



INTELLECTUAL PROPERTY AND PATENT SCIENCE

SYLLABUS

for technical specialties KPI them. Igor Sikorsky

DETAILS OF THE DISCIPLINE

Level of higher education	<i>Second (Master's)</i>
Branch of knowledge	<i>16 Chemical and bioengineering</i>
Speciality	<i>161 Chemical technology and engineering</i>
Educational program	<i>OPP Industrial Ecology and Resource Efficient Cleaner Technologies</i>
Status of discipline	<i>Mandatory</i>
Form of training	<i>full-time(daytime)/remote/mixed</i>
Year of preparation, semester	<i>1 course, autumn semester</i>
Volume of discipline	<i>3 ECTS credits (90 hours), including lectures 36 hours, practical classes 18 hours, independent work 36 hours</i>
Semester control /control measures	<i>Modular control work Passed</i>
Schedule of classes	<i>According to the schedule</i>
Language of instruction	<i>Ukrainian</i>
Information about the course leader / teachers	<i>Lecturers and teachers of practical classes: Department of Chemical, Polymeric and Silicate Engineering https://cpsm.kpi.ua/pro-kafedru/vikladachi.html</i>
Course placement	<i>Determined by the lecturer of the relevant part of the course and is brought to the attention of students at the first lesson</i>

PROGRAM OF DISCIPLINE

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

1.1. Description of the discipline

The discipline consists of two parts:

- Part 1. "Intellectual property and patent science – 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 science – 2. Patent Science and Acquisition of Rights" (provided by the Department of Machine Design of the Mechanical Engineering Institute).

1.2. The purpose of the discipline

The purpose of the discipline is to train a specialist who has basic competencies in intellectual property law, in particular regarding the legislation and the system of legal protection of intellectual

property in Ukraine, their criteria for legal protection and terms of validity of property rights, assessment, commercialization, and contractual ways of managing intellectual property rights and protection of intellectual property rights, creation of intellectual property objects, implementation of patent research on the databases of Ukrpatent, regional agencies and the World Intellectual Property Organization, acquisition of rights (state registration of rights) to objects of intellectual property rights.

The purpose of the discipline is to form competencies for students:

- Ability to generate new ideas (creativity) (K1).
- Ability to apply knowledge in practical situations (K2).
- Ability to search, process and analyze information from various sources (K3).

1.3. Subject of discipline study

The subject of the discipline is a set of rules of law regulating social relations reflected in the legislation, legal doctrine and judicial practice and related to the creation, protection of the results of intellectual creative activity and the protection of rights to them.

1.4. Learning outcomes

- Search for the necessary information on chemical technology, processes and equipment for the production of chemical substances and materials based on them, systematize, analyze and evaluate the relevant information (PR2).
- Communicate freely in national and foreign languages orally and in writing to discuss and present the results of professional activities, research and projects (PR5).
- Search the scientific and technical literature, patents, databases, and other sources for the necessary information on chemical technology, processes and equipment for the production of chemical substances and materials based on them, systematize, and analyze and evaluate the relevant information (PR7).

2. Prerequisites and requisitions of disciplines

List of disciplines or knowledge and skills, possession of which is necessary for the applicant of higher education for the successful assimilation of discipline	List of disciplines based on the results of training in this discipline
The discipline is studied on the basis of a bachelor's degree	<ul style="list-style-type: none"> • Special disciplines that provide for the implementation of tasks of technical creativity • Scientific work on the topic of master's thesis • Practice • Research practice

3. Contents of the discipline

Part 1. Intellectual property rights

Topic 1. Intellectual Property System

Topic 2. Emergence and acquisition of rights to intellectual property

Topic 3. Protection of intellectual property rights

Topic 4. Agreements in the field of intellectual property

Topic 5. Economics of Intellectual Property

Topic 6. Intellectual property management

Part 2. Patent science and acquisition of rights

Topic 7. Creation and patent-information research of objects of industrial property rights

Topic 8. Legal protection of the results of scientific and technical creativity

Topic 9. Legal protection of commercial designations

Topic 10. Legal protection of copyright and related rights

Topic 11. Unfair competition of its types, mechanisms of prevention, detection and counteraction. liability for violation of rights

4. Training materials and resources

Part 1. Intellectual property rights

Basic literature:

1. Intellectual property rights: textbook / zag. Ed. S.B. Buletsy, O.I. Chepis. Uzhhorod: RICK-U, 2019. 488 p. (University Library);
2. Intellectual property rights: textbook / zag. Ed. O.I. Kharitonova. Kyiv: Yurinkom Inter, 2019. 539 p. (University Library);
3. Intellectual property and copyright: textbook/ I.M. Chistyakov 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; for ed. S.V. Chikina; NTUU "KPI". – 2nd type, processing. and dope. – 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 agreements and agreements in the field of intellectual property: Teaching. posib. / A.S. Romashko, I.I. Verba, V.V. Adventure. – Type.2-th processing. and supplements. [Electronic resource] / – K.: NTUU "KPI", 2015. – 186. Access mode <http://ela.kpi.ua/handle/123456789/28002>

Additional literature:

