



**Associate in Arts at Heartland Community College to Bachelor's Degree in Math at Illinois Wesleyan University**

*This is a suggested course pattern. Students must work with their advisor to develop a curriculum plan that meets their scheduling needs. \*\* indicates course needed for the major. + indicates an IWU graduation requirement*

HEARTLAND COMMUNITY COLLEGE			
FIRST YEAR	COURSE NAME	CREDIT HOURS	
		FALL	SPRING
ENGL 101	Critical Reading and Writing	3	
MATH 161**	Calculus I	5	
IAI Life Science	Any IAI Life Science	3-4	
Language 101	Elementary Language I	4	
ENGL 102	Multimodal Composition		3
MATH 162**	Calculus II		4
IAI Physical Science	Any IAI Physical Science		3-4
Language 102	Elementary Language II		4
IAI Social Behavioral Sci	Any IAI Social/Behavioral Science		3
<b>Total Credit Hours</b>		<b>15-16</b>	<b>17-18</b>
SECOND YEAR	COURSE NAME	CREDIT HOURS	
		FALL	SPRING
COMM 101	Intro to Oral Communication	3	
MATH 271**	Linear Algebra	4	
IAI Humanities	Any IAI Humanities	3	
Language 201+	Intermediate Language I	4	
IAI Social Behavioral Sci	Any IAI Social/Behavioral Science	3	
MATH 163**	Calculus III		4
IAI Fine Arts	Any IAI Fine Arts		3
IAI Social Behavioral Sci	Any IAI Social/Behavioral Science		3
IAI Humanities/Fine Arts	Any IAI Humanities/Fine Arts		3
Elective	Elective		3
<b>Total Credit Hours</b>		<b>17</b>	<b>15</b>

ILLINOIS WESLEYAN UNIVERSITY			
THIRD YEAR	COURSE NAME	UNIT HOURS	
		FALL	SPRING
Math 178 MATH 200 1xx - 4xx 1xx - 4xx 1xx - 4xx	Calculus Lab Techniques of Mathematical Proof (WI) Elective outside the Major Elective outside the Major Elective outside the Major	.25 1 1 1 1	
MATH 3xx Math 321 3xx or 4xx 1xx - 4xx MATH 3xx or 4xx	Choose 1 <sup>st</sup> of 2: MATH 360, 362, 364, 366, 368 Math Immersion III Upper Level Elective outside the Major Writing Intensive Elective outside the major Choose 1 <sup>st</sup> of 3: MATH 310, 324, 325, 340, 360, 362, 364, 366, 368, 400, 403, 407, 412, 430, 437, 451 (see below for courses that satisfy the requirements for actuarial science and statistics concentrations within the major)		1 .25* 1 1 1
<b>Total Units</b>		<b>4.25</b>	<b>4.25</b>
FOURTH YEAR	COURSE NAME	UNIT HOURS	
		FALL	SPRING
MATH 3xx 3xx or 4xx 1xx - 4xx 3xx or 4xx	Choose 2 <sup>nd</sup> of 2: MATH 360, 362, 364, 366, 368 Upper Level Elective outside the Major Elective outside the Major Choose 2 <sup>nd</sup> of 3: MATH 310, 324, 325, 340, 360, 362, 364, 366, 368, 400, 403, 407, 412, 430, 437, 451 (see below for courses that satisfy the requirements for actuarial science and statistics concentrations within the major)	1 1 1 1	
MATH 3xx or 4xx Math 421 3xx or 4xx 1xx - 4xx 3xx or 4xx	Signature Experience: choose 1: 397, 495, 499 Math Immersion IV Upper level elective in or outside the major Elective outside the Major Choose 3 <sup>rd</sup> of 3: MATH 310, 324, 325, 340, 360, 362, 364, 366, 368, 400, 403, 407, 412, 430, 437, 451 (see below for courses that satisfy the requirements for actuarial science and statistics concentrations within the major)		1 .25 1 1 1
<b>Total Units</b>		<b>4</b>	<b>4.25</b>

See next page for additional notes and requirements:

- Math majors have the option of choosing a concentration at Illinois Wesleyan in Actuarial Science or in Statistics. If you choose a concentration, work carefully with your IWU advisor and review the catalog to choose classes.
- Actuarial Science Concentration:
  - o 1. A minimum of 13 course units in mathematics to include: 1. MATH 176, 177, 178, 278
  - o 2. MATH 120X, 220, 320 or 321, 420 or 421: Math Immersion Sequence (Junior transfer students should take 321 for .5 units and 421 for .25 units)

- o 3. MATH 200 and 215. Students should consult with a mathematics advisor in order to determine the best time for them to take these courses.
- o 4. MATH 324, 325, 403, and ACC 112
- o 5. Two courses selected from MATH 360, 362, 364, 366, 368 or approved 470. Students must take at least one of the two courses in their junior year. Students are allowed to take more than two course from MATH 360, 362, 364, 366, and 368.
- o 6. MATH 397, 495, or 499 for the completion of a capstone experience during the senior year. At least one of the 12 required math courses should be taken during the senior year. Students are strongly encouraged to take ECON 100 and FIS 303.
- Statics Concentration: A minimum of twelve course units in mathematics to include:
  - o 1. MATH 176, 177, 178, 278
  - o 2. MATH 120X, 220, 320 or 321, 420 or 421: Math Immersion Sequence (Junior transfer students should take 321 for .5 units and 421 for .25 units)
  - o 3. MATH 200 and 215. Students should consult with a mathematics advisor in order to determine the best time for them to take these courses.
  - o 4. MATH 324, 325, 403
  - o 5. Two courses selected from MATH 360, 362, 364, 366, 368, or approved 470. Students must take at least one of the two courses in their junior year. Students are allowed to take more than two courses from MATH 360, 362, 364, 366, and 368.
  - o 6. MATH 397, 495, or 499 for the completion of a capstone experience during the senior year.
  - o At least one of the 12 required math courses should be taken during the senior year.
- There are also three minors available to Math majors; Actuarial Science, Mathematics, and Statistics.

#### IWU General Transfer Notes:

- At Heartland, choose a (G) Global Diversity and a (U) US Diversity course from recommended list to meet IWU graduation requirements.
- AP scores with 4 or higher, or higher level IB scores of 5 or higher, can be used to meet general education requirements at IWU, but not major or minor requirements.
- Remedial math courses may be needed to prepare for the math requirement. However, remedial courses will not transfer to IWU. Adjust schedule and hour requirements accordingly to complete degree.
- Completion of any 201 language course would complete the 2<sup>nd</sup> language requirement.
- Students should complete a minimum of 64 semester hours, not including remedial or equivalent PE courses, at Heartland to be on track to complete their bachelor's degree in a total of four years.
- Students are required, at minimum, to complete 16 units of coursework at IWU including half of all major requirements.
- Graduation requirements: 32 total courses and 32 total units with 9 courses and 9 units of upper level courses, and 18 courses and 18 units outside the major. (1 IWU unit = 4 semester hours)