



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

This plan is for students who plan to work in industry or attend graduate study in chemistry.

*This is a suggested course pattern. Students must work with their advisor to develop a curriculum plan that meets their scheduling needs. At HCC, ** 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	
CHEM 161**	General Chemistry I w/Lab	5	
Language 101	Elementary Language I (Take French, Italian, Japanese or Spanish if finishing the 3-semester sequence at IWU.)	4	
ENGL 102	Multimodal Composition		3
MATH 162**	Calculus II		4
CHEM 162**	General Chemistry II w/ Lab		5
Language 102	Elementary Language II		4
Total Credit Hours		17	16
SECOND YEAR	COURSE NAME	CREDIT HOURS	
		FALL	SPRING
CHEM 241**	Organic Chemistry I	5	
PHYS 161 or 171**	College Physics I or Mechanics (Mechanics preferred)	4-5	
Language 201+	Intermediate Language I	4	
COMM 101	Intro to Oral Communication (See notes)	3	
CHEM 242**	Organic Chemistry II		5
PHYS 162 or 172**	College Physics II or Electricity and Magnetism (Electricity and Magnetism Preferred)		4
IAI Social Behavioral Sci	Choose an IAI SBS course that fulfills an IWU diversity flag		3
IWU CHEM 332**	Consider taking Inorganic Chemistry (CHEM 332) at IWU as a transition course. Or, choose a Heartland general ed course.		4 (1 IWU unit)
Total Credit Hours		16-17	16

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 five courses to complete the GECC; two Social and Behavioral Sciences courses (one will be completed with IWU PSYC 100), and three courses in the Humanities/Fine Arts area. You may take those requirements at IWU and through the

reverse transfer process, you will complete the requirements at Heartland. In choosing those courses, 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
CHEM 301	Quantitative Analysis	1	
CHEM 321	Physical Chemistry I: Thermodynamics	1.25	
3XX or 4XX	Upper Level Elective (to meet GECC & look for G, U, or W as needed)	1	
PSYC 100	General Psychology (Reverse Transfer to HCC)	1	
CHEM 312	Quantitative Analysis Laboratory		.25
CHEM 322	Physical Chemistry II: Kinetics		1
CHEM 332	Inorganic Chemistry (if not taken while at HCC)		1
3XX or 4XX	Upper Level Elective (to meet GECC & look for G, U, or W as needed)		1
1XX - 4XX	Elective (to meet GECC & look for G, U, or W as needed)		1
Total Units		4.5	4
FOURTH YEAR	COURSE NAME	UNIT HOURS	
		FALL	SPRING
CHEM 3XX or 4XX	Choose from CHEM 317, 323, 324, 413, 414, 432, or 470	1.25	
1xx-4xx	Elective	1	
1xx-4xx	Elective	1	
1xx-4xx	Elective outside the major (For the 3 electives above, work with advisor to complete remaining requirements for GECC at HCC and IWU shared curriculum requirements.)	1	
CHEM 304	Instrumental Analysis		1
CHEM 380	Advances Inorganic Synthesis and Analysis		1
1xx-4xx	Elective		1
1xx - 4xx	Elective		1
Total Units		4.25	4

Notes

- **Flexibility in Course Sequencing:** Some students may feel more comfortable taking CHEM 161/162 and MATH 161/162 in their first year at HCC and CHEM 241/242 in their second year at HCC.
- **Foreign Language:** Illinois Wesleyan requires students to complete a three-semester language sequence (101, 102, 201) or demonstrate commensurate proficiency. Students beginning language study at Heartland should be apprised of which languages can be continued at Illinois Wesleyan. Illinois Wesleyan offers majors in French and Spanish and 101-202 sequences in Italian and Japanese. Illinois Wesleyan does not offer courses in Chinese or German. Completion of HCC GER 201, SPAN 201, FREN 201, ITAL 201, JAPN 201 would complete 2nd language requirement.
- **Encountering Diversity requirements:** When choosing courses to fulfill IWU General Education, students should choose one G (Global Diversity) course and one U (Encountering U.S. Diversity) course to meet Encountering Diversity requirements.
- **AP and IB:** AP 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:** Remedial math courses may be needed to prepare for MATH 161. However, remedial courses will not transfer to IWU. Adjust schedule and semester hour requirement accordingly to complete degree.

Ensuring Sufficient Coursework for Timely Graduation:

- 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. Adjust schedule accordingly to complete these requirements.
- 1 IWU unit = 4 semester hours