DEPARTMENT OF MATHEMATICS & STATISTICS
FACULTY OF ARTS AND SCIENCE
QUEEN'S UNIVERSITY
Advice for students in third or fourth year during 2026-27

Complete information about program requirements, courses of study, and academic regulations can be found in the Faculty of Arts and Science Academic Calendar.

For advice about degree programs or courses, please email the Chair of Undergraduate Studies at mathstat.ugchair@queensu.ca

300-level and 400-level courses planned for Fall 2026

Course Number	Title	Instructor (subject to change)
MATH 310	Group Theory	TBA
MATH 326	Functions of a Complex Variable	Dimitrov
MATH 331	Ordinary Differential Equations II	Lewis
MATH 341	Differential Geometry	Barthelmé
STAT 361	Applied Methods in Statistics I	Jiang
MATH 381	Mathematics with a Historical Perspective	Murty
MATH 387	Elementary Geometry - An Advanced Perspective	TBA
MATH 429	Functional Analysis and Quantum Mechanics	Cellarosi
MATH 430	Modern Control Theory	Chiri
MATH 433	Continuum Mechanics	Mazzone
MATH/STAT 455	Stochastic Processes	Magpantay
STAT 462	Statistical Learning I	Jiang
STAT 463	Fundamentals of Statistical Inference	Takahara
STAT 464	Discrete Time Series Analysis	Takahara
MATH 474	Information Theory	Alajaji
MATH 499	Topics in Mathematics (Varieties of Integration)	Mansouri

300-level and 400-level courses planned for Winter 2027

Course Number	Title	Instructor (subject to change)
MATH 300	Modeling Techniques in Biology	Magpantay
MATH 311	Elementary Number Theory	Rodgers
MATH 328	Real Analysis	Barthelmé
MATH 335	Mathematics of Engineering Systems	Yüksel
MATH 337	Introduction to Operations Research Models	TBA
MATH 347	Introduction to Topology	TBA
STAT 353	Probability II	Mingo
STAT 362	R for Data Science	Ling
MATH 385	Life Contingencies	TBA
MATH 401	Graph Theory	Smith
MATH 413	Introduction to Algebraic Geometry	Roth
MATH 434	Optimization Theory with App. to Machine Learning	Linder
STAT 457	Statistical Learning II	Ling
MATH 472	Optimization and Control of Stochastic Systems	Yüksel
MATH 477	Data Compression and Source Coding	Linder
STAT 486	Survival Analysis	Jiang

Alternate Year Courses

Offered in 2026-2027 and not likely offered in 2027-2028

MATH 300, MATH 311, MATH 381, MATH 387

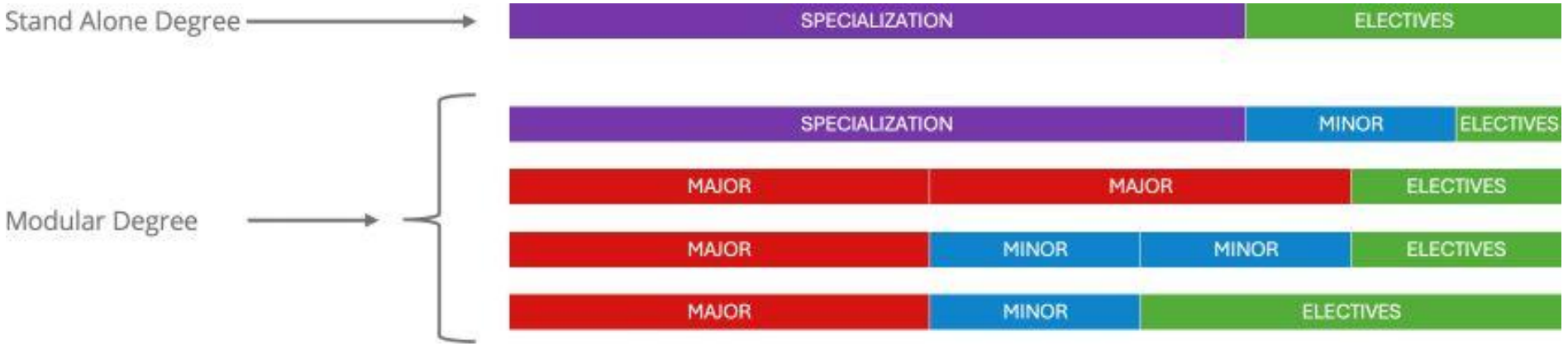
MATH 401, MATH 413, STAT 462, STAT 464

Not offered in 2026–2027 and likely offered in 2027-2028

MATH 314, MATH 339, MATH 386

MATH 402, MATH 414, MATH 418, MATH 436, STAT 456, STAT 471, STAT 473

Modular degree framework



- “Double-counting” of up to 12.0 units.
- You are now be able to double major in MATH and STAT.

