



Technology Innovation  
Management



## **TIMG 5203 Cross-border and Digital Innovation Winter 2025 (January 6 to April 14, 2025)**

### **TIME, PLACE AND DELIVERY MODE**

**Class time:** Mondays, 6:05 p.m. – 8:55 p.m. Eastern Time (Ottawa time)

**In person:** Nicol Building 3040

### **INSTRUCTOR**

**Intro:** Henry Phan, MBA, CPA, SHRM-SCP, PhD Candidate, Adjunct Professor, Technology Innovation Management Program, Sprott School of Business

**Email:** [henryphan@cunet.carleton.ca](mailto:henryphan@cunet.carleton.ca)

**Office Hours:** By Appointment via email

The instructor is available via email any time. Please use email to inform the instructor of emergencies, request in-person or virtual appointments, and for other non-course-related subject matter. Email is the preferred mode as it keeps a record of the student-instructor exchanges. Students should let the instructor know about emergencies without delay.

### **ABOUT THE COURSE**

This course helps a TIM student:

1. Gain a deep understanding of the “how technology creates wealth” domain
2. Take knowledge gained from basic research and translating into tangible solutions that add value to small and large businesses
3. Apply activity theory and ChatGPT to solve real company problems, enhance innovation, and foster collaboration
4. Actively create new knowledge and expand one’s understanding of a subject or domain
5. Define topics for their TIM projects or define the process to formulate and implement their TIM projects
6. Develop four critical thinking skills – generate, recommend, synthesize, and execute
7. Take responsibility for your education

### **COURSE DESCRIPTION**

TIMG 5203 [0.5 credit] Cross Border Businesses and Digital Innovation

Examines the mechanisms that leverage digital technology and innovation to scale the value of entrepreneurial cross-border businesses rapidly, early, and securely.

Includes: Experiential Learning Activity

### **TARGET AUDIENCE**

TIMG 5203W Cross Border Businesses and Digital Innovation is for graduate students in the Technology Innovation Management (TIM) program registered in one of the degree pathways – the Master of Entrepreneurship (MEnt), the Master of Applied Business Analytics (MABA), the Master of Digital Transformation & Entrepreneurship (MDTE), the Master of Engineering (MEng)

or the Master of Science – in their second, third term or fourth term of study.

## **LEARNING SPACE**

Course participants will engage in a learning space that includes synchronous and asynchronous learning activities.

All course content, instructions, links, and submission portals are available in Carleton University's Brightspace Learning Management System (LMS):

<https://brightspace.carleton.ca/d2l/home>. You can learn about Brightspace here:

<https://carleton.ca/brightspace/students/>

Instructions for synchronous and asynchronous learning activities are available for each class inside the course's Brightspace page. Students must review these instructions in advance and complete activities and assignments on time. Each student is responsible for the submission of their own assignment and the assessments they receive. Students will work in groups in class and outside the class; however, each student controls their own submissions.

All classes follow a consistent pattern of learning activities to complete. The pattern incentivizes consistent effort from students (effort is correlated to learning) and ensures active class discussions and applications of course concepts rather than passive listening and low student engagement.

### **Synchronous portion – class sessions**

Class sessions are the *synchronous* portion of our learning space where all of us, from anywhere in the world, come together at the same time to interact.

Class sessions will include combinations of group discussions, project work, lectures, student presentations, Q&A sessions, and learning reflections.

### **Asynchronous portion – outside class sessions**

The *asynchronous* portion of our learning space involves work done by students on their own time (i.e., activities completed outside of class).

**Pre-class** – Students receive a combination of readings and videos to consume and instructions to complete ahead of each class. Students will engage with the material on their own time and at their own pace, while meeting expected assignment deadlines. By completing the readings and videos, students will arrive to class prepared to engage in higher-order learning activities.

**After-class** – Students receive instructions on the assignments they need to submit after the synchronous classes. The after-class assignments build on the pre-class assignments and the in class learning activities. Students will complete the after-class assignments on their own time and at their own pace, while meeting expected assignment deadlines.

