



National Technical
University of Ukraine

“Igor Sikorsky Kyiv
Polytechnic Institute”



Department of Machine
Design, Mechanical
Engineering Institute



Department of Intellectual
Property and Private Law, Faculty
of Sociology and Law

Intellectual Property and Patent Science

Syllabus

Working Program of the Academic Discipline

COURSE DETAILS

- **Level of Higher Education:** Second (Master's)
- **Field of Knowledge:** C – Social Sciences, Journalism, Information and International Relations
- **Specialty:** C5 Sociology
- **Educational Program:** Social Data Analytics
- **Course Status:** Compulsory
- **Form of Study:** Full-time (Daytime)
- **Year of Study, Semester:** Year 1, Semester 2
- **Course Volume:** 3 ECTS credits (90 hours), including lectures – 30 hours, practical classes – 14 hours, independent work – 46 hours
- **Semester Control / Assessment:** Modular Test, Final Credit
- **Schedule:** According to timetable <https://schedule.kpi.ua>
- **Language of Instruction:** Ukrainian

Course Instructors:

- Department of Intellectual Property and Private Law: PhD in Law Oleksandr Mykolaiovych Boyarchuk
- Department of Machine Design: PhD in Engineering, Assoc. Prof. Oksana Yaroslavivna Yurchyshyn

Course Placement: Determined by the lecturer of the respective part of the course and communicated to students at the first class <https://campus.kpi.ua>

COURSE PROGRAM

1. Description, Purpose, Subject, and Learning Outcomes

Course Description: The discipline consists of two parts:

- Part 1: *Intellectual Property and Patent Studies – Intellectual Property Law* (Department of Intellectual Property and Private Law, Faculty of Sociology and Law).
- Part 2: *Intellectual Property and Patent Studies – Patent Studies and Acquisition of Rights* (Department of Machine Design, Mechanical Engineering Institute).

Purpose of the Course: To prepare specialists with basic competencies in intellectual property law, including legislation and the system of legal protection of intellectual property in Ukraine, criteria of legal protection, validity terms of property rights, evaluation, commercialization, contractual methods of disposal of intellectual property rights, and protection of intellectual property rights. Students will also acquire skills in creating intellectual property objects, conducting patent research using databases of Ukrpatent, regional offices, and WIPO, and acquiring rights (state registration of rights) to intellectual property objects.

Competencies:

- **General Competencies:**
 - GC 04 – Ability to work in an international context.
- **Professional Competencies:**
 - PC 06 – Ability to adhere to professional ethics of a sociologist and be guided by universal human values.

Subject of the Discipline: A set of legal norms regulating social relations reflected in legislation, legal doctrine, and judicial practice, related to the creation, protection, and defense of intellectual creative activity results and rights thereto.

Learning Outcomes:

- LO 07 – Resolve ethical dilemmas in accordance with professional ethics of a sociologist and universal values.
- LO 11 – Summarize results of own scientific research and present them in scientific reports and publications.

2. Prerequisites and Postrequisites

Prerequisites	Postrequisites
Studied on the basis of a Bachelor's degree	Specialized disciplines involving technical creativity; Research work for the Master's thesis; Practice

3. Course Content

Part 1. Intellectual Property Law

- Topic 1. Intellectual Property System
- Topic 2. Emergence and Acquisition of Rights to Intellectual Property Objects

- Topic 3. Protection of Intellectual Property Rights
- Topic 4. Contracts in the Field of Intellectual Property
- Topic 5. Commercialization of Intellectual Property Rights

Part 2. Patent Studies and Acquisition of Rights

- Topic 6. Creation and Patent-Information Research of Industrial Property Objects
- Topic 7. Legal Protection of 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: types, mechanisms of prevention, detection, and counteraction; liability for infringement of rights