Mathematics and Statistics Plans within the New Modular Framework

PLANS WITHIN HONOURS DEGREES

Specializations

- Biology and Mathematics (BSCH): 84.0 units
- Computing, Mathematics, and Analytics (BCMPH): 90.0 units
- Mathematical Physics (BSCH): 105.0 units
- Mathematics (BSCH): 60.0 units
  - Sub-plans: Pure Mathematics / Applied Mathematics
- Statistics (BSCH): 60.0 units

Majors

- Mathematics: 48.0 units
- Statistics: 48.0 units

Minors

- Mathematics: 30.0 units
- Statistics: 30.0 units

Previous Plans in Mathematics and Statistics

PLANS WITHIN HONOURS DEGREES

Specializations

- Biology and Mathematics (BSCH): 84.0 units
- Computing, Mathematics, and Analytics (BCMPH): 90.0 units
- Mathematical Physics (BSCH): 105.0 units

Majors

- Mathematics (BSCH): 60.0 units
- Statistics (BSCH): 60.0 units

Joint Honours

- Mathematics (BAH): 42.0 units
- Statistics (BAH): 42.0 units

Minors

- Mathematics (Arts): 30.0 units
- Mathematics (Science): 48.0 units
- Statistics (Arts): 30.0 units
- Statistics (Science): 48.0 units

Important to keep in mind:

- **No change will be made to students' existing Plans without the students requesting and the departments approving the request**

For 3rd and 4th year students: You are welcome to keep your Plan(s) exactly as they are, as long as no changes or additions are requested.

- **Previous Plan structures can't be combined with new modular Plans – i.e. old and new cannot be mixed**

E.g.: A student in the Mathematics Major in the previous framework wants to add a Philosophy Minor. This will mean that not only are they making a request to have the modular Philosophy Minor as part of their degree, but their Mathematics Major will also need to be moved to the new modular version. Their Plan Change request will be assessed by both Philosophy AND by Mathematics and Statistics.

In modular degree plans, or not?

- ☑ First-year students participating in Plan Selection will all have their plan options defined in the modular framework.
- ☑ Second-year students all have already chosen their plans in the modular degree structure.
- ☑ Third and Fourth-year students can choose to stay with their plan(s) in the previous framework, or can participate in the Plan Change process to move to the modular framework.

Upper-year (3rd and 4th year) students are not obligated to change to the modular degree structure!

Students already in previous plan framework are welcome to finish their studies and have their degree conferred under the previous structure.

48.0-Unit MATH Major for the Modular Degree Framework

1. Core		
A. Complete the following:		
MATH 110	Linear Algebra	6.00
MATH 120	Differential and Integral Calculus	6.00
B. Complete the following:		
MATH 210	Rings and Fields	3.00
MATH 225	Ordinary Differential Equations	3.00
MATH 280	Advanced Calculus	3.00
MATH 281	Introduction to Real Analysis	3.00
C. Complete the following:		
STAT 268	Statistics and Probability I	3.00
STAT 269	Statistics and Probability II	3.00
D. Complete the following:		
MATH 326	Functions of a Complex Variable	3.00
2. Option		
A. Complete 3.00 units from the following:		3.00
MATH_List_A		
B. Complete 3.00 units from the following:		3.00
MATH 341	Differential Geometry	
MATH 347	Introduction to Topology	
MATH at the 400-level or above		
C. Complete 3.00 units from the following:		3.00
MATH 310	Group Theory	
MATH 314	Representations of the Symmetric Group	
MATH 328	Real Analysis	
MATH 331	Ordinary Differential Equations II	
STAT 353	Probability II	
MATH at the 400-level or above		
D. Complete 6.00 units from the following:		6.00
MATH at the 400-level or above		
Total Units		48.00

60.0-Unit MATH SSP

for the Modular Degree Framework

1. Core		
A. Complete the following:		
MATH 110	Linear Algebra	6.00
MATH 120	Differential and Integral Calculus	6.00
B. Complete the following:		
MATH 210	Rings and Fields	3.00
MATH 225	Ordinary Differential Equations	3.00
MATH 280	Advanced Calculus	3.00
MATH 281	Introduction to Real Analysis	3.00
C. Complete the following:		
STAT 268	Statistics and Probability I	3.00
STAT 269	Statistics and Probability II	3.00
D. Complete the following:		
MATH 326	Functions of a Complex Variable	3.00
MATH 328	Real Analysis	3.00
2. Sub-Plans		
A. Complete one of the following Sub-Plans		24.00
i. Pure Mathematics		
ii. Applied Mathematics		
Total Units		60.00

