

## BACHELOR OF ARTS

\*\* NOTE: Students must complete 90 credits before leaving Southwestern.

### Applied Physics Major Courses 2019-2021

17 Courses; Minimum 30 credits required; 35 credits must be completed at SU

*\*\*Note: Students interested in this major should consult the Pre-Engineering Advisor in the Physics Department*

Course	Course name	Grade	Credit
CHE51-103	General Chemistry I		
CHE51-101	Chemical Methods and Techniques Lab I		
CHE51-203	General Chemistry II		
CHE51-201	Chemical Methods and Techniques Lab II		

*Take one of the following:*

MAT52-154	Calculus I		
MAT52-164	Applied Multivariable Calculus I		

*Take one of the following:*

MAT52-254	Calculus II		
MAT52-264	Applied Multivariable Calculus II		

*Take one of the following:*

MAT52-354	Calculus III		
MAT52-364	Applied Multivariable Calculus III		

<i>Take the following:</i>		Grade	Credit
MAT52-754	Differential Equations		
PHY53-104	Introduction to Engineering		
PHY53-154	Fundamentals of Physics I		
PHY53-164	Fundamentals of Physics II		
PHY53-214	Modern Physics		
PHY53-334	Classical Mechanics I		
PHY53-434	Statics		
PHY53-872	Capstone Course		

*Select one Pre-Engineering Elective from the following:*

MAT52-674	Linear Algebra		
PHY53-324	Electromagnetism I		
PHY53-404	Electronics		
PHY53-463	Dynamics		
PHY53-454	Math Methods in Physical Science II		
PHY53-473	Thermodynamics		

*Select two additional pre-approved, upper level engineering courses transferred from an ABET accredited engineering school (at least 6 credits):*


**General Education Requirements**

At least 30 total credits required; minimum 3 credits per requirement.

**General Education - Part I**

Take one of the following first semester seminars:

UST05-014	First Year Seminar		
UST05-214	Advanced Entry Seminar		

Foreign Language (three semesters of the same language)


Social Justice Course (may double count with any requirement):

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Two Fitness/Recreational Activity courses (must be different topics):


**General Education - Part II: Exploration & Breadth (6 total courses)**

PHY53-XXX courses cannot be used to satisfy Exploration & Breadth requirements.

Select one course from each of the four following areas:

*Humanities:*

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*Sciences:*

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*Sciences:*

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*Fine Arts:*

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Select one additional course from TWO of the four areas: Humanities, Natural Science, Social Science and Fine Arts. Neither course may come from the department (3 digit prefix) used above. EX: If you took PSY33-104 Principles of Psychology as a social science, you may not select another PSY33-XXX course to apply in this section.


\*Public Speaking, College Writing and Creative Writing courses may not count in E&B.

**University Graduation Requirements:**

Minimum of 127 credits:

Cumulative GPA > 2.0

GPA > 2.0 for Major and/or Areas of Concentration

All grades C- or higher in major/minor/core?

At least 64 credits completed at Southwestern

No more than 56 credits of any 5 digit prefix

Major credits completed (min 30 required)

60% of Major courses completed at Southwestern (35cr)

Gen Ed has minimum of 30 credits

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**Minor (optional):**

Minimum 18 credits

Minimum of 12 credits taken at Southwestern

Minimum 2.0 minor courses CGPA

**Other:**

Degree Audit Completed (Due one year before grad date)

Grad Application Submitted (Due start of final semester)

Approved to be part time in last semester?

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