4. Study Materials and Resources

Part 1. Basic Literature

1. Intellectual Property and Copyright: A Textbook for University Students / I.M. Chistiakova, I.B. Kryvdina, D.V. Buryak et al. — 204 p. — 2023.
2. Intellectual Property Law: Textbook / ed. by O.I. Kharytonova. — 3rd edition, stereotyped. Kyiv: Yurinkom Inter, 2023. — 540 p.
3. Intellectual Property Law: Textbook / ed. by S.B. Buletsa, O.I. Chepys. Uzhhorod: RIK-U, 2019. — 488 p. (University Library).
4. Intellectual Property Law: Academic Course. Textbook for University Students / ed. by O.A. Pidopryhora, O.D. Sviatotskyi. — 2nd edition, revised and supplemented. Kyiv: Concern "Publishing House In Yure", 2004. — 672 p.
5. Intellectual Property Law: Academic Course / O.P. Orliuk, H.O. Androshchuk, O.B. Butnik-Siverskyi et al.; ed. by O.P. Orliuk, O.D. Sviatotskyi. Kyiv: In Yure, 2007. — 696 p.
6. Intellectual Property and Patent Studies [Electronic Resource]: Textbook for Master's Students / N.O. Bilousova, N.V. Havrushkevych, M.A. Danylchenko, M.V. Dubniak, N.D. Kohut, O.V. Lytvyn, A.S. Romashko, P.M. Tsybulov, O.Ya. Yurchyshyn; National Technical University of Ukraine "Igor Sikorsky KPI"; ed. by P.M. Tsybulov, A.S. Romashko. — Electronic text data (1 file: 6.03 MB). Kyiv: KPI, 2021. — 377 p. Available at: <https://ela.kpi.ua/handle/123456789/44252..>
7. Intellectual Property Law: Textbook / A.V. Aksiutina, L.V. Mezhevskaya, O.V. Nestertsova-Sobakar et al.; ed. by T.V. Yaroshevskaya. Dnipro: Dnipropetrovsk State University of Internal Affairs, 2022. — 336 p.
8. Intellectual Property [Electronic Resource]: Textbook / L.M. Popova, A.V. Khromov, I.V. Shuba. Kharkiv: Fedorko, 2021. — 262 p.
9. Copyright and Related Rights in Ukraine: Their Protection and Liability [Text]: Practical Guide / compilers: K.I. Chyzhmar, D.V. Zhuravlov. Kyiv: Center for Educational Literature, 2021. — 224 p.

Part 1. Additional Literature

1. Manual for Judges on Intellectual Property / I.M. Benedysiuk et al. Kyiv: K.I.S., 2018. — 424 p.
2. Koval I.F. Commercialization of Intellectual Property Rights: Textbook. Kyiv: Yurinkom Inter, 2018. — 272 p.
3. Yakubivskiy I.Ye. Acquisition, Exercise and Protection of Property Rights of Intellectual Property in Ukraine: Monograph. Lviv: Ivan Franko National University of Lviv, 2018. — 522 p.

4. Vakhonieva T.M. Copyright and Related Rights in Ukraine: Textbook. Kyiv: Dakor Publishing House, 2016. — 564 p.
5. Romashko A.S. International Treaties and Agreements in the Field of Intellectual Property: Textbook / A.S. Romashko, I.I. Verba, V.V. Pryhoda. — 2nd edition, revised and supplemented [Electronic Resource]. Kyiv: NTUU “KPI”, 2015. — 186 p. Available at: <http://ela.kpi.ua/handle/123456789/28002>..
6. Zhilinkova O.V. Contractual Regulation of Intellectual Property Relations in Ukraine and Abroad: Monograph. Kyiv: Yurinkom Inter, 2015. — 280 p.
7. Koval I.F. Protection of Rights in the Field of Industrial Property: Problems of Legislative Support and Law Enforcement: Monograph. Kyiv: Research Institute of Intellectual Property of the National Academy of Legal Sciences of Ukraine, Lazurit-Polygraph, 2011. — 320 p.
8. Civil Code of Ukraine: Scientific and Practical Commentary (Explanations, Interpretations, Recommendations Using Positions of Higher Courts, Ministry of Justice, Scholars, Specialists). Vol. 6: Intellectual Property Law / ed. by Prof. I.V. Spasybo-Fatieieva. Kharkiv: FOP Lysiak L.S., 2011. — 592 p. (Commentary and Analytics).

