



Intellectual property and patent law

Syllabus of the academic discipline (Syllabus)

Academic discipline requirements

Level of higher education	<i>second (master's)</i>
Discipline	G Engineering, manufacturing construction
Specialty	G2 Electrical Engineering
Educational program	ENGINEERING OF INTELLIGENT ELECTRICAL AND MECHATRONIC SYSTEMS
Discipline status	<i>Mandatory</i>
Form of study	<i>Full-time (daytime) / distance learning / blended</i>
Year of training, semester	<i>1st year, fall semester</i>
Scope of the discipline	<i>3 credits, 90 hours; lectures – 30 hours; practical classes – 14 hours; independent work – 46 hours.</i>
Semester control/control measures	<i>Credit/ MCR/ express survey</i>
Class schedule	<i>from https://my.kpi.ua/</i>
Language of instruction	<i>English</i>
Information about the course leader/teachers	Course leader Yurchyshyn O.Ya. (Department of Machine Design) @Jurchyshyn From the Department of Intellectual Property and Private Law according to the schedule From the Department of Machine Design according to the schedule
Course placement	Part 1. Resource "Electronic Campus". Part 2. The "Electronic Campus" resource, Google Classroom, live communication via WhatsApp or Telegram group

Academic discipline program

1. Description of the academic discipline, its purpose, subject of study and learning outcomes

The academic discipline consists of two parts:

- **Part 1.** "Intellectual Property and Patent Law - 1. Intellectual Property Law" (provided by the Department of Intellectual Property and Private Law of the Faculty of Sociology and Law).
- **Part 2.** "Intellectual Property and Patent Law – 2. Patent Law and Acquisition of Rights" (provided by the Department of Machine Design of the Mechanical Engineering Institute).

The purpose of the academic discipline is to train a specialist who has basic competencies in intellectual property law, in particular regarding the legislation and system of legal protection of intellectual property in Ukraine, their legal protection criteria and terms of validity of property rights, evaluation, commercialization, and contractual methods of managing intellectual property rights and protecting intellectual property rights, creating intellectual property objects, conducting patent research using the databases of Ukrpatent, regional offices, and the World Intellectual Property Organization, acquiring rights (state registration of rights) to intellectual property objects.

The course develops the following competences in students:

GC01. The ability to search for, process and analyses information from various sources.

GC02. The ability to use information and communication technologies.

GC06. The ability to learn and acquire up-to-date knowledge.

The subject of the academic discipline is a set of legal norms that regulate social relations reflected in legislation, legal doctrine and judicial practice and that are related to the creation, protection of the results of intellectual creative activity and the protection of rights to them.

After mastering the academic discipline, students must demonstrate the following **program skills:**
learning outcomes: :

PSLO 06. Identify sources of funding for further learning, research and innovation.

PSLO 08. Take into account the legal and economic aspects of research and innovation.

PSLO 18. Adhere to the principles and rules of academic integrity in educational and research activities.

2. Prerequisites and postrequisites of the discipline (place in the structural and logical scheme of study according to the relevant educational program)

List of disciplines, or knowledge and skills, the possession of which is necessary for a higher education applicant to successfully master the discipline	List of disciplines based on learning outcomes in this discipline
Studied on the basis of a bachelor's degree	• Practice • Research practice • Master's thesis completion

3. Content of the academic discipline

Part 1. Intellectual property law

Topic 1. Intellectual property system

Topic 2. Origin and acquisition of rights to intellectual property objects

Topic 3. Protection of intellectual property rights

Topic 4. Intellectual property agreements

Topic 5. Commercialization of intellectual property rights.

Part 2. Patent law and acquisition of rights

Topic 6. Creation and patent information research of objects of industrial property rights

Topic 7. Legal protection of the results of scientific and technical creativity

Topic 8. Legal protection of commercial designations

Topic 9. Legal protection of copyright and related rights

Topic 10. Unfair competition, its types, mechanisms for prevention, detection and counteraction. Liability for violation of rights

4. Educational materials and resources

Part 1. Intellectual property law

Basic literature

1. Intellectual property law: textbook / edited by S.B. Buletsy, O.I. Chepis. Uzhhorod: RIK-U, 2019. 488 p. (University library);
2. Intellectual property law: textbook / edited by O.I. Kharitonova. Kyiv: Yurinkom Inter, 2019. 539 p. (University library);
3. Intellectual property and copyright: a textbook / I.M. Chistiakova and others. Kyiv: Karavela, 2019. 203 p. (University library).
4. Verba I.I. Fundamentals of Intellectual Property [Electronic resource]: textbook / I. I. Verba, V. O. Koval; ed. S. V. Chikin; NTUU "KPI". – 2nd ed., revised and supplemented – Electronic text data (1 file: 2.20 KB). – Kyiv: NTUU "KPI", 2013. – 262 p.: 23 ill. – Access mode <http://library.kpi.ua:8080/handle/123456789/2387>
5. Romashko A.S. International treaties and agreements in the field of intellectual property: Textbook. / A.S. Romashko, I.I. Verba, V.V. Prygoda. – 2nd edition. and additions. [Electronic resource] / - Kyiv: NTUU "KPI", 2015. – 186. Access mode: <http://ela.kpi.ua/handle/123456789/28002>.

