

College of Arts and Sciences

MATH B.A. ACADEMIC MAP 4 YEAR PLAN (EFFECTIVE FALL 2014)

This map is a term-by-term sample course schedule. The milestones listed to the right of each semester are designed to keep you on course to graduate in four years. The Sample Schedule serves as a general guideline to help you build a full schedule each term. Milestones are courses and special requirements necessary for timely progress to complete a major. Students are urged to consult with departmental advisors frequently during their undergraduate years – to make an appointment, e-mail to vkilibar@iun.edu, call (219) 980-5691 or stop by Hawthorn Hall Room 445. Each student is responsible for planning his/her own program and for meeting the college and departmental degree requirements by the time he/she graduates. Consult the [IUN Bulletin](#) for details and for courses that meet Groups I, II, III and IV requirements in the College of Arts and Sciences.

Major Requirements (30-32 cr.)

- **Required core courses** (29 cr.) MATH-M 215 (5 cr.), MATH-M 216 (5 cr.), MATH-M 301/303 (3 cr.), MATH-M 311 (4 cr.), MATH-M 360 (3 cr.), MATH-M 393 (3 cr.), MATH-M 403 (3 cr.)
Select one of the following MATH-M 413 (3 cr.) or MATH-M 366 (3 cr.)
- **Senior Thesis in Mathematics** (1-3 cr.): MATH-M 493 (1-3 cr.) (a capstone course)

Sample Schedule			Milestones
First Semester (Fall)			First Semester
MATH-M 215 Calculus I	Hrs.	Grade	Placement Tests determine first year Mathematics, English composition and foreign language courses.
Foreign Language (100-level)	5		Complete ENG-W 131 with a C or higher.
ENG-W 131 English Composition	3		All courses in the major must be completed with a grade of C- or higher.
Physical/Life Science w/lab- Group IIIA (1/4)	3		
Total hours	4-5		
	15-16		
Second Semester (Spring)			Second Semester
MATH-M 216 Calculus II	Hrs.	Grade	Use Summer sessions to make up any coursework you need to keep on track for graduation.
Foreign Language (150-level)	5		Complete SPCH-S 121 with a C or higher.
MATH-M 301 Linear Algebra ¹ or MATH-M 391/393 Foundations/Bridge ²	3		
SPCH-S 121 Public Speaking	3		
Total hours	14		
Third Semester (Fall)			Third Semester
MATH-M 311 Calculus III	Hrs.	Grade	Complete ENG-W 231 with a C or higher Intensive writing requirement – part 1.
Humanities Studio – Group IIIC Lab(1/4)	4		Need at least 12CR in group IIIC. No more than 9 credits in the same subject area.
ENG-W 231 Professional Writing Skills	3		Remember to consult with an advisor frequently.
Foreign Language (200-level)	3		
Elective ¹ or MATH-M 360 Probability ²	3		
Total hours	16		
Fourth Semester (Spring)			Fourth Semester
MATH-M 391/393 Foundations/Bridge ² or MATH-M 301 Linear Algebra ¹	Hrs.	Grade	All courses in the major must be completed with a grade of C- or higher.
Elective or Math-M 366 Statistics ^{1,3} or MATH-M 413 Introduction to Analysis ^{2,3}	3		Need at least 12CR in group IIIB. No more than 9 credits in the same subject area.
Social/Behavioral Science – Group IIIB (1/4)	3		Work on Diversity/Culture requirement.
Diversity – Group IVA	3		Complete the Foreign Language Requirement.
Foreign Language (250-level)	3		
Total hours	15		

¹ Odd-numbered year

² Even-numbered year

³ Select one of the following MATH-M 413 (3 cr.) or MATH-M 366 (3 cr.)

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Fifth Semester (Fall)	Hrs.	Grade
MATH-M 360 Probability ² or MATH-M 403 Abstract Algebra ¹	3	
Social/Behavioral Science – Group IIIB (2/4)	3	
Physical/Life Science – Group IIIA (2/4)	3	
Humanities – Group IIIC (2/4)	3	
Diversity – Group IVB	3	
Total hours	15	

Fifth Semester

All courses in the major must be completed with a grade of C- or higher.

Need at least 12CR in each of the groups IIIA, IIIB and IIIC. No more than 9 credits in the same subject area.

Work on Diversity/Culture requirement.

Sixth Semester (Spring)	Hrs.	Grade
Math-M 366 Statistics ^{1,3} or Elective or MATH-M 413 Introduction to Analysis ^{2,3}	3	
Humanities – Group IIIC (3/4)	3	
Physical/Life Science – Group IIIA (3/4)	3	
Elective	3	
Elective	3	
Total hours	15	

Sixth Semester

Remember that you need a minimum of 36 credit hours in courses at the 300-400 (junior-senior) level.

Complete a Senior Check-List to verify your remaining requirements - see COAS Recorder for assistance (HH 231).

Seventh Semester (Fall)	Hrs.	Grade
MATH-M 403 Abstract Algebra ¹ or Elective ²	3	
Social/Behavioral Science – Group IIIB (3/4)	3	
Diversity – Group IVC	3	
Physical/Life Science – Group IIIA (4/4)	3	
Elective	3	
Total hours	15	

Seventh Semester

May and August graduates must file the application for graduation by October 15.

Fulfill Diversity/Culture requirement.

Complete Group IIIA requirement.

Eighth Semester (Spring)	Hrs.	Grade
MATH-M 493 Senior Thesis	1-3	
MATH-M 413 Introduction to Analysis ^{2,3} or Elective ¹	3	
Social/Behavioral Science – Group IIIB (4/4)	3	
Humanities – Group IIIC (4/4)	3	
Elective	1-3	
Total hours	11-15	

Eighth Semester

Write and present a senior thesis.
Intensive writing requirement – part 2.

Celebrate the end of the semester and the completion of your degree!