HEC MONTRÉAL

Webinar – November 2026

Discover our PhD in Management Science



ERICK DELAGE

programme **conjoint** de doctorat en administration
joint doctoral program in administration

Where can you find these slides ?



OR

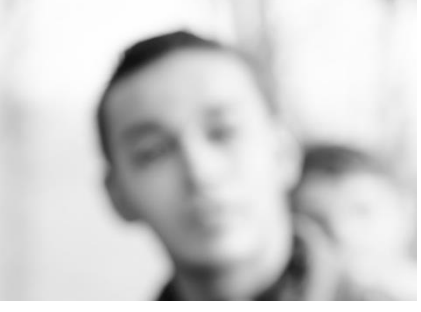
https://tintin.hec.ca/pages/erick.delage/ → Presentations → Webinar November 2026



- Erick Delage, PhD
- Full professor of decision sciences
- Holder of the Research Chair in Data-driven Decision Making
- Member of GERAD and Associate Academic Member of Mila
- Academic advisor of the PhD in Management Science

Why a PhD in Management Science at HEC Montreal?





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HEC MONTRÉAL

Our goal

Help you become *great, well-rounded,* scholars.

60% of our graduates *hold positions at Canadian or foreign universities,* most often as professors; the others work in the private sector as analysts, consultants or managers.

Our program is interesting for

Students with a background in:

- ***business analytics,***
- ***industrial engineering,***
- ***operations research,***
- ***applied mathematics, statistics, computer science,***

and with a ***strong interest and aptitude for research.***

A dynamic research environment

Many members of Department of Decision Sciences are world-renowned professors who:

- Regularly publish in leading scientific journals;
- Sit on editorial boards of high ranked scientific journals in their fields;
- Obtain on a continuous basis research funds from research agencies and companies;
- Have accumulated extensive experience in supervising dissertations; Many of them have supervised over 20 doctoral students who have flourishing industrial and academic careers.

A dynamic research environment

Researchers in management science work closely with several research groups and knowledge transfer hubs, including:

- Group for Research in Decision Analysis (GERAD, https://www.gerad.ca/en)
- Interuniversity Research Centre on Enterprise Networks, Logistics and Transportation (CIRRELT, https://www.cirrelt.ca/)
- IVADO, research consortium in artificial intelligence (https://ivado.ca/en)
- Mila – Quebec Artificial Intelligence Institute (https://mila.quebec/en/).

A dynamic research environment

Research Chairs

- Canada Research Chair in Sequential Decision-Making Under Uncertainty (Maryam Daryalal)
- Scale AI Research Chair in Artificial Intelligence for Urban Mobility and Logistics (Carolina Osorio)
- Data-driven Decision Making (Erick Delage)
- Energy Sector Management (Pierre-Olivier Pineau)
- Game Theory and Management (Georges Zaccour)

Research Professorship

- Dynamic Optimization (Michèle Breton)

Student support

- Funding of at least $***30,000 per year*** for 4 years (bursaries, teaching, research)
- ***Support for applying to scholarship***
- ***Tuition fee waiver*** for the first 4 years for all students (institutional fees still apply)
- ***Financial aid to participate in scientific activities*** (up to $5,000 over your studies: conferences, doctoral consortium, summer schools, writing workshop, job fair)

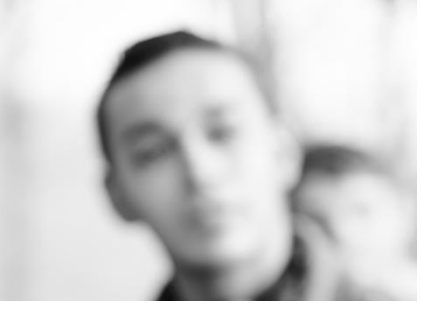
A bilingual joint Ph.D. program, unique in Canada !



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How does the program work?





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Phase I Preparation	Phase II Specialization (minimum of 30 cr.)	Phase III Thesis work (60 cr.)
If required	Coursework (at least 7 seminars) ▪ Min. 5 specialization seminars ▪ 1 pedagogy seminar ▪ Max. 1 elective seminar ▪ Workshop on responsible conduct of research (uncredited) Comprehensive Exam (written and oral)	Thesis Proposal Thesis Defence --- Shadowing Teaching

Maximum 1 year → *Maximum 2 years* → *Maximum 5 years*

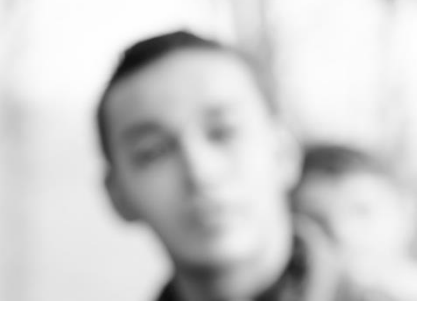
Specialization seminars

At least 5 seminars chosen among (or equivalent courses offered in the joint program):

- Dynamic Optimisation in Management
- Game Theory
- Large-Scale Optimization Models and Applications
- Quantitative Risk Management Using Robust Optimization
- Sample Efficient Optimization
- Special Topics in Management Science
- Topics in Pricing Models

Applying to the program





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How to apply

Fill out the ***online form***

Pay the ***admission fees ($111.77)***

Provide your ***admission test results*** (optional, but recommended)

Provide an ***updated CV***

Write a ***cover letter***

Describe your ***intended research project***

- *Max. 2 pages; also list your main publications, your field and 2 or 3 professors who could supervise you*

At least three recommendation letters, preferably from professors

- *Confirm your capabilities and interest for research*

Provide ***transcripts, diplomas*** and proof of language proficiency

Looking for a professor available and interested in your research project?

Consult **the department's website**, to find a professor in your field *(https://www.hec.ca/en/departments/department-decision-sciences/faculty-list)*

Consult the website of these professors who are looking for candidates:

- Arslan, Okan (combinatorial optimization for large-scale networks, smart last-mile delivery systems)
- Bahn, Olivier (integrated assessment models, hydrogen and energy transition)
- Daryalal, Maryam (sequential decision making under uncertainty)
- Delage, Erick (robust optimization, contextual optimization, risk-averse reinforcement learning)
- Denault, Michel (reinforcement learning, energy and environment)
- Osorio, Carolina (simulation-based optimization, urban transportation problems)
- Pineau, Pierre-Olivier (electricity markets, energy policy)
- Zaccour, Georges (dynamic games, game theory in supply chains, environment and marketing)

Look at « Students wanted » tab of PhD program website

Useful Information

Website

https://www.hec.ca/en/programs/phd/phd-management-science

Online admission form and requirements

Other important information

Deadline to submit your admission request

Fall 2027: *January 5th, 2027*

One admission yearly for the fall term

Response no later than 16 weeks after the deadline

Questions about the Management Science program?

Contact me!

erick.delage@hec.ca