1. Manual for judges on intellectual property / I.M. Benedysyuk et al. K.: K.I.S., 2018. 424 cc.
2. Koval I.F. Commercialization of intellectual property rights: teaching. K.: Yurinkom Inter, 2018. 272 cc.
3. Yakubivskiy I.E. Acquisition, implementation and protection of intellectual property rights in Ukraine: monograph. Lviv: Ivan Franko National University of Lviv, 2018. 522 cc
4. Vahoneva T.M. Copyright and related rights in Ukraine: textbook. K.: Dakor VD, 2016. 564 cc.
5. Zhilinkova O.V. Contractual regulation of relations on intellectual property in Ukraine and abroad: monograph. K.: Yurinkom Inter, 2015. 280 cc
6. Koval I. F. Protection of rights in the field of industrial property: problems of legislative support and enforcement: monograph. K.: Research Institute of YIP OF THE NATIONAL Academy of Sciences of Ukraine, Lazuli-Polygraf, 2011. 320 cc.
7. Civil Code of Ukraine: scientific and practical commentary (explanations, interpretations, recommendations using the positions of higher courts, the Ministry of Justice, scientists, specialists). Vol. 6: Intellectual Property Rights / per Ed. prof. I.V. Spasydo-Fateeva. H.: FOP Lysyak L.S., 2011. 592 p. (Comments and analytics).

Information resources of the Internet:

Website of the Verkhovna Rada of Ukraine. Legislation of Ukraine – <https://zakon.rada.gov.ua/>
Website of the Ministry of Economy of Ukraine – <http://www.me.gov.ua/Tags/DocumentsByTag?lang=uk-UA&id=bb27fb37-4305-4686-9ea0-995d1c10f028&tag=DerzhavnaSluzhbaIntelktualnoiVlasnosti>
The site of the State Enterprise "Ukrainian Institute of Intellectual Property" is <https://ukrpatent.org>
The website of the State Organization "Ukrainian Agency for Copyright and Related Rights" is <http://www.uacrr.kiev.ua>
World Intellectual Property Organization website – <http://www.wipo.int/portal/index.html.ru>

Part 2. Patent science and acquisition of rights

Basic literature:

1. Kuznetsov Y.M. Patent science and copyright: Textbook – K.: Kondor LLC, 2005. – 428 cc, 2nd edition, revised and supplemented, 2009. – 446 cc.
2. Mikulonok I.O. Intellectual property and patent science: textbook. Kyiv: KPI them. Igor Sikorsky Kyiv Polytechnic Institute, 2019. 244 p. Dostkp: <https://ela.kpi.ua/handle/123456789/31664>
3. Mikulonok I.O. Preparation and submission of an application for an invention and applications for a utility model: teaching. posib. Kyiv: KPI them. Igor Sikorsky Kyiv Polytechnic Institute, 2021. 116 cc Access: <https://ela.kpi.ua/handle/123456789/39745>
4. Workshop on the discipline "Patent Science and Copyright" for students and postgraduates of technical specialties and specialty "Intellectual Property" [Electronic resource] / A. S. Romashko, O. M. Kravets, O. V. Lytvyn ; NTUU "KPI". – Electronic text data (1 file: 2.72 MB). – Kyiv: NTUU "KPI", 2014. – Access mode <http://ela.kpi.ua/handle/123456789/28003>
5. Romashko A.S. International agreements and agreements in the field of intellectual property: Teaching. posib. / A.S. Romashko, I.I. Verba, V.V. Adventure. – Type.2-th processing. and supplements. [Electronic resource] / – K.: NTUU "KPI", 2015. – 186. Access mode <http://ela.kpi.ua/handle/123456789/28002>
6. Romashko A.S. Trademark: self-search, preparation for registration, monitoring Of Teaching. posib. / A.S. Romashko, O.M.Kravets. – [Electronic resource] / – K.: NTUU "KPI", 2016. – 170. stamp Approved by the Academic Council of NTUU "KPI" dated June 30, 2016 – Access mode <http://ela.kpi.ua/handle/123456789/28006>

Additional literature:

1. Altshuller G. S. Find an idea: Introduction to TRIZ – the theory of solving inventive problems. 4th ed. – M.: Alpina Publisher, 2011.

2. Volkotrubl. T. Osnovykhudozhestvennogokonstruktorovanie: Uchebnikdlyakhudozh. studies. Institutions. – 2nd ed., pererabidop. – Kyiv: Vyshchashkola, 1988. – 191 p.: ill.
3. Kuznetsov Y. M., Mikulonok I. O., Samoilenko O. V. Practicum in the discipline "Patent Science and Copyright". Tutorial / Under ed. Y.M. Kuznetsova. – Kyiv: NTUU "KPI", 2014. – 317 p.
4. Text of lectures on the discipline "ACQUISITION OF INTELLECTUAL PROPERTY RIGHTS" Part 1 "Acquisition of rights to invention (utility model)" for specialties OKH specialist 7.18010011 "Intellectual property" and master 8.18010011 "Intellectual property" / Compiled. A.S. Romashko – K.: NTUU "KPI" (electronic edition), 2012. – 137 p. [Electronic resource].
5. Text of lectures on the discipline "Acquisition of intellectual property rights" Part 2 "Acquisition of rights to industrial designs" for specialties OKH specialist 7.18010011 "Intellectual property", master 8.18010011 "Intellectual property" [Electronic resource] / NTUU "KPI"; concluded. A. S. Romashko. – Electronic text data (1 file: 432 KB). – Kyiv: NTUU "KPI", 2013. – 64 p. [Electronic resource]. – Access mode: <http://ela.kpi.ua/handle/123456789/2662>
6. Collection of test questions on the discipline "Patent Science and Copyright" for students of the educational qualification level "Master" [Electronic resource] / NTUU "KPI"; concluded. A. S. Romashko. – Electronic text data (1 file: 217 KB). – Kyiv: NTUU "KPI", 2013. – 34 p. [Electronic resource]. – Access mode: <http://ela.kpi.ua/handle/123456789/2663>