6. Intellectual property and patent science [Electronic resource]: a textbook for students studying in master's programs / N. O. Bilousova, N. V. Gavrushkevych, M. A. Danilchenko, M. V. Dubnyak, N. D. Kohut, O. V. Lytvyn, A. S. Romashko, P. M. Tsybulev, O. Ya. Yurchyshyn; Igor Sikorsky Kyiv Polytechnic Institute; edited by P. M. Tsybulev, A. S. Romashko. – Electronic text data (1 file: 6.03 MB). – Kyiv: Igor Sikorsky Kyiv Polytechnic Institute, 2021. – 377 p. – Title from the screen. Access mode: <https://ela.kpi.ua/handle/123456789/44252>.
7. World Intellectual Property Organization. *Enterprising Ideas: A Guide to Intellectual Property for Startups*. Geneva: WIPO, 2021. Available at: <https://tind.wipo.int/record/43200?v=pdf>
8. World Intellectual Property Organization. *Creative Expression: An Introduction to Copyright and Related Rights for Small and Medium-sized Enterprises*. Geneva: WIPO, 2023. Available at: <https://tind.wipo.int/record/47322?v=pdf>.
9. World Intellectual Property Organization. *Inventing the Future: An Introduction to Patents for Small and Medium-sized Enterprises*. Geneva: WIPO, 2018. Available at: <https://tind.wipo.int/record/29054?v=pdf>
10. World Intellectual Property Organization. *Making a Mark: An Introduction to Trademarks for Small and Medium-sized Enterprises*. Geneva: WIPO, 2017. Available at: <https://tind.wipo.int/record/29006?v=pdf>

Additional literature

1. Manual for judges on intellectual property /I.M. Benedysyuk et al. Kyiv: K.I.S., 2018. 424 p.
2. Koval I.F. Commercialization of intellectual property rights: a textbook. Kyiv: Yurinkom Inter, 2018. 272 p.
3. Yakubivskiy I.E. Acquisition, exercise and protection of intellectual property rights in Ukraine: monograph. Lviv: Ivan Franko National University of Lviv, 2018. 522 p.
4. Vakhoneva T.M. Copyright and Related Rights in Ukraine: Textbook. Kyiv: Publishing House "Dakor", 2016. 564 p.
5. Zhilinkova O.V. Contractual regulation of relations regarding intellectual property in Ukraine and abroad: monograph. Kyiv: Yurinkom Inter, 2015. 280 p.
6. International Trade Centre; World Intellectual Property Organization. *Exchanging Value: Negotiating Technology Licensing Agreements – A Training Manual*. Geneva: ITC/WIPO, 2005. Available at: https://www.wipo.int/edocs/pubdocs/en/licensing/906/wipo_pub_906.pdf
7. Lorenz R. *Technology Transfer Training Needs Assessment: Manual and Toolkit*. Geneva: WIPO, 2022. Available at: <https://www.wipo.int/edocs/pubdocs/en/wipo-pub-rn2022-3-en-technology-transfer-training-needs-assessment.pdf>.
8. Bently L., Sherman B., Gangjee D., Johnson P. *Intellectual Property Law*. 6th ed. Oxford: Oxford University Press, 2022.
9. Cornish W., Llewelyn D., Aplin T. *Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights*. 9th ed. London: Sweet & Maxwell, 2019.

Information resources

Web-site Ukrainian National Office of Intellectual Property and Innovations (UKRNOIVI) <https://nipo.gov.ua/>
 World Intellectual Property Organization website - <https://www.wipo.int/portal/en/index.html>

Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement), Annex 1C to the Marrakesh Agreement Establishing the World Trade Organization, 1994. URL: https://www.wto.org/english/docs_e/legal_e/27-trips.pdf

Paris Convention for the Protection of Industrial Property of March 20, 1883, as revised and amended. URL: <https://www.wipo.int/en/web/treaties/ip/paris/index>

Berne Convention for the Protection of Literary and Artistic Works of September 9, 1886, as revised and amended. URL: <https://www.wipo.int/en/web/treaties/ip/berne/index>

Patent Cooperation Treaty (PCT) of June 19, 1970, as amended. URL: <https://www.wipo.int/en/web/treaties/registration/pct/index>

Patent Law Treaty (PLT), adopted at Geneva on June 1, 2000. URL: <https://www.wipo.int/en/web/treaties/ip/plt/index>

Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks, adopted at Madrid on June 27, 1989, as amended. URL: https://www.wipo.int/en/web/treaties/registration/madrid_protocol/index

Hague Agreement Concerning the International Registration of Industrial Designs. URL: <https://www.wipo.int/en/web/treaties/registration/hague/index>