### **Student groups**

The class will be split into groups. Each student will work individually and in one of the groups to perform tasks in class, participate in informal group meetings and contribute to delivering the assignments. The constructive collaboration among group members is part of the group assignments. Leaving and changing groups for any reason will not be tolerated. Once formed, each group should establish a project management structure that will help collaboration between group members and maximize the value of the deliverables. Group members should meet on a weekly basis.

### **Group work and free loaders**

There will be zero tolerance for free loaders. A free loader refers to an individual who takes advantage of team members' efforts without contributing much in return. Group work is an important component of this course. Group conflicts are to be dealt with by the group in a way that is fair, respectful and fast. In case a non-contributing student is excluded from a group, he/she will need to deliver the assignment individually.

### **PARTICIPATION (20%)**

In most classes, students will discuss – in 3-5 person groups and/or with the class as a whole – the reading(s) and how it relates to their own ideas and experiences. The goal in these discussions is to explore and critique the readings, as well as to learn from one another's experiences and insights.

The goal of the participation is to prepare students for group presentations and eventually individual presentations. The instructor will evaluate each student's participation at the end of each class.

### **WEEKLY WRITE-UPS (20%)**

Each student will prepare a short response to that day's article reading. These short responses (**maximum 350 words!**) should have three components:

- One major aspect of the reading that you found particularly interesting (and why you found it interesting).
- Your personal response to the article, discussing its relevance to your thinking about education and research.
- 1 or 2 questions the reading raises that you would like to discuss.

Reading responses must be submitted **before class** each week. Your response should be typed or pasted as text [or perhaps audio/video] within the Brightspace course website. To facilitate discussion, students will read their questions (and perhaps all or part of their larger response) to others in their group.

The professor will read every single response and provide prompt feedback. Evaluation of your reading responses will be based on their accuracy, clarity, originality and thoughtfulness. In the first week, there is also a practice reading response, which will not count, but will give you a chance to try the format and get feedback.

To get 'good marks', you need simply to demonstrate that you have read and thoughtfully engaged with the ideas in the weekly reading.

### **TEACHING PRESENTATIONS (10%)**

Starting in Week 3, students will select a technology topic of their choice and present how AI can help or hurt that company.

We will go over examples in class, specifically with Amazon, Mondelez, and News Organizations, but the instructor would like to see applications from the students' context and within their home countries.

A sign-up sheet will be created after the 2nd class and groups will pick which week they will present.

**Deliverables:** A complete presentation (7 slides max; ppt or pdf document) and a 10-minute summary presentation that will be presented and discussed in class. Submit via Brightspace.

### **PRESENTATIONS (50%, 25% each)**

## Group Presentation 1 - On Theme Topics from Weeks 1 to 6

Consider one of the cases studied to date. Identify an artificial intelligence opportunity that one of the companies studied to date (via the Case Studies) can utilize. Please be very specific with what the artificial intelligence actually improves and how it impacts the broader organization. Examples below:

1 - Improve manufacturing operations

2 - Creating financial statements and forecasts and suggesting ways to improve financial operations.

3 - Automatically reading contracts and providing suggestions

Also, identify stakeholders that will be impacted, positively and negatively, from the innovation. For instance, if artificial intelligence creates financial statements, that takes away a potential core activity for a junior finance employee. What will the junior finance employee do?

This presentation is designed to help you understand what is and isn't relevant in artificial intelligence today, the objective of which is to identify what are true opportunities.

**Deliverables:** A complete presentation (10 slides max; ppt or pdf document) and a 10-minute summary presentation that will be presented and discussed in class. Submit via Brightspace.

2 Page Memo, 12 point font, 1 inch margins, no more than 700 words

## Group Presentation 2 - On Them Topics from Weeks 7 to 12

Consider one of the cases studied between weeks 7 and 12. Identify an artificial intelligence opportunity that one of the companies studied to date (via the Case Studies) can utilize. Please be very specific with what the artificial intelligence actually improves and how it impacts the broader organization.

In addition to identifying impacted key stakeholders that will be impacted, positively and negatively, from the innovation, also answer the question - should national governments regulate the use of artificial intelligence? Why or why not?

**Deliverables:** A complete presentation (10 slides max; ppt or pdf document) and a 10-minute summary presentation that will be presented and discussed in class. Submit via Brightspace.

