Week 12- Module 10

Security Law, Privacy Law, and Internet Law

Law, Ethics and Professional Practice - ENGI3500

WINTER 2025





Introduction

• Engineers must possess knowledge of Security Law, Privacy Law, and Internet Law to navigate the complex legal landscape surrounding technology and data. Familiarity with these legal domains enables engineers to design and implement technologies that not only meet functional requirements but also adhere to legal standards, protecting both users and organizations from legal challenges and ensuring ethical and responsible innovation.





Disclosures

- Securities legislation mandates corporations to provide comprehensive and timely information to investors through formal prospectuses, including financial and technical details, ensuring informed investment decisions.
- Ongoing compliance with disclosure obligations extends beyond the prospectus, requiring corporations to communicate material changes, adhere to rules for financial statement filing, issue press releases, and report insider trading in accordance with relevant securities regulations.



Disclosures

- The Canadian Securities Administrators (CSA) serves as a platform for provincial securities commissions, aiming to coordinate and harmonize securities regulation nationwide through guidelines known as National Instruments (NI).
- Notably, NI 43-101 and NI 51-101, addressing mineral and oil and gas activities disclosure, respectively, set standards for scientific and technical information disclosure, requiring a qualified person (QP) with relevant experience to ensure accurate reporting.
- QPs must adhere to CSA guidelines, personally inspect the property, sign and seal technical reports, provide a consent document affirming accurate disclosure, and follow industry best practice guidelines. Ongoing disclosure of material changes is also mandated under NI 51-102 (Continuous Disclosure Obligations).

Disclosures

- Engineers may face liability for misrepresentation or negligence in securities matters, with potential legal action from the company and investors if technical reports, consent letters, or prospectuses contain misrepresentations or are prepared negligently.
- National Instruments (NI 43-101 and NI 51-101), while not directly creating a cause of action, establish a minimum practice standard and become relevant in court, diminishing the likelihood of success for disclaimer clauses in reports.

Insider Trading

- Canada prohibits insider trading, where individuals with confidential information, such as directors or professionals, use that information to buy or sell securities for personal gain.
- Section 382.1 of the Criminal Code specifically addresses insider trading, encompassing shareholders, professionals, and employees who knowingly use inside knowledge to trade securities.
- Engineers, geoscientists, and architects must exercise caution to avoid violating insider trading prohibitions, and if appointed as officers or directors of public corporations, they must disclose and file information about their holdings, transactions, and warrants/options with relevant securities regulators.

Privacy Law

- Personal Information Protection and Electronic Documents Act (PIPEDA), the federal law governing privacy in Canada, outlines regulations for private sector organizations regarding the collection, use, and disclosure of personal information.
- Organizations must protect personal information, identify the purpose for its collection, obtain individual consent, collect only necessary information, and limit its use to the specified purpose.
- PIPEDA ensures accuracy of information, mandates safeguards for data protection, allows individuals access to their information, and exempts personal information collection for domestic, journalistic, artistic, or literary purposes.
- PIPEDA includes a complaint process, authorizing the privacy commissioner to decide complaints, impose fines, conduct audits, and grants individuals the right to seek damages for breaches. The Privacy Act regulates personal information protection within government institutions.



Privacy Law

- All Canadian provinces and territories have privacy legislation addressing the collection, use, and disclosure of personal information, with varying specifics and oversight by designated commissioners or ombudspersons.
- Privacy legislation can be categorized into two types: those treating
 privacy breaches as a tort, allowing private lawsuits, often titled Privacy
 Act, and those treating breaches as quasi-criminal offenses with penalties,
 often titled Personal Information Protection Act (PIPA).



What is SPAM?

 Spam is unsolicited electronic communication, primarily in the form of emails but also including text messages and software. The legal definition encompasses unauthorized alteration of transmission data, installation of computer programs without consent, false electronic representations, harvesting of addresses without permission, and illegal collection of personal information through electronic means.





