Department of Mathematical foundations of Cybernetics was established in 1972, its founder and first head was Professor Victor Sylvestrovych Charin, Doctor of Science, a veteran of WWII. Due to the expansion of scientific subjects in 1997, the Department of Mathematical foundations of cybernetics was renamed into the Department of Operations Research In the 2011-2012 academic year the faculty of the department includes Professors, Doctors of Mathematical Sciences O.K. Zakusylo (Head of the department), A.M. Iksanov (Deputy Head) and I.K. Matsak, Associate professors, Candidates of Sciences V.I. Shevchenko, S.S. Shestakov, D.P. Proskurin, B.V. Dovhay (Secretary), Assistant professors, Candidates of Sciences S.V. Polotskyy, P.A Nehadaylov, O. V. Marynych.

In 2012-2013 the following lectures are offered:

- "Statistical modeling", "Queueing theory" (Zakusylo O.K);
- "Discrete-time martingales", "Elements of the renewal theory" (Iksanov A.M.)
- "Practical work on Operations Research","Mathematical theory of reliability," "Extreme value theory and its   applications", "Extreme value theory. Module 1. Asymptotic theory of extreme values" (Matsak I.K.)

- "Theory of topological groups", "Models of Operations Research" (Shestakov S.S.)
- "Von Neumann algebras", "*-algebra with Wick ordering" (Proskurin D.P.)
- "Extreme value theory. Module 2. Random Processes"(Dovhay B.V.)

The main areas of research are:

1. Queuing theory.
2. Information Technology in Education.
3. Game theory, scheduling theory.
4. Topologies on groups.
5. Combinatorics of ultrafilters and extreme topologies on groups.
6. Measure-valued stochastic processes.
7. Stochastic analysis of Markov processes.
8. Random regenerative structures.
9. Fixed points of the smoothing transforms and branching random walk.
10. Shot noise processes.
11. Extreme value theory and its application, reliability theory.
12. Representation theory, operator algebras and their applications.

In the years 2006-2010 under the leadership of professor Zakusylo O.K (academician of Academy of Pedagogical Sciences of Ukraine) at the Department carried out a research topic: "Development theory and software of stochastic models, the theory of algebraic systems and study on their applications. Development and implementation of IT in education." In 2007-2010, employees of the Department A.M. Iksanov, P.A. Nehadaylov, S.V. Polotskyy and O. V. Marinich together with a group of University of Kiel (Germany) performed the project "Stochastic fixed points", backed by grant DFG (leaders are A.M. Iksanov and U. Rosler (Kiel)). In 2008-2011 employees of the Department A.M. Iksanov, P.A. Nehadaylov and O. V. Marinich together with Professor O. Hnedin (University of Utrecht, Netherlands) carried out the project "Combinatorial stochastic processes", supported by grant from the University of Utrecht (leaders are A.M. Iksanov and O. Hnedin).