

Course Outline

Course Code	RSM 416 H1 F	
Course Name	Generative AI for Data-Driven Management	
Term, Year	Fall 2025	
Course Meets	Course Meets Wednesdays 11:00–13:00	
Web page URL	https://q.utoronto.ca	

Instructor Details

Name	Email	Office Hours
Gerhard	Gerhard.Trippen@rotman.utoronto.ca	Mon, 15:00-17:00 (RT406);
Trippen	_	and by appointment
Rabab	rabab.azeem@mail.utoronto.ca	Contact by email for
Azeem (TA)	_	appointments

Course Description

This course gives students an applied, business-first understanding of Generative Al and modern large language models. Students will examine core capabilities and limitations; practice efficient prompting; and design lightweight Al workflows using retrieval-augmented generation (RAG), evaluation/guardrails, and multimodal inputs. Emphasis is placed on responsible use, risk management, and communicating with stakeholders. Through labs and a Simulated Leadership Meeting (SLM) capstone, students connect GenAl to business strategy and data-driven decision-making.

Learning Outcomes

By the end of this course, students will be able to:

- Explain strengths, limits, and risks of current GenAl systems in business contexts.
- Design prompt-based and structured-output workflows with basic guardrails and simple evaluation checks.
- Apply retrieval-augmented generation (RAG) when appropriate to ground answers on approved sources.
- Use multimodal capabilities judiciously and articulate trade-offs (cost, latency, accuracy, privacy).
- Lead executive-style discussions (SLM) to defend recommendations and next steps with evidence.
- Practice responsible and transparent Al use (disclose/cite tools and prompts, verify facts, protect privacy).

Course Prerequisites

None. Python familiarity is helpful but not required. (Refer to the Faculty of Arts & Science Calendar for any official updates on prerequisites, co-requisites, or exclusions.)

Course Materials

Required Readings

No textbook is required.

No course pack. All readings/cases will be provided on Quercus at no cost.

Electronic Course Materials

This course will be using the following electronic course materials:

DataCamp: https://www.datacamp.com/ Anaconda: https://www.anaconda.com/

These materials will cost a total of \$0.00. The use of these materials complies with all University of Toronto policies which govern fees for course materials.

Evaluation and Grades

Grades are a measure of the knowledge and skills developed by a student within individual courses. Each student will receive a grade on the basis of how well they have command of the course materials, skills and learning objectives of the course.

Work	% of	Due Date
	grade	
Individual Coding Assignments		Ongoing
Case/Article Application Memos (2 × 500 words)		2025-09-24 &
	5%	2025-10-08
Team Project Proposal	10%	2025-10-15
Stakeholder Role-Play Participation		2025-11-05
SLM Round 1: Memo + Facilitation (team)		2025-11-05
Prototype & Evaluation Plan (team)		2025-11-12
Report + Final Simulated Leadership Meeting (team)		2025-11-26
Final Exam (computer-based; includes coding)		TBD (scheduled by FAS)

Course Format and Expectations

We will be using Jupyter Notebook / DataCamp for data analysis exercises throughout the course. All students will receive a **free** DataCamp subscription for six months, with access to all the online courses DataCamp offers (not just the chapters that are covered in the course). To register for DataCamp an email address will be required which you need to share with me at the beginning of the term. For students who would prefer to opt out and not use DataCamp, solutions to exercises can be submitted to me by email.

Writing Assignments or Presentations

All assignments are intended to help you develop your communication skills. How well you communicate your ideas, in writing or orally, will be considered in the evaluation of the assignment. In your written assignments, you should aim for clarity, strong organization, concision, professionalism, and correct grammar. Your presentations should reflect strong planning and organization, clarity of speech, and an engaging demeanour. Sources, whether in written or presentation assignments, should always be correctly attributed.

Support is available through the RC Centre for Professional Skills (CPS) for students who would like help or feedback on their writing or speaking (presentations). CPS offers both individual and

group appointments with trained writing instructors and presentation coaches who are familiar with the RC program and common types of business assignments. You can also access your college Writing Centres for help with written assignments.

You can book an appointment <u>with a writing or presentation coach</u> through the RC Centre for Professional Skills Writing Centre. For more information about writing centres, student supports, and study resources, see the <u>Writing and Presentation Coaching academic support page</u>.

Team or Group Assignments

Group Project requires students to work in teams of 4-5. Learning to work together in teams is a crucial transferrable skill you will use not only in your coursework, but also in your future careers. Support is available if you encounter common teamwork challenges such as:

- Team members feeling left out of the team.
- Team members not responding in a timely manner to communication.
- Division or quality of work among team members being unequal or unfair.