Internet Resources

1. Website of the Verkhovna Rada of Ukraine. Legislation of Ukraine – <https://zakon.rada.gov.ua/> (zakon.rada.gov.ua in Bing)
2. Website of the Ministry of Economy of Ukraine – [http://www.me.gov.ua/...](http://www.me.gov.ua/)
3. Website of the Ukrainian National Office of Intellectual Property and Innovation (UKRNOIVI) – <https://nipo.gov.ua/>
4. Website of the State Enterprise “Ukrainian Institute of Intellectual Property” – <https://ukrpatent.org>
5. Website of the State Organization “Ukrainian Agency for Copyright and Related Rights” – <https://uacrr.org/>
6. Website of the World Intellectual Property Organization – <https://www.wipo.int/portal/en/index.html> (wipo.int in Bing)

Part 2. Basic Literature

1. Bilousova N.O., Havrushkevych N.V., Danilchenko M.A., Dubnyak M.V., Kogut N.D., Lytvyn O.V., Romashko A.S., Tsibulov P.M., Yurchyshyn O.Ya. *Intellectual Property and Patent Studies*. Kyiv: KPI named after Igor Sikorsky, 2021. 377 p. URL: <https://ela.kpi.ua/handle/123456789/44252>
2. Romashko A.S., Yurchyshyn O.Ya., Danilchenko M.A. et al. *Patent Studies and Acquisition of Rights: Practicum*. Kyiv: KPI, Politekhnik Publishing House, 2025. 305 p. URL: <https://ela.kpi.ua/handle/123456789/75501> (ela.kpi.ua in Bing)
3. Mikulionok I.O. *Intellectual Property and Patent Studies: Textbook*. 5th ed., revised and supplemented. Kyiv: KPI, Politekhnik Publishing House, 2024. 248 p. URL: <https://ela.kpi.ua/handle/123456789/68179> (ela.kpi.ua in Bing)
4. Mikulionok I.O. *Filing Applications for Inventions and Utility Models: Textbook*. 4th ed., revised and supplemented. Kyiv: KPI, Institute of Gas of NASU, 2025. 202 p. URL: <https://ela.kpi.ua/handle/123456789/72376> (ela.kpi.ua in Bing)

Part 2. Additional Literature

1. Kuznetsov Yu.M. *Patent Studies and Copyright: Textbook*. Kyiv: Kondor LLC, 2005. 428 p.; 2nd ed., revised and supplemented, 2009. 446 p.
2. Kuznetsov Yu.M., Mikulionok I.O., Samoilenko O.V. *Practicum on Patent Studies and Copyright*. Kyiv: NTUU “KPI”, 2014. 317 p.
3. Romashko A.S., Verba I.I., Pryhoda V.V. *International Treaties and Agreements in Intellectual Property*. 2nd ed., revised and supplemented. Kyiv: NTUU “KPI”, 2015. 186 p. URL: <http://ela.kpi.ua/handle/123456789/28002>
4. Romashko A.S., Kravets O.M. *Trademark: Independent Search, Preparation for Registration, Monitoring*. Kyiv: NTUU “KPI”, 2016. 170 p. URL: <http://ela.kpi.ua/handle/123456789/28006> (ela.kpi.ua in Bing)
5. Krykun N.P., Romashko A.S. *Creative Activity in Innovation and Risk Identification*. In: *Project Management. Prospects for Development of Project and Neuro-Management, IT Management, Technologies for Creation and Use of IP Objects, Technology Transfer*. Proceedings of the V International Scientific-Practical Online Conference (March 23–24, 2023). Dnipro: Yurservis, 2023. pp. 575–579. URL: http://nmetau.edu.ua/file/zbirnik__materialiv__konf_udunt_2023.pdf#page=575 (nmetau.edu.ua in Bing)
6. Romashko A., Dorozhko H., Kravets O. *Standard Basic Patents for New Technologies*. Theory and Practice of Intellectual Property, No. 2, 2023, pp. 74–84. URL: <http://uran.inprojournal.org/article/view/282172> (uran.inprojournal.org in Bing)