WIPO Copyright Treaty (WCT), adopted at Geneva on December 20, 1996. URL: <https://www.wipo.int/en/web/treaties/ip/wct/index>

WIPO Performances and Phonograms Treaty (WPPT), adopted at Geneva on December 20, 1996. URL: <https://www.wipo.int/en/web/treaties/ip/wppt/index>

Convention on the Grant of European Patents (European Patent Convention) of October 5, 1973, as revised. URL: <https://www.epo.org/en/legal/epc>

World Intellectual Property Organization. WIPO-Administered Treaties. URL: <https://www.wipo.int/en/web/treaties/>

Part 2. Patent law and acquisition of rights

Basic literature

1. Intellectual property and patent law [Electronic resource]: a textbook for students studying in master's programs / N. O. Bilousova, N. V. Gavrushkevych, M. A. Danilchenko, M. V. Dubnyak, N. D. Kohut, O. V. Lytvyn, A. S. Romashko, P. M. Tsybulev, O. Ya. Yurchyshyn; Igor Sikorsky Kyiv Polytechnic Institute; edited by P. M. Tsybulev, A. S. Romashko. – Electronic text data (1 file: 6.03 MB). – Kyiv: Igor Sikorsky Kyiv Polytechnic Institute, 2021. – 377 p. – Title from the screen. <https://ela.kpi.ua/handle/123456789/44252>
2. Mikulyonok I. O. Intellectual property and patent law: textbook. 5th ed., revised and supplemented. Kyiv: Igor Sikorsky Kyiv Polytechnic Institute, Publishing House "Polytechnics", 2024. 248 p. URL: <https://ela.kpi.ua/handle/123456789/68179>
3. Mikulyonok I. O. Filing an application for an invention and an application for a utility model: a manual. 4th ed., revised and supplemented. Kyiv: Igor Sikorsky Kyiv Polytechnic Institute: Gas Institute of the National Academy of Sciences, 2025. 202 p. URL: <https://ela.kpi.ua/handle/123456789/72376>
4. Patent law and acquisition of rights [Electronic resource]: workshop / A. S. Romashko, O. Ya. Yurchyshyn, M. A. Danilchenko and others; edited by Assoc. Prof. A. S. Romashko. – Electronic text data (1 file: 15.89 MB). – Kyiv: Igor Sikorsky Kyiv Polytechnic Institute, Publishing House "Polytechnics", 2025. – 305 p. URL: <https://ela.kpi.ua/handle/123456789/75501>
5. World Intellectual Property Organization. Inventing the Future: An Introduction to Patents for Small and Medium-sized Enterprises. Geneva: WIPO, 2018. URL: <https://www.wipo.int/publications/en/details.jsp?id=4350&plang=EN>
6. World Intellectual Property Organization. The PCT Applicant's Guide. Geneva: WIPO. Continuously updated electronic resource. URL: <https://www.wipo.int/en/web/pct-system/guide/index>
7. European Patent Office. Guidelines for Examination in the European Patent Office. Current electronic edition. URL: <https://www.epo.org/en/legal/guidelines-epc>
8. European Patent Office. European Patent Convention and Implementing Regulations. Current consolidated edition. URL: <https://www.epo.org/en/legal/epc>

Additional literature

1. Kuznetsov Yu.M. Patent Law and Copyright: Textbook – K.: Condor LLC, 2005. – 428 p., 2nd edition, revised and supplemented, 2009. – 446 p.
2. Kuznetsov Yu. M., Mikulyonok I. O., Samoilenko O. V. Practical course on the discipline "Patent science and copyright". Textbook / Edited by Yu. M. Kuznetsov. – Kyiv: NTUU "KPI", 2014. – 317 p.
3. Romashko A.S. International treaties and agreements in the field of intellectual property: Textbook. / A.S. Romashko, I.I. Verba, V.V. Prygoda. – 2nd edition revised and supplemented. [Electronic resource] / - Kyiv: NTUU "KPI", 2015. – 186. Access mode <http://ela.kpi.ua/handle/123456789/28002>
4. Romashko A.S. Trademark: independent search, preparation for registration, monitoring. Textbook. / A.S. Romashko, O.M. Kravets. – [Electronic resource] / - K.: NTUU "KPI", 2016. – 170. stamp Approved by the Academic Council of NTUU "KPI" on June 30, 2016. Access mode: <http://ela.kpi.ua/handle/123456789/28006>