2 Page Memo, 12 point font, 1 inch margins, no more than 700 words

## Student Evaluation and Assignment Grading

Assignment	Grades	Activity
Weekly Write-Ups	20%	Weekly
Participation	20%	Weekly

Presentation 1	25%	2/24/2025
Presentation 2	25%	4/7/2025
Group Presentations	10%	Week 3, Onwards

## Lecture Schedule

Class Date	Theme	Class #	Lecture	Articles
1/6/2025		Week 1	Class Introduction	Watching the Generative AI Hype Bubble Burst
1/13/2025	Disruption	Week 2	Artificial Intelligence	Oreo Owner Mondelez Taps AI to Tweak Its Classic Snacks
1/20/2025	Expansion	Week 3	Etihad Airways: Rethinking Internationalization and Growth	AI Applications in the real world - Amazon/Legal/Mid AI Models
1/27/2025	Competition	Week 4	Nvidia: Winning the Deep-Learning Leadership Battle	The Next Great Leap in AI Is Behind Schedule and Crazy Expensive
2/3/2025	Competition	Week 5	Foxconn Technology Group: Acquiring Sharp to Move Up the Value Chain	From 'NewsDeserts' to 'Information Oceans'?
2/10/2025	Competition	Week 6	Knowledge Transfer: Toyota, NUMMI, and GM	Is the Tech Industry Already on the Cusp of an A.I. Slowdown?
2/17/2025	BREAK	BREAK		
2/24/2025	Disruption	Week 7	Group Presentations	What is Venture Capital Now Anyway?
3/3/2025	Disruption	Week 8	Tesla In 2023: Building A Radically Innovative Operating System	Prominent brands struggle to adapt to an e-bike industry dominated by cheap, direct-to-consumer sales
3/10/2025	Disruption	Week 9	Diageo: Innovating for Africa	Google Should Be Forced to Sell Chrome Browser, Justice Department Says
3/17/2025	Digital Platforms	Week 10	Grab: Discovering New Frontiers for Growth in the Southeast Asian Sharing Economy	How Australia Will (or Won't) Keep Children Off Social Media; Instagram launches teen accounts with private settings, limited capabilities amid mounting scrutiny
3/24/2025	Digital Platforms	Week 11	Rappi: the Latin American Super App?	Lack of ambition in Canada creating '600-pound beaver

				in the room,
3/31/2025	Digital Platforms	Week 12	Building a Global Omni-channel Commerce Ecosystem: The Shopify Story	Meta wants an open AI world. Is that a good idea?
4/7/2025	FINAL	Week 13	Group Presentations	

## Recommended Texts

\*Instructor provided articles in brightspace

\*Harvard Business Cases - <https://hbsp.harvard.edu/import/1246981>

## ADDITIONAL RESOURCES

Within the course's Brightspace there are documents providing detailed explanation of how the course works, what actions you can take to ensure your success, and learning resources you can use to do better in the course. These documents complement this course outline by going into greater detail and providing actionable advice and tools.

Students should carefully review all content in Brightspace.

## GENERATIVE AI

Students are encouraged to use generative artificial intelligence (AI) applications such as ChatGPT (<https://chat.openai.com/chat>) responsibly within this course.

ChatGPT will be actively taught and used in the course. When using ChatGPT, students are expected to 1) keep a record of their conversation with the application, 2) check, verify, and provide proper citations to the claims and ideas used, and 3) apply critical thinking skills to increase the value created by the machine.

Assignment and project reports submissions that appear unedited, copy-paste text from the machine will be flagged and penalized.

Example uses of ChatGPT:

- Improve the quality of the presentation slide deck and presentation narrative
- Translate text
- Generate text
- Summarize text
- Explore concepts and brainstorm options
- Propose research method steps
- Engage in question answering and role playing
- Improve the explanation of data acquisition and data analysis
- Eliminate all errors in grammar spelling, capitalization, and punctuation
- Ensure that citations and references are complete and correct

When using ChatGPT it is essential to maintain academic integrity and ensure that the work you submit remains primarily your own. Here are some guidelines to follow:

1. Consider ChatGPT as a helpful resource for generating ideas, gaining insights, and finding relevant sources. It should complement your work and writing skills, not replace them entirely.