Internet Resources

1. Website of the Verkhovna Rada of Ukraine – <https://zakon.rada.gov.ua/> (zakon.rada.gov.ua in Bing)
2. Website of the Ministry of Economy of Ukraine – [http://www.me.gov.ua/...](http://www.me.gov.ua/)
3. Website of the Ukrainian National Office of Intellectual Property and Innovation (UKRNOIVI) – <https://nipo.gov.ua/>
4. Website of the State Enterprise “Ukrainian Institute of Intellectual Property” – <https://ukrpatent.org>
5. Website of the State Organization “Ukrainian Agency for Copyright and Related Rights” – <https://uacrr.org/>
6. Website of the World Intellectual Property Organization – <https://www.wipo.int/portal/en/index.html> (wipo.int in Bing)

STUDY CONTENT

Methodology of Mastering the Discipline (Educational Component)

Module / Topic	Classroom Hours	Independent Work Hours
Part 1. Intellectual Property Law		
Lecture 1. Intellectual Property System	2	2
Practical Class 1. Intellectual Property System	2	4
Lectures 2–5. Emergence and Acquisition of IP Rights	8	2
Practical Classes 2–3. Emergence and Acquisition of IP Rights	4	6
Lectures 6–7. Protection of IP Rights	4	4
Practical Class 4. Protection of IP Rights	2	4

Module / Topic	Classroom Hours	Independent Work Hours
Lecture 8. Contracts in the Field of IP	2	2
Lectures 9–10. Commercialization of IP Rights	4	2
Practical Class 5. Contracts and Commercialization	2	6
Total for Part 1	30	30
Part 2. Patent Studies and Acquisition of Rights		
Lecture 1. Creativity as Intellectual Work; Methods of Solving Inventive Tasks; Stages of Invention Development; Risk-Oriented Thinking	2	2
Lecture 2. Patent Information and Documentation; Patent Research; Information Resources	2	3
Practical Class 1. Solving Inventive Tasks; Patent Search; Selection of Analogues; Drafting Claims	2	2
Lecture 3. Acquisition of Rights to Inventions, Utility Models, Industrial Designs, Trade Secrets, Rationalization Proposals	2	2
Lecture 4. Commercial Names and Geographical Indications; Trademark Registration; Genetic Resources and Traditional Knowledge	2	3
Practical Class 2. Filing Applications for Industrial Design and Trademark Registration	2	2
Lecture 5. Copyright Protection in Ukraine and Worldwide; Registration of Copyright; Protection of Related Rights; Unfair Competition; Paris Convention; Counteracting Piracy, Trolling, Counterfeiting; Parasitic Marketing	2	2
Total for Part 2	14	16
Modular Test	–	2
Final Credit	–	6
Total for Parts 1 and 2	44	46

INDEPENDENT WORK OF STUDENTS

Independent work includes:

- Preparation for classroom sessions – 38 hours.
- Preparation for modular test – 2 hours.
- Preparation for final credit – 6 hours.

COURSE POLICY

- **Forms of Work:** Lectures are conducted using visual aids and methodological materials. Students receive all materials via email, campus, Google Classroom, or Telegram groups.
- **Participation:** Students are encouraged to discuss lecture material and ask questions.
- **Practical Classes:** Use individual and group formats (teamwork, pair work) to develop practical skills.
- **Teaching Strategies:** Problem-based learning, heuristic discussion, research method, brainstorming, case analysis.