About CASL

- CASL (Canada's Anti-Spam Legislation) was established in 2014 to combat spam and related cyber threats, emphasizing email marketing best practices.
- Since CASL's implementation, Canada has seen a significant reduction in spam, with no Canadian organizations listed among the top global spammers. Complaints to the Spam Reporting Centre demonstrate the importance of CASL in addressing unsolicited electronic communication.





About CASL

- CASL has led to a 37% decrease in Canadian-based spam within a year of its introduction, continuously reducing the global spam rate from 90% in 2015 to 45.1% in 2021. Canadians receive less spam, contributing to a more secure digital environment.
- CASL encourages businesses to manage electronic marketing programs more disciplined, requiring consent before sending commercial electronic messages. This approach builds trust, enhances open and click-through rates, and provides economic opportunities for businesses. (Canada. Innovation, Science and Economic Development Canada, 2021).

Intellectual Property

- Intellectual property rights encompass patents, trademarks, copyrights, and industrial designs, collectively governed by federal legislation in Canada.
- The relevant statutes include the Patent Act, Trade-marks Act, Copyright Act, and Industrial Design Act, addressing aspects like patenting inventions, trademark registration, and protection of copyrights and industrial designs.
- Federal legislation outlines the procedures and requirements for obtaining patents, registering trademarks, copyrights, and industrial designs.
- Professionals specializing in intellectual property law typically handle patent applications and registrations for trademarks, industrial designs, and copyrights.



Patents of Invention

- The Patent Act defines an invention as any new and useful art, process, machine, manufacture, or composition of matter, granting exclusive rights to the owner for the term of the patent.
- To be patentable, an invention must be novel, useful, and have a tangible manifestation. The Patent Act outlines conditions for anticipation and obviousness.
- Patents last for 20 years from the application date, and once granted, no other valid patent can cover the same invention.





Assignment and Licensing of Patent Rights

- Patent rights can be assigned in writing, allowing the owner to transfer part or all of the rights for valuable consideration.
- Patent rights can be licensed on an exclusive or nonexclusive basis, often involving a royalty fee based on sales of the patented product.
- Any assignment must be registered in the patent office to be effective, and registration is also available for associated documents like license agreements.





Infringement of Patents

- The patent owner has the exclusive right to use or license the patented invention, and infringement entitles the owner to claim damages.
- Damages can be recovered through court actions, with the defendant having the opportunity to defend or counterclaim the patent's invalidity.
- Damages are calculated based on the net profits the plaintiff would have made if they had sold items produced by the infringement or a reasonable royalty on the defendant's sales.





Assignment of Patent Right by Employee

- In general, an employee's invention belongs to the employer if made during employment and related to the job. Factors like express contracts and the nature of employment influence ownership.
- There is a presumption that an employee owns their invention, but this can be displaced by an express contract or employment conditions encouraging invention.
- For independent contractors, ownership must be demonstrated through an express agreement or implications from the relationship's circumstances.





Trademarks Definition and Licensing

- A **Trademark**, as defined by the Trade-marks Act, is a mark used to distinguish goods or services. Registration provides exclusive rights, and distinctiveness is a crucial element.
- A trademark must actually distinguish the owner's goods or services and may be cancelled if it loses distinctiveness. Registrable trademarks must avoid certain characteristics, such as being merely a name, descriptive, or confusing with a registered trademark.
- Third parties can use a trademark under license, but the owner must maintain control over the character or quality of the goods or services. Failure to exercise control can lead to invalidation, and including notice in packaging and advertising helps maintain quality control.

Duration, Infringement, and Criminal Offense

- Trademark registrations are effective for 15 years, with the option for unlimited 15-year renewals. Non-use of the trademark may lead to cancellation.
- Infringing a valid registered trademark may result in legal action, including restraining the use of the mark, damages, an accounting of profits, and injunctive relief.
- Forgery of a trademark with intent to deceive or defraud is a criminal offense under the Criminal Code of Canada, punishable by fine and imprisonment for up to two years.





Copyright Overview

- Copyright, governed by the Copyright Act, protects original literary, dramatic, musical, and artistic works, as well as communication signals, sound recordings, and performer's performances. It grants the sole right to produce, reproduce, perform, and publish the work.
- Copyright doesn't protect designs applied to massproduced useful articles (copies exceeding 50).