2. If you use information or ideas obtained from ChatGPT in your assignments, presentations and project reports, be sure to cite them properly. Treat it like any other source, and provide appropriate references, including the AI tool's name, date of access, and the specific generated content.
3. Always double-check the information, facts, and references provided by ChatGPT independently. Don't blindly trust the AI-generated content; use it as a starting point for your work.
4. Ensure that the primary authorship and originality of your work remain intact. While ChatGPT can suggest ideas, wording, or even paragraphs, the majority of your reports and assignments must be your own thoughts, analysis, and writing.
5. Don't simply copy and paste AI-generated text into your paper. Edit and revise it to fit your writing style and the specific requirements of your assignment. Make sure the content flows seamlessly within your paper.
6. Consult with your professor and your peers about your use of ChatGPT in your projects and assignments. They can provide valuable insights and help ensure that you're using these tools effectively and ethically.
7. Do not use ChatGPT to generate entire reports or assignments. Instead, focus on using it to supplement your work and writing process by generating ideas, clarifying concepts, or suggesting possible approaches.
8. Recognize the limitations of AI-generated content. While ChatGPT can provide valuable assistance, it may not always offer accurate or contextually relevant information. Use critical thinking to evaluate the quality and suitability of the generated content.
9. After incorporating AI-generated content, carefully proofread your paper for grammar, spelling, and formatting errors. Ensure that the paper adheres to the required style guide (e.g., APA, MLA, Chicago).
10. Keep a record of the interactions with ChatGPT. This documentation can help demonstrate your ethical and responsible use of AI tools if questions arise.

## TIM BRAND, VALUES, GROUP WORK, PLAGIARISM, AND ISSUE TRACKING

### Brand

The brand of the TIM program is an asset that is valuable. All TIM students and course participants work hard to protect and enhance both their own brand and the TIM brand.

Course participants should use Carleton email accounts.

### TIM Values

The table below identifies our expectations (what we value) and what is not acceptable in our value system. Individuals registered in this course must act accordingly.

	<b>What the instructor expects</b>	<b>What the instructor finds unacceptable</b>
<b>Course assignments</b>	<ul style="list-style-type: none"><li>• Original work</li><li>• High-quality work delivered on-time for public examination</li></ul>	<ul style="list-style-type: none"><li>• Plagiarized work</li><li>• Low-quality work delivered late with excuses</li></ul>
<b>Focus</b>	<ul style="list-style-type: none"><li>• Co-create innovation to make a difference in our university, disciplines, and communities</li></ul>	<ul style="list-style-type: none"><li>• Knowledge that fills menial gaps and has little or no impact on communities, our region, country, or world</li></ul>
<b>Source of information</b>	<ul style="list-style-type: none"><li>• Reputable scholarly journals</li></ul>	<ul style="list-style-type: none"><li>• Low quality journals, individual opinions, and stories</li></ul>
<b>Mode in which students acquire knowledge and skills</b>	<ul style="list-style-type: none"><li>• Independent and critical thinking</li></ul>	<ul style="list-style-type: none"><li>• Memorization and regurgitation of information</li></ul>



	<ul style="list-style-type: none"> <li>• Application of new knowledge to gain insights on how to launch and grow technology companies</li> </ul>	<ul style="list-style-type: none"> <li>• Application of superficial opinions, stories, management fads, generalities</li> </ul>
<b>Challenge</b>	<ul style="list-style-type: none"> <li>• Trying new things, destroying boundaries, and being deep thinkers</li> </ul>	<ul style="list-style-type: none"> <li>• Over-extending yourself by taking on so many things that you no longer have the capacity to do a respectable job at any of them.</li> </ul>
<b>Environment</b>	<ul style="list-style-type: none"> <li>• Relevant, substantive, fun, positive, 24x7 experiential learning</li> </ul>	<ul style="list-style-type: none"> <li>• Worthless, trivial, theatre, boring, negative, 3 hrs/week listening</li> </ul>

## **RULES OF CONDUCT**

### **Engagement**

Student engagement with their peers and the course content is important for learning. Students' success depends on the extent and intensity of their engagement.

Students will engage with the course individually and as part of groups. There are two types of groups students will engage with: "Learning Groups", and "Theme Groups". The instructor assigns students into Learning Groups and Theme Groups. Students can request to be transferred from one group to another.

