

INTELLECTUAL PROPERTY (INTPROP)

While every effort is made to ensure course lists are accurate, change is inevitable and courses may show alternate program restrictions at the time of scheduling. Courses used to satisfy graduation requirements must be designated as such at the time of registration. Not all courses are offered each year.

INTPROP 901-0 Intellectual Property Fundamentals (1.5 Credit Hours)

This course will introduce the laws that create and delimit property rights in intangible goods such as inventions, expressive works, brand identifiers, or information. Collectively, these laws are known as "intellectual property law," an umbrella term which includes patent law, copyright law, trademark law, trade secret law, among other areas. The course will cover the fundamentals of several specific areas of IP law: the subject matter protected, the threshold requirements for protection, the rights granted to IP owners, the ways of enforcing those rights, and the many exceptions to and limitations on IP protection. The course will emphasize both the commonalities and the contrasts among the various branches of IP. Students will learn about some of the specialized language of IP and the government and private institutions that are practically important in each area. Developing a familiarity with IP fundamentals-getting the lay of the land-is the main goal of the course. An important secondary goal is for students to see how IP law generates both constraints and opportunities from the perspective of business strategy. *Additional Course Information:* MSL Students Only, Course required for MSL degree

INTPROP 905-0 Patent Law (1.5 Credit Hours) This course provides an introduction to the basic principles of U.S. patent law. We will cover the function of the U.S patent system; subject matter eligible for patenting; the requirements for obtaining a patent; patent entitlements and remedies for patent infringement; and current debates in patent law, including the patentability of software and the problem of non-practicing entities. Course instruction will be conducted through a combination of lectures, including guest lectures from practicing patent attorneys, and exercises designed to simulate problems likely to arise in patent law practice. *Additional Course Information:* MSL Students Only

INTPROP 910-0 Patent Preparation & Prosecution Workshop (1.5 Credit Hours) The Patent Preparation and Prosecution Course is focused practically on preparing and obtaining issued patents having both broad coverage and sufficient detail for contingencies which may arise at the patent office, in licensing, and in litigation. Students will receive an invention disclosure and have an interactive invention disclosure session with the professors and/or university inventors. Using information from the invention disclosure session and other materials provided, each small group of students will then apply the core applicable laws and regulations in preparing an actual patent application. The course will focus on how to "engineer" a patent application within the legal "structural" constraints, including patent claim drafting, patent claim mechanics and legal interpretation, preparation of a patent specification (written description, enablement, best mode), with special emphasis on claim drafting for numerous different types of inventions. If time permits (based upon student feedback), we may also cover amendments and responses to office actions from the USPTO, additional foreign requirements for international protection, and approaches for preparing software patents in light of US patent office guidelines and recent precedent. Drafts of sections (claims, specification) of each group's patent application will be submitted at regular intervals, with opportunities to meet online or

in person with and receive feedback from the professors and revise the application accordingly. Regular and much shorter assignments will also include claim drafting and brief specification drafting from inventions provided in class, which will be submitted by each student, reviewed in class, and reviewed individually or in groups, including review by other students. Although not required and at the student's option, students can also meet regularly in small groups and/or individually with the professor for individualized feedback on course assignments and drafts of their actual patent applications. Evaluation will be based on each student's or group's patent application prepared during the course, along with individual class participation during interactive sessions, and regular course assignments. Prerequisites: a background in science, technology, or engineering; MSL patent law course. *Additional Course Information:* MSL Students Only

INTPROP 912-0 Patent Preparation & Prosecution Workshop II: Advanced Topics (1 Credit Hour)