5. KRYKUN N.P., ROMASHKO A.S. Creative activity in creating innovations and identifying risks/ "Project management. Prospects for the development of project and neuromanagement, information management technologies, technologies for creating and using intellectual property rights, technology transfer": collection of scientific papers based on the materials of the V International Scientific and Practical Internet Conference (March 23-24, 2023). UDUNT, UKRNET, NDIIV NAPRN of Ukraine, Dnipro: YurSERVICE, 2023. 730 p. P.575-579. URL http://nmetau.edu.ua/file/zbirnik__materialiv__konf_udunt_2023.pdf#page=575
6. Alla Romashko, Hryhoriy Dorozhko, Oleksandr Kravets STANDARD BASIC PATENTS ON NEW TECHNOLOGIES Theory and Practice of Intellectual Property No. 2, 2023. P.74-84 <http://uran.inprojournal.org/article/view/282172>
7. Romashko A., Dorozhko G., Petrenko V. SEMICONDUCTOR PRODUCTS AND THEIR LEGAL PROTECTION. Legal Scientific Electronic Journal. 2024. No. 3. P. 354–357. URL: http://www.lsej.org.ua/3_2024/86.pdf
8. Yurchyshyn O.Ya., Seminska N.V., Romashko A.S. ANALYSIS OF THE STATE OF INNOVATIVE SOLUTIONS IN THE PROSTHETICS INDUSTRY / Innovative Economy. 2024. No. 1 [97]. P. 49-56. URL: <http://inneco.org/index.php/innecoua/article/view/1189>.
9. World Intellectual Property Organization. Making a Mark: An Introduction to Trademarks for Small and Medium-sized Enterprises. Geneva: WIPO, 2017. URL: <https://www.wipo.int/publications/en/details.jsp?id=4208&plang=EN>
10. World Intellectual Property Organization. Looking Good: An Introduction to Industrial Designs for Small and Medium-sized Enterprises. Geneva: WIPO, 2019. URL: <https://www.wipo.int/publications/en/details.jsp?id=4388&plang=EN>
11. World Intellectual Property Organization. Creative Expression: An Introduction to Copyright and Related Rights for Small and Medium-sized Enterprises. Geneva: WIPO, 2023. URL: <https://www.wipo.int/publications/en/details.jsp?id=4640&plang=EN>

Information resources

Web-site Ukrainian National Office of Intellectual Property and Innovations (UKRNOIVI) <https://nipo.gov.ua/>
 Web-site of the State Enterprise "Ukrainian Institute of Intellectual Property" - <https://ukrpatent.org>
 World Intellectual Property Organization website <https://www.wipo.int/portal/en/index.html>
 WIPO PATENTSCOPE: <https://patentscope.wipo.int/search/en/search.jsf>
 WIPO International Patent Classification: <https://ipcpub.wipo.int/>
 WIPO Global Brand Database: <https://branddb.wipo.int/en/quicksearch>
 WIPO Global Design Database: <https://designdb.wipo.int/designdb/en/index.jsp>
 European Patent Office Espacenet: <https://worldwide.espacenet.com/>
 Cooperative Patent Classification: <https://www.cooperativepatentclassification.org/home>
 European Union Intellectual Property Office: <https://www.euipo.europa.eu/en>
 EUR-Lex – Access to European Union Law: <https://eur-lex.europa.eu/homepage.html?locale=en>

Educational content

5. Methodology for mastering an academic discipline (educational component)

Lecture classes

Names of content modules, topics	Auditorium, hours	SRS, hours
Part 1. Intellectual property law		
Topic 1. Lecture 1. Intellectual property system	2	2
Topic 2. Lecture 2. Origin and acquisition of intellectual property rights	2	2
Practical lesson 1 on topics 1-2. Intellectual property system. Emergence and acquisition of rights to intellectual property objects	2	2
Topic 3. Lecture 3. Protection of intellectual property rights.	2	2
Topic 4. Lecture 4. Intellectual property agreements	2	2
Topic 5. Lecture 5. Commercialization of intellectual property rights.	2	2
Practical lesson 3 on topics 3-5. Protection of intellectual property rights. Contracts in the field of intellectual property. Commercialization of intellectual property rights.	2	4

Total hours for part 1:		14	16
Part 2. Patent law and acquisition of rights			
Topic 6. Lecture 1. Creativity as a type of intellectual work. Methods of setting and solving creative problems using the example of invention. Stages of developing an invention. Risk-based thinking when creating an object .		2	1.0
Lecture 2. Patent information and documentation, patent research. Patent information resources. Patent research. Patent form		2	1.0
Practical lesson No. 1. Solving inventive problems. Patent information search.		2	2
Topic 7. Lecture 3. Procedure for acquiring rights to inventions and utility models		2	1.0
Practical lesson No. 2. Selection of analogues and choice of the closest analogue, construction of a formula.		2	2.0
Lecture 4. Filing an application for registration of rights to an invention (utility model)		2	1.0
Lecture 5. (continued)		2	1.0
Practical lesson No. 3. Filing an application for registration of property rights to an invention (utility model).		2	3
Lecture 6. Procedure for acquiring rights to industrial designs		2	1.0
Lecture 7. The procedure for acquiring rights to a trade secret and an innovative proposal. Scientific discovery, semiconductor product, plant varieties and certain aspects of their protection. Genetic resources and related traditional knowledge		2	1.0
Topic 8. Lecture 8. The concept of a brand (commercial) name and geographical indications Acquisition of trademark rights		2	1.0
Practical lesson No. 4. Application for registration of property rights for an industrial design and trademark		2	3
Lecture 9. (continued) Acquisition of rights to a geographical indication		2	1.0
Topic 9. Lecture 10. Peculiarities of copyright protection in Ukraine and the world State registration of copyrights Features of the protection of objects of related rights in Ukraine and the world Topic 10. Unfair competition and its types. Provisions on unfair competition in the Paris Convention and in Ukraine Countering piracy, trolling and counterfeiting. Piracy and trolling in Ukraine and the world Parasitic marketing at sports, mass and cultural events		2	1.0
Practical lesson No. 5. Protection of trade secrets. Copyright registration.		2	2
Modular test work.		-	2
Test		-	6
Total hours for part 2:		30	30
Together for parts 1 and 2:		44	46