Information resources of the Internet:

Website of the Verkhovna Rada of Ukraine. Legislation of Ukraine <https://zakon.rada.gov.ua/>

Website of the Ministry of Economy of Ukraine – <http://www.me.gov.ua/Tags/DocumentsByTag?lang=uk-UA&id=bb27fb37-4305-4686-9ea0-995d1c10f028&tag=DerzhavnaSluzhbaIntelektualnoiVlasnosti>

The site of the State Enterprise "Ukrainian Institute of Intellectual Property" is <https://ukrpatent.org>

The website of the State Organization "Ukrainian Agency for Copyright and Related Rights" is <http://www.uacrr.kiev.ua>

World Intellectual Property Organization website – <http://www.wipo.int/portal/index.html.ru>

EDUCATIONAL CONTENT

5. Methods of mastering the discipline (educational component)

5.1. Distribution of classes by topic

Part 1. Intellectual property rights

Topic 1. Lecture 1. Intellectual Property System

Topic 2. Lecture 2. The emergence and acquisition of intellectual property rights

Practical lesson 1 on topics 1-2. Intellectual property system. The emergence and acquisition of rights to intellectual property

Topic 3. Lecture 3. Protection of intellectual property rights.

Topic 4. Lecture 4. Contracts in the field of intellectual property

Practical lesson 2 on topics 3-4. Protection of intellectual property rights. Contracts in the field of intellectual property

Topic 5. Lecture 5. Economics of Intellectual Property

Topic 6. Lecture 6. Intellectual property management

Practical lesson 3 on topics 5-6. Economics of Intellectual Property. Intellectual property management

Part 2. Patent science and acquisition of rights

Topic 7 . Creation and patent information research of objects of industrial property rights

Lecture 1. 7.1. Creativity as a type of intellectual work.

7.2. Methods of setting and solving creative problems on the example of invention.

7.3. Stages of invention development

Lecture 2. 7.4. Patent information and documentation, patent research.

7.5. Patent information resources.

7.6. Patent research

7.7. Patent form

Practical lesson No. 1. Solving inventive problems. patent and information search.

Topic 8. Legal protection of the results of scientific and technical creativity

Lecture 3. 8.1. The procedure for acquiring rights to inventions and utility models
 Practical training No2. Selection of analogues and the choice of the nearest analogue, the construction of the formula.
 Lecture 4. 8.2. Registration of an application for registration of rights to an invention (utility model)
 Lecture 5. 8.2. (continued)
 Practical training No3. Registration of an application for registration of property rights to the invention (utility model).
 Lecture 6. 8.3. Procedure for acquiring rights to industrial designs
 Practical lesson No4. Registration of an application for registration of property rights to an industrial design.
 Lecture 7. 8.4. Procedure for acquiring rights to trade secrets and rationalization proposal.
 Topic 9. Legal protection of commercial designations
 Lecture 8. 9.1. The concept of corporate (commercial) name and geographical indications
 9.2. Acquisition of trademark rights
 Lecture 9. 9.2. (continued)
 9.3. Acquisition of rights to geographical indication
 Practical training No5. Registration of an application for registration of property rights to the trademark.
 Lecture 10. Topic 10. Legal protection of copyright and related rights
 10.1. Features of copyright protection in Ukraine and the world
 10.2. State registration of copyrights
 10.3. Peculiarities of protection of objects of related rights in Ukraine and the world
 Topic 11. Unfair competition of its types, mechanisms of prevention, detection and counteraction. Liability for violation of rights
 11.1. Unfair competition of its types. Regulations on unfair competition in the Paris Convention and in Ukraine
 11.2. Countering piracy, trolling and counterfeiting. Piracy and trolling in Ukraine and the world
 11.3. Parasitic marketing at events of a sport-mass and cultural nature
 Practical training No6. Protection of trade secrets. Copyright registration.
 Modular control work:
 1. By topics 7 and 8
 2. By topics 9, 10 and 11
 Preparation for the standings
 Passed

5.2. Mastery methodology

Lecture

Part 1. Intellectual property rights

Lecture 1. Intellectual Property System

Purpose:

educational: to form an idea of intellectual property rights, the system of objects of intellectual property rights, subjects of the right to them and the content of their rights, legislation in the field of intellectual property, the state system of legal protection of intellectual property;

developmental: formation of logical legal thinking;

educational: to cultivate a positive and respectful attitude to legal science.

Content of the lecture:

1. Concept: "intellectual property object" and "intellectual property rights".
2. Objects of intellectual property rights.
3. Subjects of intellectual property rights.
4. National intellectual property legislation.
5. International intellectual property law.
6. State system of intellectual property.

Lecture 2. The emergence and acquisition of rights to intellectual property

Purpose:

educational: to form an idea of the emergence and acquisition of the right to various objects of intellectual property rights, the difference between the concepts of "emergence" and "acquisition of the right" to intellectual property rights;

developmental: formation of logical legal thinking;

educational: to cultivate a positive and respectful attitude to legal science.

Content of the lecture:

1. The emergence of rights to objects of copyright.
2. The emergence of rights to objects of related rights.
3. Acquisition of rights to patent law and industrial designs.
4. Acquisition of rights to commercial designations.
5. The emergence and acquisition of the right to other objects of intellectual property rights.