Copyright Term, Registration, Ownership, and **Moral Rights**

- Term of Copyright: Copyright lasts for the life of the author plus 50 years after their death, unless otherwise specified in the Copyright Act.
- Registration: While not mandatory, registering copyright can aid in obtaining damages for infringement. Assignments and licenses should also be registered to protect assignees and licensees.
- Ownership: The author is the first owner of copyright. However, in employment situations, the employer owns the work unless there's an agreement to the contrary. Copyright can be assigned, subject to limitations, and must be in writing.

Copyright Term, Registration, Ownership, and Moral Rights

- Moral Rights: Creators have moral rights, including the right to be identified as the author, the right to remain anonymous, and the right to the integrity of the work. Infringement remedies are the same as copyright. Moral rights can be waived but not assigned, and the waiver must be in writing.
- Engineering Plans: Copyright in engineering plans typically belongs to the engineer or their employer if created during employment. Clients cannot reproduce plans without the engineer's consent, usually specified in engineer-client agreements.



Impact on Industrial Designs

- The Industrial Design Act protects ornamental or aesthetic features applied to finished articles, judged solely by the eye and not functional. Mechanical construction and manufacturing methods are excluded.
- To qualify for protection, a design must be novel and original.
- Exclusive right to use the design is granted for 10 years from the registration date.
- Designs can be freely assigned in writing, and licensing is permitted during the statutory protection period.





Industrial Designs Registration

• To register a design, one must submit a drawing and description with the prescribed fee to the government office within one year of publication. Registration may be refused if the design closely resembles another in use or previously registered.





Trade Secrets

- Trade Secrets vs. Patents: When patent protection's limited term and public disclosure are concerns, inventors may rely on trade secret protection.
- Trade secrets are protected under common law tort, including unlawful appropriation, breach of contract, and breach of fiduciary duty.
- Criteria for Trade Secrets: Information must be: (a) not generally known, (b) subject to reasonable efforts to maintain secrecy, (c) have economic value, and (d) not publicly disclosed.



Misappropriation of Trade Secrets

- Criteria for Misappropriation: Three criteria: (a)
 Information qualifies as a trade secret, (b) the
 information is misused, and (c) the information is
 imparted in circumstances importing an obligation of
 confidence.
- Employee Use: Employee's use of information from a prior employer may be considered misappropriation if it meets certain criteria. The line between an employee's use of own skills and employer's trade secrets is challenging to draw.





Internet Law and Copyright

- The internet's ease of copying and distributing media presents challenges for copyright protection.
- In the United States, liability for copyright infringement on internet service providers (ISPs) is contingent on active engagement or participation, protected by the Digital Millennium Copyright Act, but no equivalent legislation exists in Canada.



Internet Law and Copyright

- Courts are the primary recourse against internet copyright infringement, requiring copyright holders to register copyrights for evidential support.
- Licensing agreements, proper copyright markings, and technological tools like electronic fingerprinting may strengthen legal cases against infringement in court.

Internet Law and Trademarks

- The internet introduces challenges and risks for trademarks, with website domain names and content posing potential breaches.
- Active protection of trademarks is crucial to prevent loss, and policing the internet for infringement can be resource-intensive and costly.
- Domain name registration and use are subject to trademark laws, and domain names, alphanumeric addresses on the internet, are issued by registrars on a first-come, first-served basis.
- Cybersquatting, the opportunistic registration of domain names containing well-known trademarks, is deemed unlawful trademark use by courts, as it may mislead and confuse internet users and misrepresent approval or endorsement by the trademark owner.

Homework Before Next Class

- Complete assigned chapter readings in the Critical Path.
- Study for Final Exam − GOOD LUCK! ³



THANK YOU.





References

Canada. Innovation, Science and Economic Development Canada. (n.d.). *Canada Anti-Spam Legislation*. https://ised-isde.canada.ca/site/canada-anti-spam-legislation/en

Marston, Donald L. 2019. Law for Professional Engineers: Canadian and Global Insights. 5th ed. New York: McGraw-Hill Education.



