

The Ohio State University

Physics

Bachelor of Science

Effective beginning Academic Year 2022-23 (Last revised February 7, 2024)

The following table outlines how transfer credits will be applied to the Bachelor of Science in Physics degree at The Ohio State University for students who completed an Associate of Science degree via the Ohio Guaranteed Physics Transfer Pathway. The OGTP designation guarantees the transfer and applicability of credits, but does not guarantee admission to a program. Some bachelor-degree granting programs may be competitive, and students should check with individual institutions for their program admission requirements.

COURSE EQUIVALENCIES FROM THE ASSOCIATE DEGREE	Course Number	Credit Hours
GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER 36		
Any Ohio Transfer 36 approved First Writing (TME001) course	ENGLISH 1110.xx	3
Calculus I (TMM005)	MATH 1151	5
Any Ohio Transfer 36 approved Arts and Humanities course	Ohio Transfer 36 Elective*	3
Any Ohio Transfer 36 approved Arts and Humanities course	Ohio Transfer 36 Elective*	3
Any Ohio Transfer 36 approved Social and Behavioral Sciences course	Ohio Transfer 36 Elective*	3
Any Ohio Transfer 36 approved Social and Behavioral Sciences course	Ohio Transfer 36 Elective*	3
Calculus-Based Physics I with lab (OSC016)	PHYSICS 1250	5
Calculus-Based Physics II with lab (OSC017)	PHYSICS 1251	5
Calculus II (TMM006)	MATH 1152	5
General Chemistry I with lab (OSC008)	CHEM 1210	5
Ohio Transfer 36 Approved Elective [Recommended: Any Ohio Transfer 36 approved Second Writing (TME002) course or General Chemistry II (OSC009)] ¹	ENGLISH 2367.xx or CHEM 1220	3
PRE-MAJOR/BEGINNING MAJOR		
Calculus III (OMT018)	MATH 2153	4
Elementary Linear Algebra (OMT019)	MATH 2568	3
Elementary Differential Equations (OMT020)	MATH 2255	3
OTHER REQUIREMENTS		
Ohio Transfer 36 Approved Electives (Recommended: Any Ohio Transfer 36 approved Second Writing (TME002) course and/or General Chemistry II (OSC008))	CHEM 1220	0-5
Electives ²	Varies*	6-9
TOTAL HOURS FROM ASSOCIATE DEGREE:		60-65
Advising Notes: (*) Indicates that coursework will be evaluated for applicable equivalency upon transfer at the university. If a Transfer Assurance Guide (TAG) course is taken, the approved course equivalency will be awarded. ¹ OSU recommends Ohio Transfer 36 courses that will fulfill OSU's Race, Ethnicity, and Gender Diversity requirement. If not taken as part of the associate degree, students will need to complete this requirement at OSU. ² The OSU College of Arts and Sciences requires three semesters of world language and recommends filling elective spots with world language if possible.		

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The following additional coursework will be required to complete the Bachelor of Science in Physics degree at The Ohio State University after a student has completed an Associate of Science Ohio Guaranteed Physics Transfer Pathway degree. Some bachelor-degree granting programs may be competitive and admission into the program is not guaranteed. Students should check with individual institutions for their program admission requirements.

REMAINING COURSEWORK TO COMPLETE BACHELOR'S DEGREE		Course Number	Credit Hours
General Education:	Book ends: GE Launch Seminar and GE Reflection Seminar	GENED 1201 GENED 4001	2
General Education:	GE Theme: Citizenship for a Diverse and Just World	Varies	4-6
General Education:	GE Theme: Elective	Varies	4-6
General Education:	Race, Ethnicity, and Gender Diversity	Varies	3
College Requirement:	Arts and Sciences Survey: Transfer	ARTSSCI 1100.04	1
College Requirement:	World Language (completion through the 1103-level)	1101, 1102, and 1103	12
Major Requirement:	Intermediate Mechanics I	PHYSICS 2300	4
Major Requirement:	Intermediate Mechanics II	PHYSICS 2301	4
Major Requirement:	Introductory Physics Seminar	PHYSICS 2095	1
Major Requirement:	Experimental Physics Instrumentation and Data Analysis Lab ¹	PHYSICS 3700	3
Major Requirement:	Quantum Mechanics	PHYSICS 5500	4
Major Requirement:	Introductory Electronics for Physicists	PHYSICS 4700	3
Major Requirement:	Intermediate Electricity and Magnetism	PHYSICS 5400	4
Major Requirement:	Advanced Physics Laboratory ²	PHYSICS 5700	3
Major Requirement:	Introduction to Computer Programming in C++ for Engineers and Scientists	CSE 1222	3
Major Requirement:	Physics Option Courses	Varies	12-19
GE/Electives:	Additional General Education Courses and Electives	Varies	6-12
REMAINING COURSEWORK TO COMPLETE BACHELOR'S DEGREE TOTAL: ³			60-72
Advising Notes: ¹ Fulfills the Data Analysis Embedded Literacy requirement. ² Fulfills the Advanced Writing and Technology Embedded Literacy requirements. ³ The OSU College of Arts and Sciences requires a total of 121 credit hours for degree completion. The total number of hours to complete a bachelor's degree represents a range of hours that may be needed depending on the individual course selections made during the associate degree program.			
COMPLETE BACHELOR'S DEGREE			Total Credit Hours
BACHELOR'S DEGREE TOTAL:			121

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SPECIAL NOTES

For more information, please contact:
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SAMPLE DEGREE MAP

THIRD YEAR

SEMESTER 5			SEMESTER 6	
Course Name & Number	Credit Hours		Course Name & Number	Credit Hours
PHYSICS 2300 Intermediate Mechanics I	4		PHYSICS 2301 Intermediate Mechanics II	4
PHYSICS 2095 Introductory Physics Seminar	1		Physics Option Course	3
CSE 1222 Introduction to Computer Programming in C++ for Engineers and Scientists	3		PHYSICS 3700 Experimental Physics Instrumentation and Data Analysis Lab	3
Physics Option Course	3		World Language 1101	4
GE Race, Ethnicity, and Gender Diversity course	3		GE Theme: Citizenship for a Diverse and Just World course	4
ARTSSCI 1100.04 Arts and Sciences Survey: Transfer	1			
GENED 1201 GE Launch Seminar	1			
Total Semester 5 Credit Hours	16		Total Semester 6 Credit Hours	18

FOURTH YEAR

SEMESTER 7			SEMESTER 8	
Course Name & Number	Credit Hours		Course Name & Number	Credit Hours
PHYSICS 5500 Quantum Mechanics	4		PHYSICS 5400 Intermediate Electricity and Magnetism	4
PHYSICS 4700 Introductory Electronics for Physicists	3		PHYSICS 5700 Advanced Physics Laboratory	3
World Language 1102	4		Physics Option Course	4
Physics Option Course	3-4		World Language 1103	4
GE Theme: Elective course	4		GENED 4001 GE Reflection Seminar	1
Total Semester 7 Credit Hours	18-19		Total Semester 8 Credit Hours	16