Practical classes

No. of the company	Tasks assigned to practical classes
Part 1. Intellectual property law	
Practical lesson 1	Intellectual property system. Origin and acquisition of rights to intellectual property objects (2 hours) <u>Purpose:</u> educational : to generalize knowledge about intellectual property law, the system of intellectual property objects, subjects of rights to them and the content of their rights, the emergence and acquisition of rights to intellectual property objects; developmental : formation of logical legal thinking; Educational : to cultivate a positive and respectful attitude towards legal science.

	Review questions: Concepts: "object of intellectual property" and "intellectual property right." Objects of intellectual property right. Subjects of intellectual property law. National intellectual property legislation. International intellectual property law. State system of intellectual property. Origin of rights to copyright objects. Emergence of rights to objects of related rights. Acquisition of rights to objects of patent law and industrial designs. Acquisition of rights to commercial designations. Origin and acquisition of rights to other objects of intellectual property law. Questions for analysis: 1. How do you understand the concepts of "creative activity" and "intellectual activity?" Give examples. Justify your answer. 2. Which concept is broader – "author" or "legal entity"? Who can be an author – an individual or a legal entity? Justify your answer. 3. How do you understand the concepts of "origination of intellectual property rights" and "acquisition of intellectual property rights"? Give examples. Justify your answer. 4. Can a personal letter written for another person be considered an object of copyright? Who has the right to dispose of such a letter – its author or the person to whom it is written? 5. Can there be objects of related rights without copyright? Justify your answer. What rights arise for the performer of a song - copyright or related? Does the performer of a song have the right to dispose of the lyrics and music? If so, under what conditions? 6. How do you understand the concept of "co-authorship"? Commercials and films are created in co-authorship. How is it possible to dispose of property rights to such copyright objects? Is it possible to dispose of property rights solely? If so, under what conditions? 7. How to distinguish inventions and utility models from: • trade secrets, know-how; • scientific discovery.
Practical lesson 2	Protection of intellectual property rights . Intellectual property agreements. Commercialization of intellectual property rights (2 hours) <u>Purpose:</u> educational: to generalize knowledge about the protection of intellectual property rights, contractual methods of managing intellectual property rights, commercialization and management of rights to intellectual property objects; developmental: formation of logical legal thinking; Educational: to cultivate a positive and respectful attitude towards legal science. Review question: The concept and grounds for protecting intellectual property rights. Jurisdictional form of protection of intellectual property rights. Non-jurisdictional form of protection of intellectual property rights. The concept and content of contracts in the field of intellectual property. Contracts at the stage of creating an intellectual property object. Contracts at the stage of using the intellectual property object. Agreement on the transfer of exclusive property rights to intellectual property. Other agreements on the disposal of property rights to intellectual property. Intellectual property as an intangible asset. Valuation of intellectual property rights. Intellectual property accounting. Taxation of transactions with intellectual property rights. The concept of management and principles of intellectual property management. The life cycle of an intellectual property object. Management of an intellectual property object at different stages of its life cycle. Task: 1. Check out sample agreements in the field of intellectual property: https://ukrpatent.org/uk/articles/copyright-req (clause 5 of Information on state registration of copyright and agreements relating to the author's right to a work). 2. Prepare an application (https://ukrpatent.org/uk/articles/copyright-forms) for registration of an agreement concerning the author's right to a work: a) an agreement on the alienation of intellectual property rights; b) a license agreement. Questions for analysis: 1. Compare the concepts of "protection of intellectual property rights" and "protection of intellectual property rights."