Consult the <u>Centre for Professional Skills Teamwork Resources page</u> for tips, strategies, and best practices. You can also <u>book an appointment with a teamwork mentor</u> through the RC Centre for Professional Skills Writing Centre or by emailing <u>rotmancommerce.teamworkhelp@utoronto.ca</u>. Teamwork mentors can help you resolve or mitigate conflict, strategize on planning, or improve team communication.

If you are a student registered with Accessibility Services, and extensions are one of your academic accommodations, consult with your Accessibility Advisor about the teamwork in this course.

Class Participation

Students are expected to prepare thoroughly and make every effort to attend every class. As class participation is a graded component of the course, students will be evaluated on the following:

- Thoughtful responses
- · Understanding and analysis of topic
- Idea generation
- Promoting further discussion
- Respectful active listening
- Attentiveness

While attendance is necessary for students to participate in class discussions, attendance on its own will not result in a high participation grade. Students must actively contribute and participate by exhibiting the components listed above.

Rotman Commerce Attendance Policy *NEW*

Rotman Commerce students are expected to make every effort to attend each class. Infrequently, students may miss term work, e.g., quizzes, assignments, etc., due to unplanned and extenuating circumstances and must follow the Request for Special Consideration process as outlined in their course outlines. However, Rotman Commerce will not approve any Request for Special Consideration for participation marks for missed classes. Any such request will be denied.

Missed Tests and Assignments

Students who miss a term test or assignment for reasons entirely beyond their control (e.g., illness) may request special consideration **within 2 business days** of the missed midterm/test/assignment due date.

In such cases, students must:

- 1. Complete the Request for Special Consideration form: https://uoft.me/RSMConsideration
- 2. Provide documentation to support the request, e.g., Absence Declaration from <u>ACORN</u>, <u>Verification of Illness Form</u> etc.

Please note: As of September 2023, students may use the Absence Declaration on ACORN *one time per term* to report an absence and request consideration. Any subsequent absence will require a Verification of Illness form or other similar relevant documentation.

Students who do not submit their requests and documentation within 2 days may receive a grade of 0 (zero) on the missed course deliverable.

Final Exams: If you miss the final exam in this course for a legitimate reason (illness, etc) you will need to contact your College Registrar to file a petition for a deferred exam. This deferred exam will be written at a later date as established by the Faculty of Arts & Science. Instructions can be found here: https://www.artsci.utoronto.ca/current/faculty-registrar/petitions-appeals/preparing-petition

Late Assignments

All assignments are due on the date and at the time specified in Quercus. Late submissions will normally be penalized by 20% if not received by the specified due date/time. A further penalty of 10% will be applied to each subsequent day.

Statement on Equity, Diversity and Inclusion

The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. U of T does not condone discrimination or harassment against any persons or communities.

Commitment to Accessibility

The University is committed to inclusivity and accessibility, and strives to provide support for, and facilitate the accommodation of, individuals with disabilities so that all may share the same level of access to opportunities and activities offered at the University.

If you require accommodations for a temporary or ongoing disability or health concern, or have any accessibility concerns about the course, the classroom or course materials, please <a href="mailto:emailto:

Plagiarism Detection

Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the University's Plagiarism Detection Tool FAQ page from Centre for Teaching Support & Innovation.

Generative AI / ChatGPT

- Where allowed: GenAl is permitted and encouraged for labs, memos, the team project, and SLMs.
- Closed-Al contexts: Any activity explicitly marked "closed-Al" must be done without GenAl.
- Disclosure: Include an "AI Use Appendix" with every submission listing (i) tool/model + version/date, (ii) your key prompts/instructions, (iii) what you kept/edited/discarded, and (iv) any direct quotes or generated images.
- Accountability: You must fact-check and verify outputs. You are responsible for all content you submit, including citations and code correctness.
- Privacy & data handling: Do not upload confidential, proprietary, personal, or regulated data. Mask or synthesize examples when needed. Follow U of T privacy and academic integrity policies.
- Acceptable help for coding: Using GenAl for scaffolding, explanations, debugging, and small snippets is allowed; you must understand your code and may be asked to explain it orally.
- Original work: Individual work must reflect your reasoning, structure, and voice. Do not share or reuse another student's prompts, outputs, or appendix.
- Guardrails & safety: Use basic safeguards (PII hygiene; refusals/safety filters). Do not attempt to bypass tool safety systems.
- Citation style (example): "ChatGPT (GPT-4o), Aug 2025. Prompt: ...; outputs edited for accuracy. See Appendix A for full prompt/response log."

Academic Integrity

Academic Integrity is a fundamental value essential to the pursuit of learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the U of T degree that you earn will continue to be valued and respected as a true signifier of a student's individual work and academic achievement. As a result, the University treats cases of academic misconduct very seriously.