- **ICT Use:** Electronic presentations, multimedia tasks, online tests, and interactive communication platforms supplement traditional classes.
- **Attendance:** Classes are held in classrooms according to the timetable. Online classes may be conducted synchronously via video conferencing, provided clear identification
- **Online Classes:** Conducting online classes must be stipulated by an official order of Igor Sikorsky Kyiv Polytechnic Institute.
- **Excused Absences:** In case of valid reasons, a student must notify the instructor in advance (at least one day before) about the possible absence from a control activity.
- **Unnotified Absences:** If advance notice was not possible, the student must contact the instructor within one week to agree on the form and procedure for making up the missed work.
- **Classes on Non-Working Days:** If a classroom session falls on a non-working day (holiday, memorial day, etc.), the material of such a session is partly transferred to the category of “Independent Work of Students” and partly added to the next session.
- **Compensation for Missed Classes:** Time lost due to missed classes may be compensated by performing the modular test outside of class hours (through testing).

Rules for Awarding Incentive and Penalty Points

Incentive Points:

- +5 points – for active participation in at least 5 lectures (asking questions, requesting clarification of lecture material, constructive objections to presented information, and participation in discussions).
- +10 points – for a student who is the author (inventor) of an object for which an application has been filed (only upon submission of a complete set of materials and application number).
- Up to +10 points – for completing the WIPO DL-101 “Basics of Intellectual Property” online course (free of charge), provided a screenshot of the final exam result is submitted. Completion of paid courses during the semester is not encouraged. Completion of other free courses (and paid courses paid by the student before September 1 for the first semester or before February 1 for the second semester) on intellectual property is recognized if the course volume is equivalent to the DL-101 course (at least 50 hours).
- Up to +5 points – for completing the WIPO DL101R course (DL-101 for Ukrainian students in a language other than Russian, and for foreign students in a language other than their native country’s language). These points are added to the above-mentioned DL-101 course points.

Penalty Points: Not provided.

University Policy

Academic Integrity Policy: 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.” Details: <https://kpi.ua/code>.

Ethical Conduct Norms: The norms of ethical conduct for students and staff are defined in Section 2 of the Code of Honor of NTUU “Igor Sikorsky Kyiv Polytechnic Institute.”
Details: <https://kpi.ua/code>.

Assessment and Control Measures

The main part of the student’s rating is formed through active participation in practical classes and results of the modular test. The modular test and final credit are conducted by the lecturer of Part 1 (Department of Intellectual Property and Private Law, Faculty of Sociology and Law).

Types of Control and Rating System of Learning Outcomes (RSO)

Part 1. Intellectual Property Law

- **Current Control:** Express questioning on the topic, testing, solving legal tasks, preparing draft documents, modular test.
- **Semester Control:** The final credit for both parts of the discipline is conducted by the lecturer of Part 1. Admission conditions are determined based on completion of individual assignments in both parts.
- **Student Rating:** Points are awarded for express questioning, discussion of legal cases, solving practical tasks, supplementing answers of other students during discussions, completing online test tasks, and preparing draft documents. For one practical class (covering two lecture topics), a student may receive up to 11 points. In case of absence, the missed class must be compensated by completing online tests (provided by the lecturer) or solving legal tasks (submitted via email).

Activities and Maximum Points:

- Practical Class 1 – 10
- Practical Class 2 – 10
- Practical Class 3 – 10
- Practical Class 4 – 10
- Practical Class 5 – 10
- Modular Test No. 1 (IP system, acquisition of rights, protection of IP rights, contracts in IP law) – 17
- **Total for Part 1:** 67

Calendar Control: Conducted twice per semester to monitor compliance with syllabus requirements.

- Week 6 – positive if current rating $\geq 50\%$ of maximum possible points.
- Week 12 – positive if current rating $\geq 50\%$ of maximum possible points.

Part 2. Patent Studies and Acquisition of Rights

- **Current Control:** Express questioning, testing, solving tasks.
- **Semester Control:** The final credit for both parts is conducted by the lecturer of Part 1. Admission conditions are determined based on completion of individual assignments in both parts.

Assessment of Students in Practical Classes:

- Average weighted score: 13–20 points per 2 academic hours (one practical class).
- Students perform individual practical work based on the lecturer’s assignment or their Master’s research object.
- Maximum points are awarded if the task is correctly completed within 2 weeks after the class.
- 0 points – if the student is absent, did not study the topic independently, and did not complete the assignment.