	2. Compare the concepts of "alternative (out-of-court) protection of intellectual property rights" and "non-jurisdictional form of protection of intellectual property rights." 3. What is the role of the commercialization of intellectual property rights in the development of society? Give examples. Justify your answer. 4. How do you understand the concept of "balance of interests of intellectual property rights holders"? Give examples. Justify your answer. 5. Contracts at the stage of creation and use of an intellectual property object.
Part 2. Patent law and acquisition of rights	
Practical lesson 1	Solving inventive problems. Structure and definition of headings of the International Patent Classification. Patent information search. 1.1 Theoretical part 1.1.1 Levels of invention. Good faith and bad faith patents. 1.1.2 Methods of solving inventive problems and demonstration of one of the methods . 1.1.3 Selection of the International Patent Classification heading. 1.1.4 Performing a patent search (familiarizing patent databases). 1.2 Practical part during classroom work. 1.2.1 Definition of the IPC rubric of the object. 1.2.2 Search for patents by specific IPC category and/or keywords. 1.2.3 Submission of practical assignment results and assessment. 1.3. Practical part for independent work. Definition of the IPC rubric of the object by the topic of the master's thesis with the name of the section, class, subclass, main group.
Practical lesson 2	Selection of analogues and choice of the closest analogue, construction of a formula. 2.1 Theoretical part 2.1.1 Selection of analogues and selection of the closest analogue for the invention (utility model). 2.1.2 General requirements for formula preparation 2.1.3 Generalization of feature pairs 2.1.4 Drawing up a claim (utility model) for a product/method using the basic laws of logic. 2.1.5 Formal formula examination (finding errors in formulas for real patents). 2.2 Practical part during classroom work 2.2.1 Performing formal examination of formulas by variants. 2.2.2 Submission of practical assignment results and assessment 2.3 Practical part for independent work 2.3.1 Choosing the closest analogue for the topic of the master's thesis
Practical lesson 3	Filing an application for registration of property rights to an invention (utility model) 3.1 Theoretical part 3.1.1 Preparation of application documents with a recommendation for building a description. 3.1.2 Example of a description from a real patent 3.2 Practical part during classroom work 3.2.1 Explanation of the test and formula construction. 3.3.2 Submission of practical assignment results and assessment 3.3 Practical part for independent work Drafting a set of documents for registering rights to a utility model on the topic EXCLUSIVELY of your bachelor's/master's thesis.
Practical lesson 4	Filing an application for registration of property rights for an industrial design and trademark 4.1 Theoretical part 4.1.1 Selection of the ICPZ category and determination of the name of the industrial design. 4.1.2 Preparation of documents for the application for state registration of an industrial design . 4.1.3 Grouping the list of goods and services by International Classification of Goods and Services codes 4.1.4 Classification of trademarks (TM) according to the Vienna Classification

	4.1.5 Search for industrial designs and trademarks 4.2 Practical part 4.2.1 Definition of the ICPZ heading and the name of the industrial design 4.2.2 Definition of Nice and Vienna Classification rubrics. 4. 2.3 Search for industrial designs and trademarks 4.2.4 Submission of practical assignment results and assessment 4.3 Practical part for independent work
Practical lesson 5	Trade secret protection. Copyright registration 6.1 Theoretical part 6.1.1 Restricted information 6.1.2 Examples of trade secret identification and documentation 6.1.3 Procedure for filing an application for copyright registration 6.1.4 University documents for an official essay 6.2 Practical part during classroom work 6.2.1. Detection of a trade secret in the materials of an application for an invention (utility model) 6.2.2. Determination of the list of documents for registering copyright for a specific copyright object. 6.2.3 Submission of practical assignment results and assessment 6.3 Independent work

6. Independent work of a higher education student

Independent student work involves:

preparation for classroom lessons – 38 hours;

preparation for the modular test – 2 hours;

preparation for the test – 6 hours.

Policy and control

7. Academic discipline policy (educational component)

Forms of work. Lectures are conducted using visual aids and methodological materials, access to which is available to higher education applicants. Students receive all materials via e-mail, campus or telegram group. Higher education students are involved in discussing the lecture material and asking questions about its essence. In practical classes, forms of individual and collective work (teamwork, pair work) are used to implement the teacher's tasks to acquire skills for independent practical work.

During the course, active and collective learning strategies are used, which are determined by the following methods and technologies:

1. problem-based learning methods (problem presentation, partial search (heuristic conversation) and research method);
2. personality-oriented (developmental) technologies based on active forms and methods of learning ("brainstorming", "situation analysis", etc.);
3. information and communication technologies that ensure the problem-based and research nature of the learning process and the activation of independent work of higher education applicants (electronic presentations, the use of computer and multimedia-based practical tasks (tests), the addition of traditional educational classes with means of interaction based on network communication capabilities (software, mobile applications, etc.).

Attendance at classes . Classes can be held in classrooms according to the schedule. Classes can also be held online in synchronous mode using video communication tools, provided that the higher education applicant is uniquely identified. Conducting classes online must be provided for by the relevant order of Igor Sikorsky Kyiv Polytechnic Institute.

If there are good reasons, the higher education applicant must inform the teacher in advance (1 day in advance) about the reasons for possibly missing the test.

If it is not possible to notify in advance, the higher education student must contact the teacher within one week to agree on the form and procedure for eliminating the debt.

If a classroom lesson falls on a non-working day (holiday, memorial, etc.), then the material of such a lesson is partially transferred to the category "Independent work of higher education students", and partially added to the next lesson. It is also possible to save time for missed lessons by performing modular control work outside of class time (by testing).