Lecture 3. Protection of intellectual property rights

Purpose:

educational: to form an idea of the concept, grounds, forms, ways of protecting intellectual property rights;

developmental: formation of logical legal thinking;

educational: to cultivate a positive and respectful attitude to legal science.

Content of the lecture:

1. The concept and grounds for the protection of intellectual property rights.
2. Jurisdictional form of protection of intellectual property rights.
3. The unmerciful form of protection of intellectual property rights.

Lecture 4. Contracts in the field of intellectual property

Purpose:

educational: to form an idea of contractual ways of disposing of intellectual property rights;

developmental: formation of logical legal thinking;

educational: to cultivate a positive and respectful attitude to legal science.

Content of the lecture:

1. The concept and content of the contract.
2. Agreements at the stage of creation of the intellectual property object.
3. Contracts at the stage of using the intellectual property object.
4. Agreement on the transfer of exclusive property rights of intellectual property.
5. Other agreements on the disposal of intellectual property rights.

Lecture 5. Economics of Intellectual Property

Purpose:

educational: to form an idea of commercialization of intellectual property rights;

developmental: formation of logical legal thinking;

educational: to cultivate a positive and respectful attitude to legal science.

Content of the lecture:

1. Intellectual property as an intangible asset.
2. Assessment of the value of intellectual property rights.
3. Accounting of intellectual property.
4. Taxation of transactions with objects of intellectual property rights.
5. Commercialization of intellectual property rights.

Lecture 6. Intellectual property management

Purpose:

educational: to form an idea of the principles of intellectual property management, the life cycle of the object of intellectual property rights, the management of an intellectual property object at different stages of its life cycle;

developmental: formation of logical legal thinking;

educational: to cultivate a positive and respectful attitude to legal science.

Content of the lecture:

1. The concept of management and principles of intellectual property management.
2. Life cycle of the object of intellectual property rights.

3. Management of intellectual property at different stages of its life cycle.

Part 2. Patenting and acquisition of rights

Topic 7. Creation and patent-information research of objects of industrial property rights

Lecture 1

7.1. Creativity as a type of intellectual work. Social aspects of scientific and technical creativity.

7.2. Methods of setting and solving creative problems on the example of invention. General classification of methods for solving inventive problems, their essence.

7.3. Stages of invention development

Lecture 2

7.4. Patent information and documentation, patent research. Patent documentation and regulatory framework of patent information activities.

7.5. Patent information resources. Non-proprietary information. Using the Internet to search for patent information

7.6. Patent research Content and procedure for patent research. Life cycle of the object of economic activity. Patent form.

7.7. Patent form. Purpose and preparation

Topic 8. Legal protection of the results of scientific and technical creativity

Lecture 3

8.1. The procedure for acquiring rights to inventions and utility models.

General provisions. The concept of invention and utility model. Objects of inventions and utility models. Objects that are not recognized as inventions (useful models). Subjects of the right to inventions (utility models). Conditions for granting legal protection to inventions (useful models). Fees for acquiring rights. Procedure for obtaining a patent: date of application, priority of application, withdrawal and change of application. Temporary legal protection, publications on the issuance of a patent, examination of the application, registration of a patent, issuance of a patent.

Lecture 4

8.2. Registration of an application for registration of rights to an invention (utility model).

List of materials when submitting an application in Ukraine. The requirement of unity of the invention (utility model). The formula of the invention (purpose, structure, assembly, features). Requirements for the description of the invention (utility model). Requirements for graphic materials that explain the description of the invention. Abstract of the invention. Registration of application documents. Fees on request.

Lecture 5

8.2. Registration of an application for registration of rights to an invention (utility model). (Continued)

Types and essence of examinations on applications, record keeping on application types of conclusions, decisions and requests of the patent examination body on the materials of the application for the issuance of a patent for an invention (utility model). Registration of an international application for an invention. Mechanisms for preventing industrial trolling.

Lecture 6

8.3. Procedure for acquiring rights to industrial designs

The concept of industrial design. Unregistered industrial design. Protection of unregistered industrial designs in the EU and Ukraine and its term. Objects of industrial designs. Objects that are not recognized as industrial designs. Subjects of law industrial designs Terms of legal protection and conditions of protection of industrial design. Examination of industrial designs. Deadline for registration. Scope of legal protection. Fees for acquiring rights. Examination. Requirements for registration of an application for registration of an industrial design. List of materials when submitting an application in Ukraine and requirements for them. System of classification of industrial designs. Protection of industrial design in foreign countries, including the Hague system. Features of the international application and its expertise.

Lecture 7

8.4. Procedure for acquiring rights to trade secrets and rationalization proposal. Scientific discovery, semiconductor product, plant varieties and certain aspects of their protection. Information with limited access to its types and characteristics. The concept of "know-how" and its relation to objects of intellectual property rights. Rationalization proposal in the legislation of Ukraine. The relationship of the rationalization proposal with other objects of intellectual property rights. comparative analysis of the protection of rationalization proposal in the world.

Topic 9. Legal protection of commercial designations

Lecture 8

9.1. The concept of corporate (commercial) name and geographical indications

Identification of commercial designations as typical objects of intellectual property rights. The concept of corporate (commercial) name; trademarks; geographical indications. The content of the right to a commercial name and geographical indication. Legal protection of unregistered commercial designations. The relationship of various objects of intellectual property rights.