The Patent Preparation II: Advanced Topics course will build on the Patent Preparation and Prosecution Workshop of Spring 1, and is also focused practically on preparing and obtaining issued patents having both broad coverage and sufficient detail for contingencies which may arise at the patent office, in licensing, and in litigation. Students will participate, in small groups of 2 - 3 students, in conducting invention disclosure sessions with university scientists and engineers, generally within the students' technical or scientific fields. Using information from the invention disclosure session and other materials provided by the inventors, each student will then apply the core applicable laws and regulations in preparing an actual patent application. The course will focus on how to "engineer" a patent application within the legal "structural" constraints, including patent claim drafting, patent claim mechanics and legal interpretation, and preparation of a patent specification (written description, enablement, best mode). Additional topics which will be covered include processor-based (e.g., computer-based, medical devices, mobile devices, etc.), software and biotechnology inventions (Section 101, Alice, Mayo and their progeny); analysis of office actions with rejections and objections; actual amendments and responses to office actions from the USPTO; doctrine of equivalents and prosecution history estoppel; claim construction, claim charts and infringement analysis; and additional foreign requirements for international protection. We will review new approaches for preparing software and biotechnology patents in light of US patent office guidelines and recent precedent. Optionally, we will also review topics suggested by students for greater analysis and discussion from the Spring 1 Patent Preparation and Prosecution Workshop. Drafts of sections (claims, specification) of each student's patent application will be submitted at regular intervals, with opportunities to meet with and receive feedback from the professor and revise the application accordingly. Regular and much shorter assignments will also include office action responses; and claim drafting and claim amendments from inventions provided in class, which will be submitted by each student, reviewed in class, and reviewed individually. Although not required and at the student's option, students can also meet regularly in small groups and individually with the professor for individualized feedback on course assignments and drafts of their actual patent applications. Evaluation will be based on each student's patent application prepared during the course, along with individual class participation, class presentations, and regular course assignments. Prerequisites: Patent Preparation and Prosecution Workshop. ". *Additional Course Information:* MSL Students Only

INTPROP 922-0 Patenting Software Inventions (0.5 Credit Hour) This course covers current topics relating to patenting software inventions, with a particular emphasis on patent eligibility. While software-related inventions continue to increase in significance, they also face particular challenges relating to eligibility, scope, and enforcement. The legal

landscape has also shifted drastically since the Supreme Court's *Alice Corp. v. CLS Bank Int'l* decision in 2014, leading to uncertainty regarding the extent and strength of patent protection for software inventions. Students will learn to identify and evaluate software-specific issues relating to subject matter eligibility, prior art, and enforceability. *Additional Course Information:* MSL Students Only

INTPROP 935-0 Introduction to IP Licensing (1 Credit Hour) This course will cover the structure and function of license agreements with a focus on what a business professional needs to understand about licensing. Group exercises will be performed on how to use a term sheet in a negotiation of a license. While patent rights will be the dominant IP right used for the examples, we will briefly explore how the license terms change if you are licensing copyrights, trade secrets, trademarks and/or tangible materials. The course will conclude with the students drafting a term sheet for a license based on a set of real-world facts. Prerequisite: IP Fundamentals. *Additional Course Information:* MSL Students Only

INTPROP 940-0 IP Strategy & Management (1.5 Credit Hours) This course covers the principles of why companies and individuals create or acquire intellectual property, how intellectual property fits into the overall business objectives, as well as the operational aspects of managing an IP portfolio in sync with the business strategy. Students will become familiar with the practical aspects of IP portfolio management, including the IP Pipeline, as well as the processes, tools, and systems needed to maintain alignment with business objectives and create value opportunities. Leverage opportunities will be discussed, including evaluation of enforcement opportunities as good business investments. Prerequisite: IP Fundamentals. *Additional Course Information:* MSL Students Only

INTPROP 945-0 IP Valuation (1.5 Credit Hours) Intangibles now comprise roughly 80% of corporate balance sheets among publicly traded companies. Key among these assets are intellectual property (IP) assets: patents, trademarks, copyrights, marketing intangibles, know-how, and others. Conventional valuation methodologies frequently fail to accurately measure the value of IP. Moreover, the current valuation paradigm fails to recognize the impossibility of valuation certainty for many IP assets, and the context-specificity of their value. This ignorance and uncertainty presents opportunity for those who understand IP value. In IP Valuation, you will learn and apply the various available theories, methods, and tools for measuring and contextualizing IP value. This will include in-class instruction and discussion, supplemented by out-of-class work, on case studies derived from the real-world experience of best-in-class IP professionals. You will also gain a view of the nascent understanding of IP value among financial professionals and the handful of entities presently working to create liquidity and make capital available for IP-rich entities. Finally, you will learn how to assess IP value, identify information incompleteness and uncertainty, and use that knowledge to inform decision-making in a variety of business and legal contexts. *Additional Course Information:* MSL Students Only

