



Winona State University
Four-Year Program Map

Created on 4/23/2024
 Effective Fall 2024

Program: Physics Teaching 9-12 (BT PHST)
Emphasis (optional):

Fall Semester				Spring Semester			
	Course	Requirement Met	SH		Course	Requirement Met	SH
Year 1	CHEM 212 Principles of Chemistry I	GE Goal 3/Major	4	CHEM 213 Principles of Chemistry II	GE Goal 3/Major	4	
	MATH 120 Precalculus	GE Goal 4	4	MATH 212 Calculus I	GE Goal 4/Major	4	
	ENG 111 College Reading & Writing	GE Goal 1	4	CMST 191 Intro to Public Speaking	GE Goal 1	3	
	OR 100 Intro to Higher Education	Recommended	1	PHYS 221 University Physics I	GE Goal 3/Major	4	
	General Education Course (double count)	GE Goal 5/6/7/8/9/10	3	PHYS 231 University Physics IB	Major	1	
	PHYS 099 The Career Physicist	Major	0	PHYS 099 The Career Physicist	Major	0	
	<i>NOTE: May swap ENG 111 with CMST 191 in the Spring; check and track Teacher Education admission requirements</i>				<i>NOTE: May swap CMST 191 with ENG 111 from the Fall; track Teacher Education admission requirements</i>		
First-Year Fall Semester Credit Hour Total			16	First-Year Spring Semester Credit Hour Total			16
Year 2	MATH 213 Calculus II	GE Goal 4/Major	4	PHYS 340 Modern Physics	Major/WI	4	
	PHYS 222 University Physics II	GE Goal 3/Major	4	MATH 313 Differential Equations	Major/CAI	4	
	PHYS 232 University Physics IIB	Major	1	General Education Course	GE Goal 5/6/7/8/9/10	3	
	SPED 300 Children and Youth with Exceptionalities	Major	3	EDFD 401 Metacognitive Learner: K-12 and 5-12	Major	2	
	HERS 204 Personal & Community Health	Major/PDW	3	CPES 401 Child Study Field Experiences: 5-12	Major	0	
	General Education Course (double count)	GE Goal 5/6/7/8/9/10	3	EDFD 461 Multicultural Youth, Children, & Families: Part I: K-12 and 5-12	Major	2	
	<i>NOTE: Apply for admission to the Teacher Education Program</i>				<i>NOTE: EDFD 401 and 461 and CPES 401 must be taken concurrently</i>		
Second-Year Fall Semester Credit Hour Total			18	Second-Year Spring Semester Credit Hour Total			15
Year 3	PHYS 350 Mechanics	Major	4	PHYS 345 Thermodynamics and Statistical Physics	Major/CAI	4	
	PHYS 330 Electronics	Major/WI	4	PHYS 099 The Career Physicist	Major	0	
	EDFD 421 Classroom Management: K-12 and 5-12	Major	1	EDFD 459 The Professional Educator	Major/WI	3	
	EDFD 441 Curriculum, Instruction and Assessment: K-12 and 5-12	Major/CAI	3	EDFD 462 Multicultural Youth, Children, and Families Part II	Major	1	
	CPES 441 Child Study Field Experiences: 5-12	Major	0	General Education Course (double count)	GE Goal 5/6/7/8/9/10	3	
	PHYS 370 Optics	Major/WI	4	General Education Course	GE Goal 5/6/7/8/9/10	3	
	PHYS 099 The Career Physicist	Major	0	General Education Course	GE Goal 5/6/7/8/9/10	3	
<i>NOTE: EDFD 421 and 441 and CPES 441 must be taken concurrently</i>				<i>NOTE: EDFD 459 and 462 must be taken concurrently; Apply for student teaching</i>			
Third-Year Fall Semester Credit Hour Total			16	Third-Year Spring Semester Credit Hour Total			17
Year 4	EDUC 429 Secondary Reading & Teaching Strategies	Major	3	EDST 465 Student Teaching - Sr High School K-12 Specialty	Major/OI	12	
	PHYS 460 Undergraduate Research	Major/OI	2				
	PHYS 320 Computational Physics	Major	2				
	CHEM 311 Science Teaching Methods	Major	4				
	General Education Course	GE Goal 5/6/7/8/9/10	3				
<i>NOTE:</i>				<i>NOTE:</i>			
Fourth-Year Fall Semester Credit Hour Total			14	Fourth-Year Spring Semester Credit Hour Total			12

Total Credit Hours (SH): 124

Guide to 4 Year Major Maps

- 4 Year Major Maps are intended to show a recommended four-year pathway to a degree. Students must be full-time, college ready, and ready to declare a major to follow the map exactly as shown. Maps are only a sample; there may be other pathways that lead to completion of the degree in four years.
- Major Maps are NOT intended to take the place of meetings with advisors.
- Major Maps are NOT intended to take the place of the Degree Audit (DARs/uAchieve).

All courses listed on a major map will be labelled as one or more of the following:

GE Goal	General Education Goal Area	Indicates that the course meets one of the 10 General Education Goals
Gen Elec	General Elective	Indicates that the course does not meet a General Education, Major or Minor requirement but does count toward the degree
Major	Major Requirement	Indicates that the course meets a Major requirement
Major Elec	Major Elective	Indicates that the course counts toward the major as an elective, must be chosen from list of approved courses
Minor	Minor Requirement	Indicates that the course meets a Minor requirement
CAI	Critical Analysis Intensive	Indicates that the course counts as a Critical Analysis Intensive
OI	Oral Intensive	Indicates that the course counts as an Oral Intensive
WI	Written Intensive	Indicates that the course counts as a Written Intensive
PDW	Personal Development and Wellness	Indicates that the course counts as a Personal Development and Wellness Requirement

General Education Goal Areas:

		Minimum credits required
Goal 1	Communication	7 credits
Goal 2	Critical Thinking (Met with completion of all other goal areas)	--
Goal 3	Natural Science	7 credits
Goal 4	Mathematics	3-4 credits
Goal 5	History, Social/Behavioral Sciences	9 credits
Goal 6	Humanities and Fine Arts	9 credits
Goal 7	Human Diversity	3 credits
Goal 8	Global Perspective	3 credits
Goal 9	Ethic and Civic Responsibility	3 credits
Goal 10	People and the Environment	3 credits

Graduation Requirements:

- Minimum of 120 total credits (semester hours) required for Bachelors' Degree
- Minimum of 40 General Education credits required
- Minimum of 40 Upper Division credits required
- Minimum of 30 Residence credits required in Junior/Senior years
- Minimum WSU cumulative grade point average of 2.00; some programs require higher grade point averages

Major Maps are not contracts. Winona State University reserves the right to make changes at any time, without prior notice, to programs, policies, procedures, and information described in this major map. Students should consult the appropriate academic department or college for currently accurate program information.