9.2. Acquisition of trademark rights

Subjects and objects of trademark rights. Terms of legal protection. Grounds for refusal to provide legal protection.

Lecture 9

9.2. Acquisition of trademark rights (Continued)

Rules for drawing up an application for registration of a certain commercial designation as a typical object of intellectual property rights. Rules for examination of applications for registration of commercial designations, which are typical objects of intellectual property rights. Application of the provisions of international classification agreements relating to trademarks. Independent search of the trademark before the registration procedure and during monitoring to identify violations of rights using available electronic sources. International trademark protection under the Madrid system. An example of an international application. Features relating to trademarks in accordance with the Association Agreement.

9.3. Acquisition of rights to geographical indications

Geographical indication is an important aspect of the market of quality goods. Look at the geographical indications. The procedure for acquiring rights to geographical indication Application of the provisions of international agreements relating to geographical indications. Features relating to geographical indications in accordance with the Association Agreement.

Lecture 10

Topic 10. Legal protection of copyright and related rights

10.1. Features of copyright protection in Ukraine and the world.

Objects/subjects of copyright. The scope of legal protection and the term of protection.

10.2. State registration of copyrights.

Security document: type, mandatory. the composition of the application, examination on request, the procedure for obtaining, the cost. Rights arising from the security document. Notifying the owner of their rights. Service works. Co-authorship. Use of copyright objects without the consent of the owner. Acquisition of rights abroad. WIPO PROOF VOIV SERVICE

10.3. Features of protection of objects of adjacent rights **of Oshibka!**

Objects/subjects of related rights. The scope of legal protection and the term of protection.

Topic 11. Unfair competition of its types, mechanisms of prevention, detection and counteraction. Liability for violation of rights

11.1. Unfair competition of its types

Regulations on unfair competition in the Paris Convention and in Ukraine

11.2. Countering piracy, trolling and counterfeiting.

Piracy and trolling in Ukraine and in the world. Mechanisms for preventing unfair competition and counterfeit products.

11.3. Parasitic marketing at events of a sport-mass and cultural nature.

Examples of parasitic marketing and countermeasures.

Practicaland classes

Part 1. The right of intellectual property

Practical training 1. Intellectual property system. The emergence and acquisition of rights to intellectual property

Purpose:

educational: to summarize knowledge about intellectual property rights, the system of objects of intellectual property rights, subjects of the right to them and the content of their rights, the emergence and acquisition of the right to intellectual property;

developmental: formation of logical legal thinking;

educational: to cultivate a positive and respectful attitude to legal science.

Questions for repetition : Concept: "intellectual property object" and "intellectual property rights". Acquisition of rights to commercial designations. The emergence and acquisition of the right to other objects of intellectual property rights.

Questions for analysis:

1. As you understand the concepts of "creative activity" and "intellectual activity". Give examples. Justify the answer.
2. What is the broader concept – "author" or "subject of law"? Who can be the author – a natural or legal person? Justify the answer.
3. How do you understand the concepts of "the emergence of intellectual property rights" and "acquisition of intellectual property rights"? Give examples. Justify the answer.
4. Is it possible to consider a personal letter written for another person as 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 the answer. What rights do the artist of the song have – copyright or related? Does the singer of the 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, films are created in co-authorship. How is it possible to dispose of property rights to such objects of copyright? Is it possible to solely dispose of property rights? If so, under what conditions?
7. How to distinguish inventions and utility models from:
 - trade secrets, know-how;
 - scientific discovery.

Practical training 2. Protection of intellectual property rights. Contracts in the field of intellectual property

Purpose:

educational: to summarize knowledge about the protection of intellectual property rights and contractual ways to dispose of intellectual property rights;

developmental: formation of logical legal thinking;

educational: to cultivate a positive and respectful attitude to legal science.

Questions for repetition: The concept and grounds for the protection of intellectual property rights. jurisdictional form of protection of intellectual property rights. disposal of intellectual property rights.

Task:

1. Get acquainted with the samples of contracts in the field of intellectual property: <https://ukrpatent.org/uk/articles/copyright-reg> (paragraph 5 of the Information on state registration of copyright and contracts relating to the author's right to the work).
2. Prepare an application (<https://ukrpatent.org/uk/articles/copyright-forms>) on the registration of a contract relating to the author's right to a work: a) an agreement on the alienation of intellectual property rights; (b) the license agreement.

Questions for analysis:

1. Compare the concepts of "protection of intellectual property rights" and "protection of intellectual property rights".
2. Compare the concept of "alternative (extrajudicial) protection of intellectual property rights" and "non-use form of protection of intellectual property rights".

Practical training 3. Economics of Intellectual Property. Intellectual property management

Purpose:

educational: to summarize knowledge about commercialization and management of intellectual property rights;

developmental: formation of logical legal thinking;

educational: to cultivate a positive and respectful attitude to legal science.

Questions for repetition: Intellectual property as an intangible asset. Evaluation of the value of intellectual property rights. Intellectual property accounting. taxation of transactions with intellectual property rights. commercialization of intellectual property rights. life cycle.

Questions for analysis:

- What is the role of commercialization of intellectual property rights in the development of society? Give examples: Justify the answer.
- How do you understand the concept of "balance of interests of subjects of intellectual property rights"? Give examples. Justify the answer.

