



Associate in Arts at Heartland Community College to Bachelor's Degree in **Physics 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
PHYS 171**	Mechanics w/Lab		3-4
Language 102	Elementary Language II		4
COMM 101	Intro to Oral Communication		3
Total Credit Hours		15-16	17-18
SECOND YEAR	COURSE NAME	CREDIT HOURS	
		FALL	SPRING
PHYS 172**	Electricity & Magnetism w/Lab	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	
PHYS 173**	Fluids & Thermal Physics w/Lab (Students should complete 173 & 174)		2
PHYS 174**	Quantum Physics w/Lab		2
IAI Fine Arts	Any IAI Fine Arts		3
IAI Social Behavioral Sci	Any IAI Social/Behavioral Science		3
MATH 272	Differential Equations		4
IAI Humanities/Fine Art	Any IAI Humanities/Fine Art		3
Total Credit Hours		18	17

It is recommended that you complete the IAI GECC through Heartland. Meeting all of the GECC requirements will automatically meet the Illinois Wesleyan general education requirements. In this plan, you will leave Heartland missing one course to complete the GECC, a Social and Behavioral Sciences course. You may meet that requirement at IWU and through the reverse transfer process, you will complete the requirements at Heartland. In choosing this course, please work with your advisor to also complete the IWU Encountering Diversity requirement. Those requirements are detailed below.

ILLINOIS WESLEYAN UNIVERSITY			
THIRD YEAR	COURSE NAME	UNIT HOURS	
		FALL	SPRING

PHYS elective xxx (see note below) 3xx or 4xx 1xx - 4xx PHYS elective xxx	Choose 1 st of 4: PHYS 170, 270, 277, 301, 305, 306, 307, 308 , 310, 339 , 370, 399 , 495, 499 Upper Level Elective in or outside major Choose a course for reverse transfer	1 1 1 1	
PHYS elective xxx	Choose 2 nd of 4: PHYS 170, 270, 277, 301, 305, 306, 307, 308 , 310, 339 , 370, 399 , 495, 499		1
PHYS 304*** 1xx - 4xx 1xx - 4xx	Mathematical Methods of Physical Science Elective outside the major Writing intensive elective in or outside the major		1 1 1
Total Units		4	4
FOURTH YEAR	COURSE NAME	UNIT HOURS	
		FALL	SPRING
PHYS 4xx	Choose 1 st of 2: PHYS 405, 406, 407, 408 (1 must be 405 or 406, taken fall or spring semester)	1	
PHYS elective xxx	Choose 4 th of 4: PHYS 170, 270, 277, 301, 305, 306, 307, 308 , 310, 339 , 370, 399 , 435, 495, 499 (work with advisor to meet upper level graduation requirements)	1	
3xx or 4xx Elective	Upper level elective in or outside the major Elective outside the major	1 1	
PHYS 4xx	Choose 2 nd of 2: PHYS 405, 406, 407, 408 (1 must be 405 or 406 if not already completed)		1
3xx or 4xx	Upper level elective in or outside the major		1
3xx or 4xx	Upper level elective in or outside the major		1
3xx or 4xx	Upper level elective in or outside the major		1
Total Units		4	4

- You should plan to complete the two years at Heartland prior to transfer to IWU as a Physics major.
- Note regarding PHYS elective xxx: You will be required to select four elective Physics courses. When doing so, work with your advisor to ensure that at least two of the four courses selected have lab components. Courses with labs include those in **bold** above. Physics 170, 270, or 370 may also meet the lab requirement if the topic offered includes a lab.
- Physics majors have the option of choosing a minor at Illinois Wesleyan. If you choose a minor, work carefully with your IWU advisor and review the catalog to choose classes to complete the minor.
- No more than 14 units in Physics can count toward the IWU degree.
- ***If you take Linear Algebra, Differential Equations, and Complex Variables at Heartland, your PHYS 304 requirement will be waived. You must replace that course with an additional 300 or 400 level course at IWU to meet major requirements.
- Work with your advisor to ensure that you meet the graduation requirement of a minimum of nine upper level courses.
- At Heartland, choose a (G) Global Diversity and a (U) US Diversity course from recommended list to meet IWU graduation requirements.
- AP with scores of 4 or higher and higher level IB scores of 5 or higher can be used to meet general education requirements at IWU. If scores were used to meet major content requirements, equivalent hours within the major will be required.
- Remedial math courses may be needed to prepare for the math requirement. However, remedial courses will not transfer to IWU. Adjust schedule and semester hour requirement accordingly to complete degree.
- Completion of any 201 language course would complete the 2nd language requirement.

- Students must complete a minimum of 64 semester hours, not including remedial courses or equivalent PE courses, at HCC to be on track to complete their bachelor's degree in a total of four years.
- Students are required, at a minimum, to complete 16 units of coursework at IWU including half of all major requirements.
- Graduation requirements: 32 total courses and 32 total units, 9 courses and 9 units of upper level courses, and 18 courses and 18 units of courses outside the major. (1 IWU unit = 4 semester hours)