:

- ◆ Development of curriculum for Digital Economy specialization
- ◆ Harmonization of doctoral programs in Economics with Bologna system
- ◆ Development of teaching programs in areas such as data mining, big data analysis, empirical economic research, etc.

Academic mobility:

- ◆ Student exchanges
- ◆ Teacher professional development programs
- ◆ Visiting professors exchanges
- ◆ We can offer English-language courses in areas such as Time Series Analysis, Empirical Industrial Organization, Dynamic Programming, Simulation Models, Auction Theory and Mechanism Design, and others.