Part 2 Patent science and acquisition of rights – 12 hours (6 practical classes)

Practical lesson No. 1. Solving inventive problems. Patent information search

Theoretical part

1. Levels of inventions. Bona fide and unscrupulous patents
2. Methods of solving inventive problems
3. Selection of the International Patent Classification
4. Execution of patent search (acquaintance with patent databases)
5. Demonstration of one of the methods of solving inventive problems

Practical part when working in the audience

6. Determine the rubric of the IPC object on the instructions of the teacher and painting the name of the class section, subclass, main group
7. Find according to the specified rubric IPC 1-3 patents on patent bases.
8. Survey on the topic of the lesson

Practical part for independent work

9. Determination of the IPC rubric of the object on the topic of the master's thesis with the title of the section, class, subclass, main group.
10. Selection of 2-3 analogues of the object on the topic of master's thesis.

Practical training No2. Selection of analogues and the choice of the nearest analogue, the construction of the formula.

Theoretical part

1. Selection of analogues and selection of a prototype for invention (utility model).
2. Generalization of pairs of signs
3. Drawing up the formula of the invention (utility model) on the product / method using the basic laws of logic.
4. Formal examination of the formula (search for errors in formulas for real patents).

Practical part when working in the audience

5. Implementation of formal examination of formulas by variants.
6. Survey on the topic of the lesson

Practical part for independent work

7. Choosing the nearest analogue on the topic of the master's thesis

Practical training No3. Registration of an application for registration of property rights to the invention (utility model).

Theoretical part

1. Preparation of the application form.
2. Preparation of documents for the application on the example of a real patent.

Practical part when working in the audience

3. Drawing up a formula on the instructions of the teacher.
4. Survey on the topic of occupation/ preparation of other materials of the application

Practical part for independent work

5. Preparation of a set of documents for registration of rights to a utility model on the topic EXCLUSIVELY of his bachelor/master's thesis.

Practical lesson No4. Registration of an application for registration of property rights to an industrial design.

Theoretical part

1. Selection of the section of the ITUC on the basis of Ukrpatent, determination of the name of the industrial design
2. Search for industrial designs (base of registered industrial designs)
3. Preparation of the application form.
4. Registration of an application for registration of industrial designs on examples.

Practical part when working in the audience

5. Determination of the list of industrial design images
6. Survey on the topic of the lesson/ preparation of other materials of the application.

Practical part for independent work

7. Determination of codes of the ITUC of industrial design related to the theme of the master's thesis. Search by bases of Ukrpatent and VOIV. Compiling descriptions and images.

Practical training No5. Registration of an application for registration of property rights to the trademark.

Theoretical part

1. Collection of source data.
2. Grouping the list of goods and services by ICTP codes using the Goods & Services Manager Internet service.
3. Classification of trademarks (TM) according to the Vienna classification.
4. Preparation of a description of a trademark containing a verbal part.
5. Preparation of the application form and documents for it.
6. Organization of self-search of the trademark.

Practical part when working in the audience

7. Survey on the topic of occupation / preparation of application materials with the definition of the sections of the Nietzka and Vienna classification.

Practical part for independent work

8. Selection of existing/development of a new trademark for the production of goods/services related to the startup/theme of the master's thesis (for example, for the production of products/processes studied in the dissertation, or for equipment/materials used in the production). Search for similar trademarks

Practical training No6. Protection of trade secrets. Copyright registration.

Theoretical part

1. Classification of restricted information
2. Specificity of trade secrets, its detection in the materials of the application for invention (utility model) and documentation
3. The procedure for issuing an application for copyright registration and determining the composition of additional documents and material media

Practical part when working in the audience

4. Detection in the materials of the application for the invention (utility model) of trade secrets
5. Determination of the list of documents for copyright registration for a particular copyright object
6. Registration of an application for copyright registration

Practical part for independent work

7. Identification of possible trade secrets to the patent on the topic of master's thesis.

6. Independent work of higher education applicants

The independent work of students includes preparation for classroom classes by mastering lecture materials, studying basic, additional literature and legislation, performing practical tasks.

Part 1. Intellectual property rights

Topic 1. Intellectual Property System

Get acquainted with international documents in the field of intellectual property.

Topic 2. The emergence and acquisition of rights to intellectual property

Get acquainted with the specifics of the emergence or acquisition of the right to atypical objects of intellectual property rights.

Topic 3. Protection of intellectual property rights

Get acquainted with ways to protect intellectual property rights.

Topic 4. Contracts in the field of intellectual property

Get acquainted with the samples of contracts in the field of intellectual property: <https://ukrpatent.org/uk/articles/copyright-reg> (paragraph 5 of the Information on state registration of copyright and contracts relating to the author's right to the work) and prepare an application (<https://ukrpatent.org/uk/articles/copyright-forms>) on the registration of the contract relating to the author's right to the work: a) the agreement on the alienation of intellectual property rights; (b) the license agreement.

Topic 5. Economics of Intellectual Property

Get acquainted with the specifics of taxation of transactions with objects of intellectual property rights.

Topic 6. Intellectual property management

Get acquainted with the management of the intellectual property object at different stages of its life cycle.

Part 2. Patenting and acquisition of rights

Topic 7. Creation and patent-information research of objects of industrial property rights

The concept of "system" and a systematic approach in the creative process. Methodological basis and social aspects of scientific and technical creativity. Stages of development of the invention. Psychological features of scientific and technical creativity.

Get acquainted with the rubric of the International Patent Classification, which corresponds to the topic of the master's thesis. Find analogues of the object on the topic of the master's thesis and choose the nearest analogue.

