

**PHYSICS BS DEGREE (entering 2019) – 32 COURSE UNITS**  
**MAJOR COURSE REQUIREMENTS**

<b>NAME:</b>	<b>2<sup>nd</sup> Major*:</b>
<b>Year:</b> 1 <sup>st</sup> Yr    2 <sup>nd</sup> Yr    3 <sup>rd</sup> Yr    4 <sup>th</sup> Yr	<b>1<sup>st</sup> Minor*:</b>
<b>PHY Specialization:</b>	<b>2<sup>nd</sup> Minor*:</b>

\*One course can double count for major and minor. Three courses may double count for students who are double majors.

Core Courses	Major Options Courses	Correlate Courses
<input type="checkbox"/> PHY 099 – Orientation Seminar	4 option units required, 200+ level PHY. 1 must include a lab from below. 1 unit max may be from combined 290, 291, 393, 493.	<input type="checkbox"/> MAT 127 – Calculus A
<input type="checkbox"/> PHY 203 – Physics I		<input type="checkbox"/> MAT 128 – Calculus B
<input type="checkbox"/> PHY 204 – Physics II		<b>STEM Courses</b>
<input type="checkbox"/> PHY 299 – Research Fund’ls	<input type="checkbox"/> PHY 220 (Lab) – Advanced Geology	5 units required from Schools of Science or Engineering. 200+ level (min of 3). 1 unit max may be from combined 290, 291, 393, 493. List 5 STEM courses below:
<input type="checkbox"/> PHY 306* – Math Physics	<input type="checkbox"/> PHY 311 (Lab) – Electronics	
<input type="checkbox"/> PHY 321 – Modern Physics	<input type="checkbox"/> PHY 345 (Lab) – Clouds & Climate	
<input type="checkbox"/> PHY 356 – Thermal Physics	<input type="checkbox"/> PHY 411 (Lab) – EM Waves & Optics	
<input type="checkbox"/> PHY 401 – Classical Mechanics	List remaining <b>options</b> courses below:	
<input type="checkbox"/> PHY 421 – EM Theory I		
* <b>BOTH</b> of the following courses may be taken in place of PHY306: <input type="checkbox"/> MAT 205 – Linear Algebra <input type="checkbox"/> MAT 229 – Calculus C	<input type="checkbox"/> PHY	
	<input type="checkbox"/> PHY	<input type="checkbox"/>
	<input type="checkbox"/> PHY	<input type="checkbox"/>
<b>Graduation Requirements</b>	<b>Capstone Course</b>	<input type="checkbox"/>
<input type="checkbox"/> Completion of PHY reqs.	One of the following courses is required.	<input type="checkbox"/>
<input type="checkbox"/> 2.0 or better in-major GPA	<input type="checkbox"/> PHY 451 – Advanced Lab	<b>Further Information</b>
<input type="checkbox"/> 2.0 or better overall GPA	<input type="checkbox"/> SED 498 – For Secondary Ed students	Upper level PHY courses are not offered every semester. Schedule is here: <a href="http://physics.tcnj.edu/physics-upper-level-course-timetable/">physics.tcnj.edu/physics-upper-level-course-timetable/</a>
<input type="checkbox"/> C or better in PHY203, 204, 321		
<input type="checkbox"/> Complete 32 course units		Specializations: <a href="http://physics.tcnj.edu/academics/programs/">physics.tcnj.edu/academics/programs/</a>

**LIBERAL LEARNING REQUIREMENTS, CIVIC RESPONSIBILITIES, AND PROFICIENCIES**

Liberal Learning	Liberal Learning (Option C)	Civic Responsibilities
Select one of the options below. (Option C most common)	Option C – 8 Required Courses**	Fulfilled through courses, programs or sustained experiences
<input type="checkbox"/> Option A – Designated Interdisciplinary Concentration OR Second Major*	<input type="checkbox"/> Literary, Visual, Performing Arts (LVPA) <u>List course:</u>	<input type="checkbox"/> IDS 103 – Community Engaged Learning
<input type="checkbox"/> Option B – Self-designed Interdisciplinary Concentration*	<input type="checkbox"/> World Views/Ways of Knowing (WV) <u>List course:</u>	<input type="checkbox"/> Gender <u>List course:</u>
<input type="checkbox"/> Option C – Breadth Distribution List 8 courses required – See next column.	<input type="checkbox"/> Behavioral, Social, or Cultural Perspectives (BSCP) <u>List course:</u>	<input type="checkbox"/> Global Perspective <u>List course:</u>
* <i>see: <a href="https://liberallearning.tcnj.edu/courses-information/interdisciplinary-concentrations/">https://liberallearning.tcnj.edu/courses-information/interdisciplinary-concentrations/</a></i>	<input type="checkbox"/> Social Change in Historical Perspective (SCHP) <u>List course:</u>	<input type="checkbox"/> Race & Ethnicity <u>List course:</u>
<b>Language</b>	<input type="checkbox"/> 2 additional courses from: LVPA, WV/WK, BSCP, or SCHP <u>List course:</u>	<b>Proficiencies</b>
<input type="checkbox"/> Second language proficiency at 1st level (101) <u>List course:</u>		<input type="checkbox"/> IDS 102
<input type="checkbox"/> Second language proficiency at 2nd level (102) <u>List course:</u>		<input type="checkbox"/> WRI 102
<input type="checkbox"/> Second language proficiency at 3rd level (103) <u>List course:</u>	<input type="checkbox"/> Natural Science: PHY 203	<input type="checkbox"/> FSP First Year Seminar
	<input type="checkbox"/> Quantitative Reasoning: MAT 127	<b>Electives</b>
**Note: By testing out of Lang. courses, you satisfy this requirement but do not receive any course units. You must take 3 additional electives in any dept.	**Table of approved liberal learning course: <a href="https://liberallearning.tcnj.edu/fulfilling-requirements/approved-liberal-learning-courses/">https://liberallearning.tcnj.edu/fulfilling-requirements/approved-liberal-learning-courses/</a>	List three elective courses.
		<input type="checkbox"/> Elective 1:
		<input type="checkbox"/> Elective 2:
		<input type="checkbox"/> Elective 3: