

Name of the discipline	NEW INDUSTRIAL REVOLUTION OF THE 21ST CENTURY
Information about the faculties (educational and scientific institutes) and courses of study, students of which are invited to study this discipline	ERI "Karazin Institute of International Relations and Tourism Business", Target audience - 2nd year (4th semester) students of the third (educational and scientific) level of higher education
Contact details of the developers of the work program of the educational discipline, scientific and pedagogical workers involved in teaching	MATYUSHENKO Igor Yuriyovych Professor of the Department of International Economic Relations and Logistics, Doctor of Economic Sciences, Professor meo@karazin.ua
Prerequisites for studying the discipline	Not required
Description	The purpose of the discipline. The purpose of teaching the academic discipline is to form in students a system of theoretical knowledge and practical skills in the field of the new industrial revolution, as well as about objective patterns, real processes and specific features of scientific and technological development, technological exchange and the introduction of advanced production technologies in the conditions of the new industrial revolution of the 21st century within the framework of the European integration process, which has transformed the EU countries into a political and economic force. Expected learning outcomes. According to the results of the study, the student will: know: theoretical principles, methodological foundations, essence, subject, object, subject and methods of research of the new industrial revolution in modern conditions; characteristic features of the implementation of innovations and the development of a business model of an innovation and investment project; typical errors in the implementation of innovations and mistakes of the entrepreneur; characteristic features of the convergence of technologies and the application of the synergistic effect of the development of NBIC technologies; the essence and structure of the global technology market, forms and stages of development of the new industrial revolution; non-market forms of international technology transfer; the activities of international organizations in the field of technology transfer; problematic issues of methodological assessment of the effectiveness of technology transfer; the economic essence and features of licensing trade in the international economy; the mechanism for forming the price of technology as a factor of production; features of the new industrial revolution of the 21st century, its main megatrends and turning points until 2025; prospects for the use of convergent and advanced production technologies in various sectors of the economy; the use of organizational mechanisms for scientific and technological

	development and technology transfer in countries around the world and Ukraine be able to: build a business model of an innovative enterprise and determine the factors of their transformation in the conditions of the new industrial revolution; timely identify and avoid errors in the implementation of innovations, mistakes of an entrepreneur, and also apply the art of attracting money to innovative business; apply the convergence of knowledge, technology and society to solve global and national problems; substantiate the priority areas of international technology transfer in the conditions of the new industrial revolution as a mechanism for solving global problems; apply franchising as a modern form of international technology movement; apply international consulting and engineering, innovative technology transfer; use methodological approaches to assessing the effectiveness of technology transfer; assess the market and commercial potential of scientific and technical developments; use license agreements; assess the value of rights to intellectual property objects; take into account the specifics of economic calculations when buying and selling licenses; predict the consequences of the impact of Industry 4.0 on the economy, business, national and global problems, society and personality; assess the prospects for using convergent and advanced production technologies in medicine and the agro-industrial complex, the production of advanced materials, ICT and electronics, the energy complex and the aerospace complex of Ukraine; use organizational mechanisms for scientific and technological development and technology transfer, taking into account Ukraine's implementation of European integration reforms in the field of science and technology transfer. Topics of classroom lessons and independent work Topic 1. The essence of the new industrial revolution. International Technology Transfer (Lecture – 1 hour Semester – 2 hours) Topic 2. Innovations, business models of an innovative enterprise and their transformation. Mistakes in implementing innovations, mistakes of an entrepreneur and the art of raising money. The impact of technological innovations on the economic development of society (Lecture – 2 hours Semester – 4 hours) Topic 3. Convergence of knowledge, technology and society (KTS) as a key factor in solving global problems (Lecture – 2 hours Semester – 4 hours) Topic 4. The world market as a mechanism for international technology transfer. Non-commercial technology transfer and high-tech transfer (Lecture – 1 hour Semester – 2 hours) Topic 5. Indicators of science and innovation (Lecture – 1 hour Semester – 2 hours) Topic 6. Licensing in the scientific and technical sphere. Features of pricing in the global technology market
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	(Lecture – 1 hour Semester – 2 hours) Topic 7. The new industrial revolution of the 21st century, the development of advanced production technologies and their impact on the economy, business, national and global, society and personality (Lecture – 2 hours Semester – 4 hours) Topic 8. Prospects for the development of scientific and innovative potential and high-tech industries in Ukraine (Lecture – 1 hour Semester – 2 hours) Topic 9. Organizational mechanisms of scientific and technological development and technology transfer (Lecture – 1 hour Semester – 2 hours) Topic 10. European integration reforms of Ukraine in the field of science and technology transfer (Lecture – 1 hour Semester – 2 hours) Methods of monitoring learning outcomes input – in the form of an interview, current – in the form of a survey and current tests (tests), semester – in the form of a test. Language of instruction. Ukrainian
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