<u>The University of Toronto's Code of Behaviour on Academic Matters</u> outlines the behaviours that constitute academic misconduct, the process for addressing academic offences and the penalties that may be imposed. You are expected to be familiar with the contents of this document. Potential offences include, but are not limited to:

In papers and assignments

- Using someone else's ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.

 Obtaining or providing unauthorized assistance on any assignment (this includes collaborating with others on assignments that are supposed to be completed individually).

On test and exams

- Using or possessing any unauthorized aid, including a cell phone.
- Looking at someone else's answers.
- Misrepresenting your identity.
- Submitting an altered test for re-grading.

Misrepresentation

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to) medical notes.

All suspected cases of academic dishonesty will be investigated by the procedures outlined in the <u>Code of Behaviour on Academic Matters</u>. If you have any questions about what is or is not permitted in the course, please do not hesitate to contact the course instructor. If you have any questions about appropriate research and citation methods, you are expected to seek out additional information from the instructor or other U of T or RC resources such as the RC Centre for Professional Skills, the College Writing Centres or the Academic Success Centre.

Email

At times, the course instructor may decide to communicate important course information by email. As such, all U of T students are required to have a valid UTmail+ email address. You are responsible for ensuring that your UTmail+ email address is set up and properly entered on ACORN. For more information visit the <u>Information Commons Help Desk</u>.

Forwarding your utoronto.ca email to a Gmail or other type of email account is not advisable. In some cases, messages from utoronto.ca addresses sent to Gmail accounts are filtered as junk mail, which means that important messages from your course instructor may end up in your spam or junk mail folder.

Recording Lectures

Lectures and course materials prepared by the instructor are considered by the University to be an instructor's intellectual property covered by the Canadian Copyright Act. Students wishing to record a lecture or other course material in any way are required to ask the instructor's explicit permission and may not do so unless permission is granted. Students who have been previously granted permission to record lectures as an accommodation for a disability are excepted. This includes tape recording, filming, photographing PowerPoint slides, Quercus materials, etc.

If permission for recording is granted by the instructor (or via Accessibility Services), it is intended for the individual student's own study purposes and does not include permission to "publish" them in any way. It is forbidden for a student to publish an instructor's notes to a website or sell them in any other form without formal permission.



Weekly Schedule (Tentative)

Session	Date	Торіс
1	2025-09-03	Overview Introduction to GenAl and LLMs
2	2025-09-10	Business Use Cases
3	2025-09-17	Prompt Design and Evaluation
4	2025-09-24	Retrieval-Augmented Generation (RAG)
5	2025-10-01	RAG II Evaluation & Guardrails
6	2025-10-08	Multimodal GenAl for Business
7	2025-10-15	Prompt Chaining and Structured Outputs
8	2025-10-22	Ethical AI; Bias/Fairness; Regulation
9	2025-11-05	Impact on Business Strategy; Case Studies: SLM Round 1
10	2025-11-12	Model Optimization
11	2025-11-19	Data-driven Decision-making: Tools and Techniques
12	2025-11-26	Final Simulated Leadership Meetings (Capstone)

Please note that the last day you can drop this course without academic penalty is Nov 11, 2025



Other Useful Links

- Become a volunteer note taker
- Accessibility Services Note Taking Support
- Credit / No-Credit in RSM courses
- Rotman Commerce Academic Support
- Where to find teaching assistant opportunities

URL links for print

- ACORN: http://www.acorn.utoronto.ca/
- Email Accessibility Services: accessibility.services@utoronto.ca
- Accessibility Services website: http://studentlife.utoronto.ca/as
- University's Plagiarism Detection Tool FAQ: https://uoft.me/pdt-faq
- The University of Toronto's Code of Behaviour on Academic Matters: http://www.governingcouncil.utoronto.ca/policies/behaveac.htm
- Information Commons Help Desk: http://help.ic.utoronto.ca/category/3/utmail.html
- Become a volunteer note taker: https://studentlife.utoronto.ca/program/volunteer-note-taking/
- Accessibility Services Note Taking Support: https://studentlife.utoronto.ca/service/note-taking-support/
- Credit / No-Credit in RSM courses: https://rotmancommerce.utoronto.ca/current-students/degree-requirements/credit-no-credit-option/
- Rotman Commerce Academic Support: https://rotmancommerce.utoronto.ca/current-students/academic-support/
- Book an appointment with a writing or presentation coach: http://uoft.me/writingcentres
- Writing and Presentation Coaching academic support page: https://rotmancommerce.utoronto.ca/current-students/academic-support/writing-and-presentation-coaching/
- Centre for Professional Skills Teamwork Resources page: https://rotmancommerce.utoronto.ca/teamwork-resources
- Book an appointment with a Teamwork Mentor: http://uoft.me/writingcentres