Each student is to interact with members of their groups actively and respectfully to complete assignments and assimilate the content covered in the course.

### **Expectations**

	The instructor expects students to:
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<p><b>Academic integrity and participation</b></p>	<ul style="list-style-type: none"> <li>• Deliver excellent presentations. An excellent presentation is clear, concise, insightful, and completed within the allotted time</li> <li>• Submit assignments that meet specifications on time             <ul style="list-style-type: none"> <li>• Deliver professional-quality work (i.e., your work is clear, influential, organized, and free of spelling errors, poor grammar, inconsistent formatting, and other mistakes)</li> </ul> </li> <li>• Comply with the university's academic integrity standards (e.g., will not plagiarize)</li> <li>• Interact with peers and the instructor to produce new knowledge</li> </ul>
<p><b>Teamwork and communication</b></p>	<ul style="list-style-type: none"> <li>• Arrive prepared to team meetings</li> </ul>

	<ul style="list-style-type: none"> <li>• Not permit (i.e., not allow) or engage in freeloading for team projects or group work</li> <li>• Work through adversity and disagreement while maintaining a positive and respectful mindset (towards others and oneself)</li> <li>• Deal with uncertainty productively</li> <li>• Respond to emails reliably and promptly</li> <li>• Work respectfully and collaboratively with others</li> </ul>
<p><b>Classroom etiquette</b></p>	<ul style="list-style-type: none"> <li>• Respect others</li> <li>• Use communications resources to learn, not disrespect others</li> <li>• Be prepared for each class and fully participate in all classes</li> <li>• Show up to class on time</li> <li>• Manage time by scheduling course assignment due dates and requisite study time into their personal calendar</li> </ul>

## COURSE LEVEL LEARNING OUTCOMES

A learning outcome is what you will be able to do after completing this course.

The table below provides the learning outcomes at the course level.

<b>You can:</b>	<b>Assignments</b>
<b>Execute</b> – do what you are required to do	Exceed or meet specifications on all assignments
<b>Synthesize</b> – figure out what is important	Slide decks 1 and 2
<b>Recommend</b> – determine what should be done	Project report for Themes A-E Project report for Theme F: Digital platforms
<b>Generate</b> – create something from nothing	Project report for Theme F: Digital platforms Project report for Themes A-E
<b>Communicate</b> – deliver high-quality presentations	Presentations 1 and 2

### Plagiarism

Plagiarism, including copying and handing in for credit someone else's work, is a serious instructional offence that will not be tolerated. Please refer to the section on instructional offenses in the Carleton Graduate Calendar for additional information. Plagiarism is against the TIM culture. A case of plagiarism will be referred to the Dean of the Faculty of Graduate and Postdoctoral Affairs (FGPA). The instructor will not deal with the matter directly. Carleton University has a clear process to deal with allegations of plagiarism.

### Issue tracking and technical support

Students should alert the instructor of any content or technical issues you encounter in this course.

## INFORMATION ON ACADEMIC ACCOMMODATIONS

### Requests for Academic Accommodation

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

### Pregnancy obligation

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For

more details, visit the Equity Services website:

[carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf](http://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf)

### **Religious obligation**

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website:

[carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf](http://carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf)

### **Academic Accommodations for Students with Disabilities**

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or [pmc@carleton.ca](mailto:pmc@carleton.ca) for a formal evaluation or contact your PMC coordinator to send your

instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made.

[carleton.ca/pmc](http://carleton.ca/pmc)

### **Survivors of Sexual Violence**

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: [carleton.ca/sexual-violence-support](http://carleton.ca/sexual-violence-support)

### **Accommodation for Student Activities**

Carleton University recognizes the substantial benefits, both to the individual student and for the university, which result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.

<https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

### **Course Sharing Websites**

Materials created for this course (including presentations and posted notes, labs, case studies, assignments, and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

### **Other information**

For more information on academic accommodation, please contact the departmental administrator [timprogram@CUNET.Carleton.ca](mailto:timprogram@CUNET.Carleton.ca) or visit: [students.carleton.ca/course-outline](http://students.carleton.ca/course-outline)

**HAVE A GREAT WINTER TERM LEARNING!**