INTPROP 950-0 International & Comparative IP (1 Credit Hour) This course focuses on the global patent system. It will survey national patents in the most important countries and regional patent conventions. It also will survey the major international agreements concerning patents. The course will also introduce students to patent enforcement around the world. This course may touch briefly on other intellectual property rights, namely, copyrights and trademarks. IP Fundamentals is a pre-req for this course. *Additional Course Information:* MSL Students Only

INTPROP 951-0 Intellectual Property Internship (0-5 Credit Hours) MSL students may participate in an internship in the field of intellectual property as part of their MSL academic program. There are a variety of possible placements, including educational institutions, non-profits,

government agencies, or companies. The work done in the internship will further the educational goals of the MSL program, develop the MSL student's skills, and provide real world and practical training for the student. Internships are supervised by an on-site supervisor and by an MSL faculty member. Registration Requirement: Once the student has identified and been accepted at an approved placement, the student will apply to the MSL Program Director for permission to enroll in the internship; approved students will be given permission to enroll in the course. Evaluation Method: Internship performance will be evaluated by the student's on-site supervisor, in conjunction with the MSL faculty supervisor, on a credit/no credit basis. The on-site supervisor will complete two written evaluations of the student's work - one mid-way through the internship and a final evaluation. *Additional Course Information:* MSL Students Only

INTPROP 955-0 Intellectual Property Investments and Capital Markets: A Global Perspective (1 Credit Hour) Developed world corporations today are focused on an innovation heavy, tangible asset-lite model while exporting manufacturing, a lower margin enterprise. The trend is demonstrated by increased levels of R&D in innovation-driven industries, a doubling of issued patents outstanding and material, concentrated changes in the underlying IP law. While IP valuation, implementation and technological trends are coming to dominate many forms of investing, optimal risk adjusted returns morph with levels in the equity and credits markets and changes in IP law. This course will review these trends, explain the range of IP investment types (liquid/illiquid, public/private, cash/derivative) and illustrate how insight into IP can drive investment and capital market decision making. *Additional Course Information:* MSL Students Only

INTPROP 980-0 Patent Landscape Analysis Using AI (1 Credit Hour) Products cost time and money to develop. Companies and individuals can benefit from knowing the lay of the land before committing to building a product. One of many ways to know is by looking at patents. The primary purpose of filing a patent is to temporarily exclude competition from selling identical or similar products in the market. Sophisticated companies and individuals regularly file patents in certain calibrated stages of their product development cycle, in order to maximize the return on their investment of time and money. Patents also inform which products are already in the market, as well as products contemporaneously being developed, to be later released into the market. Learning which products are being developed in which areas can inform where to place your next bet. While informative, however, patents can be difficult to analyze due to industry idiosyncratic conventions. They are filed and prosecuted under intricate sets of rules that vary from country to country. Patents have jargon specifically applicable to prosecuting patents within a technological area. As such, manually reading and analyzing hundreds of patents filed across different countries in different languages, with a correct understanding of their scope expressed in patent jargon, can be challenging. Despite challenges, working with patents has several advantages. Rules relevant to conducting an early analysis are limited and fairly consistent across countries. Important patent jargon with legal significance is, at least in the United States, clearly defined by court rulings. And while patents can get voluminous, much of the information in patents is repetitive. Consistency and repetitiveness of information enable iterative analysis. In this course, students will gain expertise in both NLP and LLM techniques, equipping them with the skills to navigate the complex world of patent landscapes and make informed strategic decisions in product development and intellectual property management. *Additional Course Information:* MSL Students Only