

Bowling Green State University

Physics Bachelor of Science

Effective beginning Academic Year 2019-20 (Last revised November 4, 2019)

The following table outlines how transfer credits will be applied to the Bachelor of Science in Physics degree at Bowling Green 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	WRIT 1110	3
Calculus I (TMM005)	MATH 1310	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)	PHYS 2110	5
Calculus-Based Physics II with lab (OSC017)	PHYS 2120	5
Calculus II (TMM006)	MATH 2320	5
General Chemistry I with lab (OSC008)	CHEM 1250	5
Ohio Transfer 36 Approved Elective [Recommended: Any Ohio Transfer 36 approved Second Writing (TME002) course or General Chemistry II (OSC009)]	WRIT 1120 ² or CHEM 1270/1280	3
PRE-MAJOR/BEGINNING MAJOR		
Calculus III (OMT018)	MATH 2350	4
Elementary Linear Algebra (OMT019)	MATH 3320	3
Elementary Differential Equations (OMT020)	MATH 3370	3
OTHER RECOMMENDATIONS		
General Chemistry II with lab (OSC009) (if not taken as part of the Ohio Transfer 36)	CHEM 1270/1280	5
Electives ¹	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.

¹BGSU requires four semesters of foreign language and highly recommends filling elective spots with two semesters of foreign language if at all possible.

² Successful completion of WRIT 1120 with a "C or higher" is a BGSU graduation requirement.



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The following additional coursework will be required to complete the Bachelor of Science in Physics degree at Bowling Green State University after a student has completed their 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 COURSEW	ORK TO COMPLETE BACHELOR'S DEGREE	Course Number	Credit Hours
BG Perspective:	International Perspective and Cultural Diversity in the United States (if not taken during the associate degree) ¹	Varies	0-6
Arts and Sciences Requirement:	Foreign Language III and Foreign Language IV ²	Varies	6
MDC:	Multidisciplinary Component ³	Varies	12
Major Requirement:	Introduction to Physics	PHYS 1910	1
Major Requirement:	Modern Physics	PHYS 3010	3
Major Requirement:	Thermal Physics & Optics	PHYS 3020	3
Major Requirement:	Modern Physics Lab	PHYS 3110	1
Major Requirement:	Thermal Physics & Optics Lab	PHYS 3120	1
Major Requirement:	Meth. Of Math. & Comp. Physics	PHYS 4010	3
Major Requirement:	Solid State Physics	PHYS 4100	3
Major Requirement:	Classical Mechanics	PHYS 4160	3
Major Requirement:	Quantum Mechanics	PHYS 4170	3
Major Requirement:	Electricity & Magnetism	PHYS 4180	3
Major Requirement:	Independent Study (to be taken in two semesters at one credit hour each)	PHYS 4700	2
Minor Requirement:	Minor Courses ⁴	Varies	21
REMAINING COURSEW	ORK TO COMPLETE BACHELOR'S DEGREE TOTAL:5		65

Advising Notes:

⁵ BGSU requires a total of 122 credit hours for degree completion. The total number of hours in the third and fourth years represent a range of hours that may be needed depending on the individual course selections made during the first two years.

COMPLETE BACHELOR'S DEGREE	Total Credit Hours
BACHELOR'S DEGREE TOTAL:	122

¹ Assumes students have already fulfilled Bowling Green Perspective (BGP) requirements, which include select courses that meet the International Perspective and the Cultural Diversity in the United States requirements, as part of their associate degree program. If these requirements were not met, they will need to be upon transfer. Please work closely with your academic advisor.

² Assumes that the student has completed the first two semesters of the language sequence prior to entering BGSU.

³ The College of Arts and Sciences at BGSU requires a four-course Multidisciplinary Component (MDC). Students are strongly encouraged to work with their advisor to maximize the potential transfer credit to fulfill the first two courses of the MDC. The four courses selected for the MDC may be closely related to the major, sample the diverse domains of the arts, humanities, natural sciences, and social sciences, or be interdisciplinary in nature. Each course must have a different prefix; at least two courses must be at 3000- or 4000-level; and courses applied to the MDC will not fulfill other Arts and Sciences degree requirements, nor will MDC courses fulfill the major, minor, BGP, or other program requirements.

⁴ Assumes that the student selects a minor with 21 semester hours.



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SPECIAL NOTES

For more information, please contact: College of Arts and Science Advising Office (419) 372-2015 contactcas@bgsu.edu

SAMPLE DEGREE MAP

THIRD YEAR

SEMESTER 5		
Course Name & Number	Credit Hours	
MDC 1	3	
Foreign Language III	3	
PHYS 1910 Introduction to Physics	1	
PHYS 3010 Modern Physics	3	
PHYS 3110 Modern Physics Lab	1	
PHYS 4010 Meth. Of Math. & Comp. Physics	3	
PHYS 4180 Electricity & Magnetism	3	
Total Semester 5 Credit Hours	17	

SEMESTER 6		
Course Name & Number	Credit Hours	
MDC 2	3	
Foreign Language IV	3	
PHYS 3020 Thermal Physics & Optics	3	
PHYS 3120 Thermal Physics & Optics Lab	1	
PHYS 4700 Indep. Study	1	
Minor Course	3	
Minor Course	3	
Total Semester 6 Credit Hours	17	

FOURTH YEAR

SEMESTER 7		
Course Name & Number	Credit Hours	
MDC 3000/4000	3	
PHYS 4160 Classical Mechanics	3	
PHYS 4700 Indep. Study	1	
Minor Course	3	
Minor Course	3	
Minor Course	3	
Total Semester 7 Credit Hours	16	

SEMESTER 8		
Course Name & Number	Credit Hours	
MDC 3000/4000	3	
PHYS 4100 Solid State Physics	3	
PHYS 4170 Quantum Mechanics	3	
Minor Course	3	
Minor Course	3	
Total Semester 8 Credit Hours	15	