

Department of Mathematics and Statistics, University of Ottawa

Information Session for Upper-level
Undergraduates

Your Department

- 35 professors
- ~ 10 postdoctoral researchers
- ~ 70 graduate students
- ~180 undergraduate students

KED hosts all the above, including the undergraduate common room (KED B-12) and three classrooms.

Careers In Mathematics and Statistics

- Statistician, actuary, mathematician
- Operations research
- Information technology
- Cryptology
- Biostatistics and bioinformatics
- Teaching

Coop Programme

- Apply online by September 30 of your 2nd year
- Resume and Interview training
- 4 work terms; various placements:
 - Statistics Canada, Communication Security Establishment Canada, Health Canada, CSIS, Research in our Department

Statistics

- MAT2375 opens the door to the study of statistics
- You can write your first actuarial exams upon completion of MAT2375
- The specialization or major in statistics give you the academic qualifications for the A.Stat.
- Opens the door to a variety of career options

Scholarships and more

- We award several undergraduate scholarships each year (no application required)
- NSERC – USRA : deadline in mid-January
- Work-study and coop placements doing mathematical research
- Coop prize
- NSERC-CMS Math in Moscow Scholarships

Programmes in Mathematics and Statistics: Year by Year Guide

NEVER trust Rabaska

Info for 2nd year students

- Our programme begins in 2nd year
- It's a big step up from first year!
- Attend DGDs, talk to your professors, classmates
- Core courses:
 - MAT2120 and MAT2121 (analysis)
 - MAT2141* and MAT2143** (algebra)

*may be replaced by MAT2342 in some programmes

**not required in Stats programmes

2nd year

- Optional courses:
 - MAT2362 : foundations (required in B.Spec Math)
 - MAT2324 : differential equations (required in all Spec . pr)
 - MAT2371 : probability (required in all Stats pr)
 - MAT2375 : statistics (required in all Stats pr)
 - MAT2348 : discrete mathematics
 - MAT2355 : geometry
- Warning: MAT2322, MAT2377, MAT2378 and MAT2384 cannot count towards any major or spec programme in math

CEGEP 2nd year students

- No CEGEP equivalent for MAT1341
- You may request a waiver to take MAT2120 or MAT2322 if you have taken linear algebra in CEGEP and are taking MAT1341 now
- Contact: Monica Nevins

3rd year students

Advanced core courses:

MAT3141 or MAT3341 (linear algebra), MAT3143** (ring theory)

MAT3120 (analysis III), MAT3121 (complex analysis)

These courses are required for most graduate programs in mathematics or statistics.

Core courses in statistics:

MAT3172 (probability), MAT3175 (mathematical statistics)

MAT3375 (regression analysis), MAT3377 (sampling and surveys)

MAT3378 (analysis of experimental designs)

These courses are required for accreditation as an A.Stat and for most graduate programs in statistics.

These courses are offered every year, usually alternating Eng/Fr.

3rd year Optional Courses

These courses are intended to help convey the different flavours of mathematics and statistics. They include

- MAT3100, MAT3101 (history of mathematics)
- MAT3130 (dynamical systems)
- MAT3166 (number theory), MAT3153 (topology)
- MAT3155 (differential geometry), MAT3343 (applied algebra)
- MAT3348 (applied discrete math), MAT3361 (mathematical logic)
- MAT3380 (numerical analysis), MAT3381 (comp. geometry)
- MAT3395 (mathematical models and mathematical software)

Some offered each year (English or French), depending on demand.

4th year

- In-depth analogues of 3rd year courses
- Some courses are MAT4XXX/MAT5XXX – 4th year students have a gentler evaluation
- Some courses alternate with Carleton University (free registration, free shuttle bus)
- Look for special topics courses, or seminar courses
- Talk to your professors about course options!

And beyond...

- The beginning of 4th year is the right time to start thinking about further studies
- Applications for graduate school scholarships in October --- professors here will help!
- Applications for graduate school admission, teacher's college admission: late fall for many programmes

For all our Students: Requesting courses

- Courses for 2010-2011 (including Summer 2010) will be set in January 2010
- Send us your requests!
- Look for an email from Michelle Lukaszczyk in December

Fun stuff

- Math and Stats Society: a student club under the Science Students Association
- Sign up here
 - Clubs achieving minimum membership get \$\$
 - Invitations to activities and events
 - Get to know other math & stats students
- Your rep: Anisa Ramia

More Fun Stuff

- Putnam competition : practice sessions this fall (Contact Pieter Hofstra)
- Statistical Society of Ottawa Student Research Day : September 11
 - Sessions starting at 8:30 in MRT250
 - Lunch and posters 10:00-13:00 in CBY A707
 - Workshop on 'R' 13:00-16:30 in FTX 147A

Future events

- Careers with Statistics Canada:
October 8, 2:30, KED B005
- Movie night: “Enigma” (2001) :
October 8, 7pm, D’lorio 214
- Public lecture about cryptology and the
Enigma machine by Richard Brisson, CSEC
October 15, 2:30, KED B005

More to come! Watch for emails, posters, and info from your math&stats society rep.

Contact us

- mathstat@uottawa.ca
- Director: David McDonald
- Undergrad programmes : Monica Nevins,
mnevins@uottawa.ca
- Putnam coach: Pieter Hofstra
phofstra@uottawa.ca
- Graduate studies: Benoit Dionne
bdionne@uottawa.ca