MATH SSP Sub-Plans for the Modular Degree Framework

PURE MATHEMATICS		
1. Core		
a. Complete the following:		
MATH 310	Group Theory	3.00
2. Option		
a. Complete 3.00 units from the following:		3.00
MATH List A		
b. Complete 9.00 units from the following:		9.00
MATH List B		
MATH at the 400-level or above		
c. Complete 3.00 units from the following:		3.00
MATH 341	Differential Geometry	
MATH 347	Introduction to Topology	
d. Complete 6.00 units from the following:		6.00
MATH at the 400-level or above		
Total Units		24.00

APPLIED MATHEMATICS		
1. Core		
a. Complete the following:		
MATH 331	Ordinary Differential Equations II	3.00
STAT 353	Probability II	3.00
2. Option		
a. Complete 3.00 units from the following:		3.00
MATH List A		
b. Complete 6.00 units from the following:		6.00
MATH List B		
MATH at the 400-level or above		
c. Complete 3.00 units from the following:		3.00
MATH 300	Modeling Techniques in Biology	
MATH 337	Stochastic Models in Operations Research	
MATH 339	Game Theory	
d. Complete 6.00 units from the following:		6.00
MATH at the 400-level or above		
Total Units		24.00

Special Lists of Courses for the new Modular Degree Framework

MATH_List_A	
MATH 300	Modeling Techniques in Biology
MATH 311	Elementary Number Theory
MATH 381	Mathematics with a Historical Perspective
MATH 382	Mathematical Explorations
MATH 386	Our Number System - an Advanced Perspective
MATH 387	Elementary Geometry - an Advanced Perspective
MATH_List_B	
MATH 300	Modeling Techniques in Biology
MATH 310	Group Theory
MATH 314	Representations of the Symmetric Group
MATH 331	Ordinary Differential Equations II
MATH 335	Mathematics of Engineering Systems
MATH 337	Stochastic Models in Operations Research
MATH 339	Game Theory
MATH 341	Differential Geometry
MATH 347	Introduction to Topology
STAT 353	Probability II

48.0-Unit STAT Major for the Modular Degree Framework

1. Core		
A. Complete the following:		
MATH 110	Linear Algebra	6.00
MATH 120	Differential and Integral Calculus	6.00
B. Complete the following:		
MATH 280	Advanced Calculus	3.00
MATH 281	Introduction to Real Analysis	3.00
C. Complete the following:		
STAT 268	Statistics and Probability I	3.00
STAT 269	Statistics and Probability II	3.00
D. Complete the following:		
STAT 353	Probability II	3.00
STAT 361	Applied Methods in Statistics I	3.00
STAT 362	R for Data Science	3.00
E. Complete the following:		
STAT 463	Fundamentals of Statistics Inference	3.00
2. Option		
A. Complete 9.00 units from the following:		9.00
STAT at the 300-level or above		
B. Complete 3.00 units from the following:		3.00
MATH 210	Rings and Fields	
MATH 225	Ordinary Differential Equations	
MATH at the 300-level or above		
STAT at the 300-level or above		
Total Units		48.00

