

# Physics

## Associate of Science

Effective beginning Academic Year 2019-20 (Last revised July 9, 2021)

GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER 36		Course Number	Credit Hours
ENGLISH COMPOSITION AND ORAL COMMUNICATION:			3
Course 1:	Any Ohio Transfer 36 approved First Writing (TME001) course	ENGL 161	3
MATHEMATICS, STATISTICS, AND LOGIC:			5
Course 1:	Calculus I (TMM005) <sup>1</sup>	MTHM 181	5
ARTS AND HUMANITIES:			6
+ Course 1:	Any Ohio Transfer 36 approved Arts and Humanities course	HUMS 151G	3
+ Course 2:	Any Ohio Transfer 36 approved Arts and Humanities course	PHLY 151G or PHLY 161	3
SOCIAL AND BEHAVIORAL SCIENCES:			6
+ Course 1:	Any Ohio Transfer 36 approved Social and Behavioral Sciences course	PSYH 151	3
+ Course 2:	Any Ohio Transfer 36 approved Social and Behavioral Sciences course	SOCY 151G	3
NATURAL SCIENCES:			10
Course 1:	Calculus-Based Physics I with lab (OSC016)	PHYC 251	5
Course 2:	Calculus-Based Physics II with lab (OSC017)	PHYC 252	5
ADDITIONAL CREDITS: <sup>2</sup>			10
Course 1:	Calculus II (TMM006)	MTHM 182	5
Course 2:	General Chemistry I with lab (OSC008)	CHMY 171	5
<b>GENERAL EDUCATION/OHIO TRANSFER 36TOTAL:</b>			<b>40</b>
<p>Advising Notes:            Where it indicates "Any Ohio Transfer 36 approved," students should work closely with their advisors.            (+) indicates that the courses chosen should be from two different areas within that category.  <sup>1</sup> A prerequisite, such as College Algebra (TMM001), may be needed for a student to reach Calculus I (TMM005).  <sup>2</sup> Due to the variability across institutions, students should work with their academic advisor to determine an appropriate program of study and appropriate amount of additional credits to satisfy the Ohio Transfer 36.</p>			

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PRE-MAJOR/BEGINNING MAJOR		Course Number	Credit Hours
Course 1:	Calculus III (OMT018)	MTHM 281	4
Course 2:	Elementary Linear Algebra (OMT019)	MTHM 280	4
Course 3:	Elementary Differential Equations (OMT020)	MTHM 283	3
<b>PRE-MAJOR/BEGINNING MAJOR TOTAL:</b>			<b>11</b>

OTHER REQUIREMENTS		Course Number	Credit Hours
Course 1:	General Chemistry II with lab (OSC009) (if not taken as part of the Ohio Transfer 36)	CHMY 172	5
Electives:	General Electives as needed (May include FYE or Orientation course) <sup>1</sup>	SDEV 101	1
		CMPR 166	3
		ENGL 162	3
<b>OTHER REQUIREMENTS TOTAL:</b>			<b>12</b>

**Advising Notes:**

<sup>1</sup> Certain institutions may require two semesters or more of foreign language for Bachelor of Arts and Bachelor of Science degrees. If so, foreign language should be taken – check with your receiving institution. Additional recommended pre-major/major coursework is institution specific and might include an appropriate course in programming or modern physics (may not be offered by most two-year institutions). Consult with your academic advisor and your receiving institution to determine an appropriate program of study.

ASSOCIATE DEGREE	Total Credit Hours
<b>ASSOCIATE DEGREE TOTAL:</b>	<b>63</b>

## SPECIAL NOTES

Students with plans of pursuing a pre-professional or graduate studies track in the future should work closely with their academic advisor and receiving institution starting in the first year of their program in order to adequately prepare themselves for those types of tracks. Some pre-professional degrees include pre-medicine, pre-veterinary, pre-law, and pre-dentistry.

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.

Some bachelor-degree granting institutions require additional general education courses outside of the Ohio Transfer 36 and students may be required to take these courses in their junior or senior year. Students will still be able to follow this pathway and complete their bachelor's degree in approximately 60 additional credit hours.

For more information, please contact:

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## SAMPLE DEGREE MAP

### FIRST YEAR

SEMESTER 1		SEMESTER 2	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
CHMY 171 General Chemistry	5	CHMY 172 General Chemistry II	5
CMPR 166 Introduction to Computer Science	3	ENGL 162 College Composition II	3
ENGL 161 College Composition	3	MTHM 182 Calculus II	5
MTHM 181 Calculus I	5	PSYH 151 Introduction to Psychology	3
SDEV 101 College 101	1		
<b>Total Semester 1 Credit Hours</b>	<b>17</b>	<b>Total Semester 2 Credit Hours</b>	<b>16</b>

### SECOND YEAR

SEMESTER 3		SEMESTER 4	
Course Name & Number	Credit Hours	Course Name & Number	Credit Hours
HUMS 151G Introduction to Humanities	3	MTHM 283 Differential Equations	3
MTHM 280 Linear Algebra	4	PHLY 151G Introduction to Philosophy or PHLY 161 Introduction to Ethics	3
MTHM 281 Multivariable Calculus	4	PHYC 252 College Physics II	5
PHYC 251 College Physics I	5	SOCY 151G Introduction to Sociology	3
<b>Total Semester 3 Credit Hours</b>	<b>16</b>	<b>Total Semester 4 Credit Hours</b>	<b>14</b>