Rules for assigning incentive points

Encouragement points are awarded by the lecturer of Part 2 for:

+ 5 points – for active work in at least 5 lectures (questions, requests to clarify aspects of the lecture material, constructive refutation of the presented information, and participation in discussions);

+ 10 points – to the student who is the author (inventor) of the object for which an application for an invention/utility model has been submitted (only if a set of materials is submitted and the application number is available);

+ up to 10 - mastering the WIPO DL-101 distance learning course "Fundamentals of Intellectual Property" (Free), provided that a screenshot of the final exam result is provided. Mastering during paid courses is not encouraged. Mastering during other free courses (as well as paid courses that are paid by the student before September 1, when teaching the discipline in the first semester or before February 1, when teaching in the second semester) on intellectual property is carried out provided that the course volume is equivalent to the volume of the above-mentioned course (about 50 hours).

+ up to 10 - presentation of the results of a patent search on the topic of the master's thesis with the definition of IPC/CPC rubrics, using the UKRNOIVI, PATENTSCOPE, Espacenet databases (as well as the use of other databases, including LENS).

+ 3 points - WIPO DL-177 Use of Patent Information (or equivalent to Practical No. 1, see p.5, p.9 of this syllabus).

+ 2 points - WIPO DL-101PCT Introduction to Patent Cooperation Treaty, as well as other free courses as agreed with the instructor.

The sum of incentive points cannot exceed 10% of the rating scale for the discipline, i.e. 10 points.

Academic Integrity. The policy and principles of academic integrity are defined in Section 3 of the Code of Honor of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute". More information: <https://kpi.ua/code>.

Norms of Ethical Conduct. Norms of ethical conduct of students and employees are defined in Section 2 of the Code of Honor of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute". More details: <https://kpi.ua/code>.

Procedure for appealing the results of assessment controls. A student may raise any issue related to the assessment procedure and expect it to be considered in accordance with pre-defined procedures. Students have the right to appeal the results of the assessment with a reasoned explanation, explaining which criterion they disagree with in accordance with the assessment.

8. Types of control and rating system for assessing learning outcomes (RSO)

Semester control is carried out in the form of a test. A 100-point rating system and a university scale are used to evaluate learning outcomes.

Assessment and control measures. The main part of the student's rating is formed through active participation in practical classes and obtaining the results of modular control work.

The modular test and assessment are conducted by a lecturer from section 2 (teacher of the Department of Machine Design of the Mechanical Engineering Institute).

Part 1. Intellectual property law

Current control : express survey on the topic of the lesson, completion of test tasks, discussion of legal cases, preparation of draft documents

In total, for 1 practical session, a student can receive up to 16 and 17 points, respectively for the first and second practical session. In the event of a student's absence from a practical lesson, it is necessary to make up for the missed lesson by completing practical tasks, solving online tests (access to the test is provided by the teacher) or solving legal problems (by sending the work to the classroom or to the teacher's email).

A student's rating consists of the points he receives for:

	Type of activities	Maximum possible score
Practical lesson #1	Express survey on the topic of the lesson, discussion of legal cases, supplementing other students' answers during the discussion in practical classes, completing test tasks, preparing practical tasks	16
Practical lesson #2		17
Total for part 1		33

Part 2. Patent law and acquisition of rights

Current control : completion of practical tasks, modular test (MKR)

Weighted score – an average of 5 for 2 academic hours - one practical lesson. For practicals No. 3 and No. 4, the maximum score is 10. Students can choose to take a test or do **their own real** work on objects during or after the practical lesson (additional points may be awarded for such work).

Assessment in distance learning (assessment mainly through testing)

- Up to 5 (practical No. 1, 2, 5) or 10 (practical No. 3, 4) points are awarded to a student who has prepared for the practical session, attended it and passed the test.
- up to 5 (practical No. 1, 2, 5) or 10 (practical No. 3, 4) students are absent from class, **within 2 weeks** after the relevant practical class, **they took the assignment from the teacher**, independently worked on the topic, and completed and submitted the completed assignment **within 2 weeks** after the practical class;
- 0 points – the student is absent from class, did not work on the topic independently on time, and did not complete the teacher's assignment on time.

For assessment during face-to-face (not distance) learning and by completing teacher assignments or solving own tasks related to professional activities

- up to 5 (practical No. 1, 2, 5) or 10 (practical No. 3, 4) – the student is prepared for the practical lesson, present at it, performs the teacher's tasks correctly and on time (within **2 weeks** after the relevant practical lesson);
- up to 5 (practical No. 1, 2, 5) or 10 (practical No. 3, 4) – the student is absent from the lesson, **within 2 weeks** after the relevant practical lesson, **took an assignment from the teacher or completed work on the topic of the bachelor's/master's thesis**, independently worked on the topic and completed and submitted the completed assignment **within 2 weeks** after the practical lesson;
- 0 points – the student is absent from class, did not work on the topic independently on time, and did not complete the teacher's assignment on time.