Control Measures and Weighted Points:

1. Practical Task 1 – Solving inventive problems, patent search, selection of analogues, drafting claims – 13 points.
 2. Practical Task 4 – Filing applications for registration of industrial design and trademark rights – 20 points.
- **Total for Part 2: 33**

Calendar Control: Conducted twice per semester to monitor compliance with syllabus requirements.

- Week 6 – positive if current rating $\geq 50\%$ of maximum possible points.
- Week 12 – positive if current rating $\geq 50\%$ of maximum possible points.

Semester Control: Final credit.

Rating System of Assessment

Total rating score for the discipline “Intellectual Property and Patent Studies” (maximum 100 points):

$$R\Sigma = R1 + RPr1 + RPr2 + RPr3 + RPr4 + RPr5 + RPr6 + RMTR1 + RMTR2$$

Where:

- **R1** – rating score for Part 1 “Intellectual Property Law” (0–33 points), awarded by the lecturer of the module.
- **RPr1 ... RPr6** – rating scores for practical classes No. 1–6.
- **RMTR1 and RMTR2** – rating scores for the 1st and 2nd modular tests.

The final rating cannot exceed 100 points.

Final Control Work

If the student is not satisfied with the number of points obtained, the rating results are annulled and the student must complete a final control work covering the entire discipline “Intellectual Property and Patent Studies.”

The final control work is a test, which may be graded from 0 to 100 points. Questions may be:

- Traditional questions.
- Statements with which the student may agree (“yes”) or disagree (“no”).

Conversion Table of Rating Points to University Grades:

Points	Grade
100–95	Excellent
94–85	Very Good
84–75	Good
74–65	Satisfactory
64–60	Sufficient
	Unsatisfactory
Not meeting admission requirements	Not admitted

Additional Information on the Discipline

- Possession of an individual copyright registration certificate is equivalent to completing Practical Class No. 2 (Part 1) with maximum points.
- Possession of an individual trademark registration certificate is equivalent to completing Practical Class No. 2 (Part 2) with maximum points.
- Possession of an individual patent for an invention (utility model) is equivalent to completing Practical Class No. 1 (Part 2) with maximum points.
- Possession of an individual patent for an industrial design is equivalent to completing Practical Class No. 2 (Part 2) with maximum points.
- Possession of a WIPO DL-177 certificate (*Using Patent Information*) is equivalent to completing Practical Class No. 1 (Part 2) with maximum points.
- For foreign students, for whom studying Ukrainian legislation is not relevant, completion of WIPO courses may be credited:
 - DL-101 “Basics of Intellectual Property” – up to 50 points (with screenshot of final exam result).
 - DL-177 “Using Patent Information” – up to 20 points.
 - DL-101PCT “Introduction to the Patent Cooperation Treaty” – up to 5 points.
 - Patent assignment – up to 25 points (search for a patent from the student’s country related to their specialty, search for analogues, description of INID codes, identification of structural elements of the patent including IPC rubric, formula, and sections of description such as field of technology, prior art, essence of invention, drawings, enabling disclosure, and preparation of a draft claim for their own invention).

Compilation and Approval

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

- **Part 1:** Assoc. Prof. Nataliia Valeriivna Kisil, PhD (Agricultural Sciences), Department of Intellectual Property and Private Law, Senior Lecturer at the Department of Intellectual Property and Private Law, PhD in Law, Oleksandr Mykolaiovych Boiarchuk.
- **Part 2:** Assoc. Prof. Oksana Yaroslavivna Yurchyshyn, PhD (Engineering), Department of Machine Design.

Approvals:

- Approved by the Department of Intellectual Property and Private Law (Protocol No. 13, June 10, 2025).

- Endorsed by the Methodological Commission of the Faculty of Sociology and Law (Protocol No. 4, June 24, 2025).
- Approved by the Department of Machine Design (Protocol No. 17, June 20, 2025).
- Endorsed by the Methodological Commission of the Mechanical Engineering Institute (Protocol No. 11, June 27, 2025).