SRS to Practical Training 1.

Topic 8. Legal protection of the results of scientific and technical creativity

Get acquainted with the "[Rules for drawing up and submitting an application for an invention and applications for a utility model](#)", "[Rules for drawing up and submitting an application for an industrial design](#)".

Make a formula for an invention or utility model on the topic of your master's thesis.

A set of documents for registration of rights to a utility model on the topic of their attestation work.

Determine the codes of the industrial design design with the topic of their work. Get acquainted with the search bases for industrial designs.

Get acquainted with the types of information that cannot be classified as a trade secret.

SRS to practical training 2, 3, 4 and 6 (part).

Topic 9. Legal protection of commercial designations

Get acquainted with the "[Rules for drawing up, submitting and considering an application for the issuance of a certificate of Ukraine for a mark for goods and services](#)", Determination of the codes of the Nitska and Vienna classification. Selection of similar trademarks

SRS to Practical Training 5.

Topic 10. Legal protection of copyright and related rights.

Get acquainted with the Procedure for state registration of copyright and contracts relating to the author's right to the work.

SRS to Practical Training 6 (part).

Topic 11 Unfair competition of its types, mechanisms of prevention, detection and counteraction.

Get acquainted with the Law of Ukraine "On Protection against Unfair Competition" and the Association Agreement.

Preparation for the test.

POLITICS AND CONTROL

7. Policy of discipline (educational component)

7.1. Forms of work

Lectures are held using visual means of presenting material and using methodological materials, access to which is available to applicants for higher education. Students receive all materials via e-mail, campus or Telegram group.

Higher education applicants are involved in the discussion of lecture material and ask questions about its essence.

In practical occupations, forms of individual and collective work (teamwork, pair work) are used to implement the teacher's tasks for acquiring skills in independent practical work.

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

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

7.2. Rules for attending classes

Classes can be held in classrooms according to the schedule. Also, classes can be conducted online in synchronous modes using video communication means, provided that the applicant of higher education is uniquely identified. Conducting classes online should be provided for by the relevant order on kpi them. Igor Sikorsky Kyiv Polytechnic Institute.

If there are good reasons, the applicant of higher education must inform the teacher in advance (1 day) about the reasons for the possible skipping of the control event.

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

If the classroom session falls on a non-working day (festive, memorable, etc.), then the material of such an occupation partially passes into the category "Independent work of higher education applicants", and is partially added to the next lesson.

7.3. Rules for awarding incentive and penalty points

Incentive points for:

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

+10 points – to the student of the author (inventor) of the object for which the application is submitted (only if a set of materials and application number are submitted);

up to +10 points – mastering the remote course OF VOIV DL-101 "Fundamentals of Intellectual Property" (Free of Charge), provided that the screen of the final exam is provided. Mastering during paid courses is not encouraged. in relation to intellectual property, is carried out subject to such a volume of the course, which is equivalent to the volume of the above-mentioned rate (at least 50 hours);

up to +5 points – mastering the distance course of VOIV DL101R – DL-101 for Ukrainian students in a language other than Russian, and for foreign students – in a language different from the language of the country from which the student comes (attached to the above points for the course).

The sum of all incentive points may not exceed 10 points.

Penalty points are not provided.

8. University policy

8.1. Academic Integrity Policy

The policies 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". Read more: <https://kpi.ua/code>

8.2. Ethical standards

The norms of ethical behavior 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". Read more: <https://kpi.ua/code>

ASSESSMENTS 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.

Modular control work and scoring is carried out by a lecturer from part 2 of the discipline (teacher of the Department of Machine Construction of the Mechanical Engineering Institute).

9. Types of control and rating system for assessing learning outcomes (RCOs)

9.1. Types of control

Type of control	Method of control
Current control	Part 1. Checking preparation for practical classes (express survey, testing, discussion of legal cases), preparation of draft documents Part 2. Checking the implementation of practical classes in accordance with the schedule of classes, modular control work
Calendar control	It is carried out twice a semester as a monitoring of the current state of fulfillment of the requirements of the syllabus
Semester control	Passed

9.2. Rating system for assessing learning outcomes

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

Modular control work and scoring is carried out by a lecturer from part 2 (teacher of the Department of Machine Design of the Mechanical Engineering Institute).

1) Current control

Part 1. Intellectual property rights

Express surveys are conducted on the topic of the lesson, the implementation of test tasks, discussion of legal cases, preparation of draft documents

The student's rating consists of points received for an express survey on the topic of the lesson, discussion of legal cases, solving practical problems, supplementing the answers of other students in the process of discussion in practical classes, performing test tasks online and preparing draft documents. In the absence of a student in a practical lesson, it is necessary to work out the missed lesson by solving online tests (access to the test is provided by the teacher) or solving legal problems (by sending work to the teacher's e-mail).