A student's rating consists of the points he receives for:

	Type of activities	Maximum possible score
Practical lesson #1	Solving inventive problems. Patent information search.	5
Practical lesson #2	Selection of analogues and choice of the closest analogue, construction of a formula.	5
Practical lesson #3	Filing an application for registration of property rights to an invention (utility model).	10
Practical lesson #4	Filing an application for registration of property rights for an industrial design and trademark.	10
Practical lesson #5	Trade secret protection. Copyright registration.	5
MKR	Inventions, utility models, industrial designs, Rationalization proposal, commercial designations, trade secret, know-how, copyright, related rights	32
Total for part 2		67

Calendar control: conducted twice a semester as a monitoring of the current status of implementation of syllabus requirements in order to improve the quality of student learning.

Criterion	First calendar control	Second calendar control
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Calendar control period	Week 8	Week 14
Conditions for obtaining a positive assessment	if the current rating score is at least 50% of the maximum possible score at the time of calendar control	if the current rating score is at least 50% of the maximum possible score at the time of calendar control

Semester control : credit

Conditions for admission to semester control : semester rating from zero points.

Total rating score for the discipline "Intellectual Property and Patent Law" (maximum 100 points):

$$R_{\Sigma} = R_1 + R_{Pr1} + R_{Pr2} + R_{Pr3} + R_{Pr4} + R_{Pr5} + R_{MKR},$$

where R_1 – rating score for the section "Intellectual Property and Patent Law – 1. Intellectual Property Law" (from 0 to 33 points inclusive) – is set by the teacher of the relevant module; $R_{Pr1} \dots R_{Pr5}$ – rating scores for performing the work provided for in practical classes No. 1...No. 5; R_{MKR} – rating scores for the module test.

The final rating cannot exceed 100 points.

Students who have met the admission requirements for the test and have a rating score of 60 or more points receive a grade corresponding to the rating obtained without additional tests.

Students who have met the admission requirements for the test and have a rating score of less than 60 points, as well as those students who wish to increase their rating score, are given a semester test in the form of a test paper at the last scheduled lesson in the discipline in the semester.

If the higher education applicant is not satisfied with the number of points scored, the results of the rating assessment are canceled and the higher education applicant writes a test paper for the entire discipline "Intellectual Property and Patent Law".

Final test is a test that can be scored from 0 to 100 points. The questions/statements of the test require a response of "yes" or "no", or choosing the correct answer from the proposed options. The test consists of 33 tasks, each of which is scored 3.03 points. The number of correct answers is multiplied by 3.03 points, and the result is rounded.

To receive an appropriate grade in a discipline, a student must score a certain number of points, according to the conversion table.

Table for converting rating points into a university scale grade:

Number of points	Rating
100-95	Perfectly
94-85	Very good
84-75	Good
74-65	Satisfactorily
64-60	Enough
Less than 60	Unsatisfactorily
Admission conditions not met	Not allowed

9. Additional information on the discipline (educational component)

1. The presence of a sole patent for an invention (utility model) may be counted as additional points or equated to the performance of work in practical classes No. 2 and No. 3 (under part 2) with a weighting point of 5.
2. The presence of a single certificate of registration of an industrial design or mark for goods and services is equivalent to completing work in practical session No. 4 with a weighting of 5 for the certificate.
3. The presence of a single certificate of registration of copyright for a work is equivalent to completing work in practical lesson No. 5 with a weighting point of 5.
4. The presence of a certificate for the WIPO course DL-177 Use of Patent Information may be counted as additional points or equated to the performance of work on practical No. 1 (under part 2) with a weighting point of 3.
5. For foreign students for whom it is not appropriate to study Ukrainian legislation, it is possible to enroll in the WIPO courses DL-101 "Fundamentals of Intellectual Property", provided that a screenshot of the final exam result is provided (estimated up to 50 points), DL-177 Use of Patent Information (estimated up to 20 points), DL-101PCT Introduction to a Patent Cooperation Treaty (estimated up to 5 points). Patent - is estimated up to 25 points (search for a patent in your country that relates to the specialty, search for analogues to it, in addition to those specified in the patent, description of the essence of the patent's INID codes, highlighting the structural elements of the patent: the IPC headings to which the invention belongs, information that makes up the formula and the following sections of the description: the field of technology to which the invention belongs; the state of the art;

the essence of the invention; a list of drawing figures, if there are references to them in the description; information confirming the possibility of implementation; preparation of a draft formula for your invention). Alternatives to WIPO courses may be other courses offered by the student in agreement with the instructor.

The working program of the academic discipline (syllabus) was compiled by:

Associate Professor of the Department of Intellectual Property and Private Law, Candidate of Legal Sciences, Natalia Valeriyevna Kisil

Associate Professor of the Department of Machine Design, Candidate of Technical Sciences Romashko Alla Sazonivna

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Approved by the methodological commission of the ER IEE (Minutes No. 30 dated 25 June 2025)