60.0-Unit STAT SSP for the Modular Degree Framework

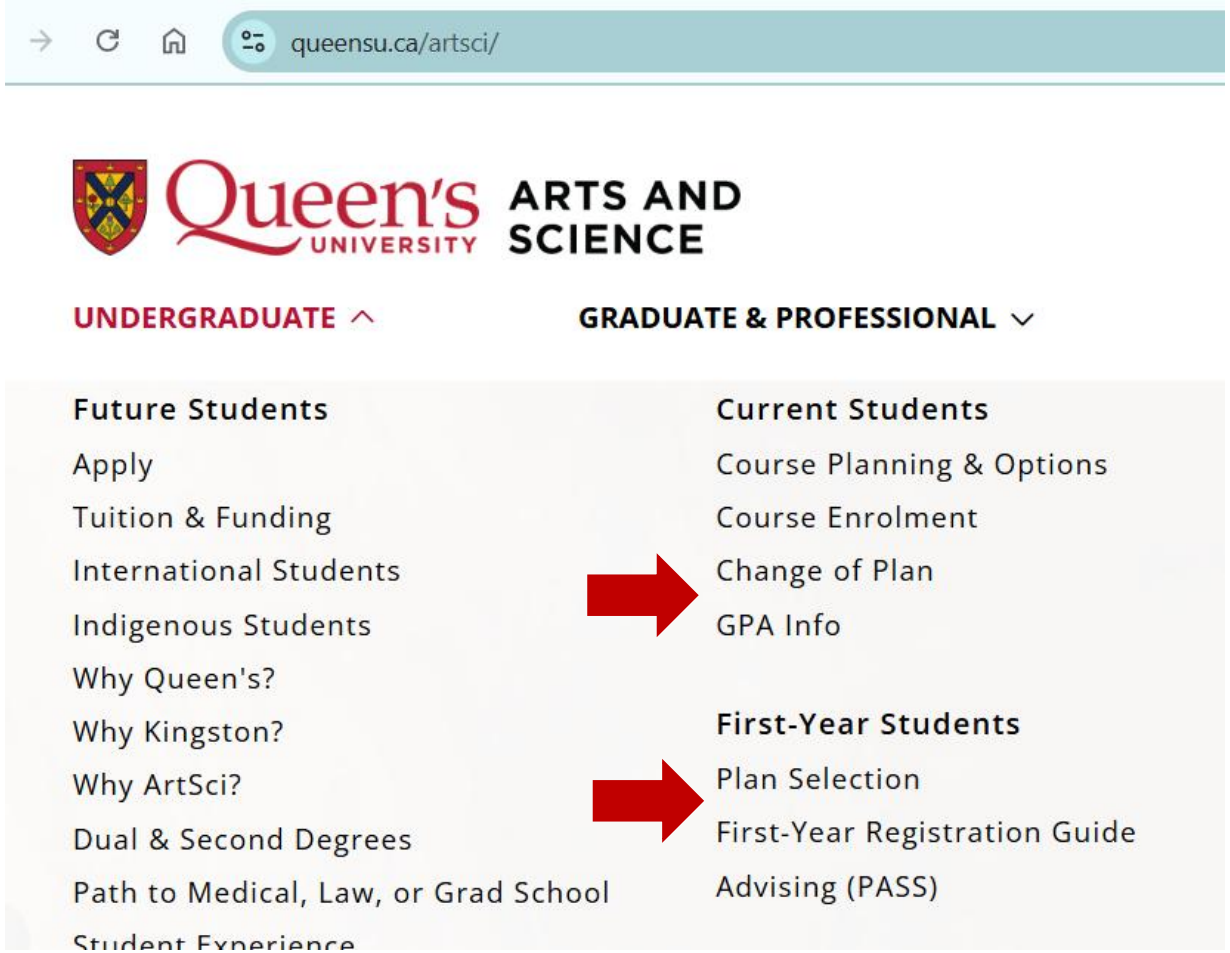
1. Core		
A. Complete the following:		
MATH 110	Linear Algebra	6.00
MATH 120	Differential and Integral Calculus	6.00
B. Complete the following:		
MATH 280	Advanced Calculus	3.00
MATH 281	Introduction to Real Analysis	3.00
C. Complete the following:		
STAT 268	Statistics and Probability I	3.00
STAT 269	Statistics and Probability II	3.00
D. Complete the following:		
STAT 353	Probability II	3.00
STAT 361	Applied Methods in Statistics I	3.00
STAT 362	R for Data Science	3.00
E. Complete the following:		
STAT 463	Fundamentals of Statistics Inference	3.00
2. Option		
A. Complete 15.00 units from the following:		15.00
STAT at the 300-level or above		
B. Complete 9.00 units from the following:		9.00
MATH 210	Rings and Fields	
MATH 225	Ordinary Differential Equations	
MATH at the 300-level or above		
STAT at the 300-level or above		
Total Units		60.00

When can a Modular Plan be requested?

- First-year students will participate in Plan Selection from **May 19 to 30, 2026**
- Upper-year students can request a plan change in (or to move to) the Modular framework, during the Plan Change period, this year also from **May 19 to 30**
- Late Change of Plan period: **June 22 – July 3**

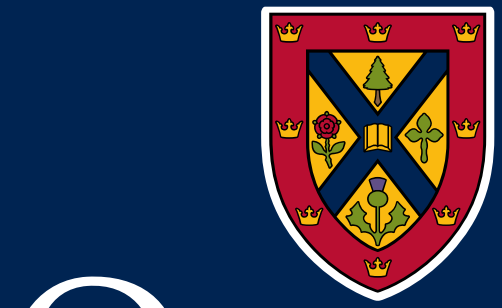
Where do we go for more guidance?

- **Review the information already on the Arts and Science website** (including detailed overviews of the course/unit requirements for all approved Modular Plans)
  - *Upper-year students* – Change of Plan webpage
  - *First-year students* – Plan Selection webpage
- **Watch for updates on Plan details/first-year placement thresholds as they get posted on those sites**
- **Reach out to our department (and others that you're interested in) for specific questions**
- **Connect with an Academic Advisor in the Student Services Office**



Useful Websites:

- Arts and Science: Change of Plan
- Degree Plans in Mathematics and Statistics
- Advice – Undergraduate Study in Mathematics
- Advice – Undergraduate Study in Statistics
- Math Stat Degree Plan Combinations – Guidelines for Double Counting and Course Substitution



Queen's
UNIVERSITY