	Type of activity	Maximum possible score
Practical lesson No1	express survey on the topic of the lesson, discussion of legal cases, supplementing the answers of other students in the process of discussion in practical classes, performing test tasks, preparing practical tasks	11
Practical lesson No2		11
Practical lesson No3		11
Total for part 1		33

Part 2. Patenting and acquisition of rights

Evaluation of the applicant of higher education is carried out in practical classes

<i>Control measure</i>	<i>Weight ball</i>
Performing a practical task 1. Solving inventive problems. Patent information search	5
Performing a practical task 2. Selection of analogues and selection of the nearest analogue, formula construction	5
Performing a practical task 3. Registration of an application for registration of property rights to the invention (utility model)	10
Performing a practical task 4. Registration of an application for registration of property rights to an industrial design	5
Performing a practical task 5. Registration of an application for registration of property rights to a trademark	5
Performing a practical task 6. Protection of trade secrets. Copyright registration	5
Total for practical tasks	35
Modular control work. Part 1 Inventions, utility models, industrial designs	17
Modular control work. Part 2 Rationalization offer, commercial designations, trade secrets, know-how, copyright, related rights	15
Total for modular control work	32
Total for part 2	67

General rating score of the discipline "Intellectual Property and Patent Science" (maximum 100 points):

$$R_{\Sigma} = R_1 + R_{\Pi p1} + R_{\Pi p2} + R_{\Pi p3} + R_{\Pi p4} + R_{\Pi p5} + R_{\Pi p6} + R_{MKP1} + R_{MKP2},$$

where R_1 – rating score for part 1 of the discipline (from 0 to 33 points inclusive) – is issued by the teacher of the relevant part;

$R_{Pr1} \dots R_{Pr6}$ – rating points for the performance of works provided for by practical classes No1... No6;

R_{MKR1} and R_{MKR2} – rating points for 1st and 2nd modular control works – see paragraph 7.5.

The final rating cannot exceed 100 points.

2) Calendar control

It is carried out twice a semester as a monitoring of the current state of fulfillment of the requirements of the syllabus

<i>Criterion Term</i>	<i>First Week 8</i>	<i>Second Week 14</i>
Conditions for obtaining a positive result	if the current rating score is not less than 50% of the maximum possible score at the time of calendar control	if the current rating score is not less than 50% of the maximum possible score at the time of calendar control

3) Scoring control work

If the applicant of higher education is not satisfied with the number of points scored, then the results of the rating assessment are canceled and the higher education applicant writes a scoring control work in the entire discipline "Intellectual Property and Patent Science".

The task of scoring control work consists of three issues: two theoretical issues on different credit modules of the discipline, as well as one practical issue. Each theoretical question of scoring control work (r_1 , r_2) is estimated at 30 points, and the practical (r_3) is 40 points, according to the evaluation system.

Criteria for evaluating issues on scoring control work:

Ball	Completeness of answers to questions
29–30 (38–40)	Complete comprehensive answer
26–27 (34–37)	The answer does not provide secondary or dependent on the main materials
23–25 (30–33)	The answer does not provide sufficiently significant information of the main materials
20–22 (26–29)	The answer does not provide half of the main materials
18–19 (24–25)	The answer is superficial without analyzing the question, incomplete conclusions

0–17 (0–23)	Significant errors in the answer, lack of orientation in the question
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The sum of the R_{points} for each of the three issues of the control work is transferred to the scoring assessment according to the table.

4) Table of conformity of rating points of ratings on university scale

Score	Score
95...100	Perfectly
85...94	Very good
75...84	Well
65...74	Satisfactory
60...64	Enough
Less than 60	Disappointing

10. Additional information on the discipline (educational component)

1. The presence of a sole patent for an invention (utility model) is equal to the performance of work on practical classes No. 2 and No. 3 with a maximum weight point.

2. The presence of a sole patent for an industrial design is equal to the performance of work on the practical lesson No. 4 with the maximum weight point.

3. The presence of a single certificate of registration of the mark for goods and services is equal to the performance of work at the practical lesson No. 5 with the maximum weight point.

4. The presence of a single certificate of registration of copyright to the work is equal to the performance of work at the practical lesson No. 1 with the maximum weight point.

5. Availability of a certificate of THE COURSE DL-177 The use of patent information is equated to the performance of work in practical classes No. 1 and No. 2 with a maximum weight point.

6. For international students, for whom it is impractical to study the legislation of Ukraine, it is possible to enroll the courses of VOIV DL-101 "Fundamentals of Intellectual Property", provided that the result of the final exam is provided (up to 50 points are evaluated), DL-177 The use of patent information (estimated up to 20 points), DL-101PCT Introduction to the patent cooperation agreement (estimated at up to 5 points). Patent – is evaluated up to 25 points (search for a patent of his country relating to the specialty, search for analogues to it, in addition to those specified in the patent, a description of the essence of the INID codes of the patent, the allocation of structural elements of the patent: the headings of the IPC, to which the invention belongs, the information that makes the formula and the following sections of the description: the field of technology to which the invention belongs; the level of technology; the essence of the invention; the list of drawing figures; the list of drawing figures; if they have a link in the description; information confirming the possibility of implementation; preparation of a draft formula for your invention).

Work program of the discipline (syllabus):

Compiled:

Part 1: Ph.D. Dmytrenko Victoria Viktorovna,
Ph.D. Yasharova Maria Nikolaevna,
Doctor of Law, Assoc. Daria Maritz

Part 2 k.t.n., Assoc. Alla Romashko,
Ph.D., Assoc. Oksana Yurchyshyn,
Ph.D., Assoc. Samoilenko Oleksiy Vasyliovych;

Adapted for OPP Industrial Ecology and Resource Efficient Cleaner Technologies:
Doctor of Technical Sciences, Prof., Mikulionok Ihor Olehovich

Approved Extended meeting of the MMI Machine Design Department (Protocol No. 19 of 17.06.21)

Approved by the Faculty Methodical Commission (Protocol No. 10 of 24.06.22)