

PHYSICS/ENGINEERING DUAL MAJOR

3 Years at WVWC followed by 2 years of Engineering at either UVA, WVU or Marshall

<u>Required Courses</u>	<u>Hrs.</u>	<u>Prereq.</u>	<u>Rec.Yr.</u>
PHYS 145	Engineering Design I	1	Fr
PHYS 146	Engineering Design II	1	Fr
PHYS 161	General Physics I w/Calculus	4	Fr
PHYS 162	General Physics II w/Calculus	4	Fr
PHYS 210	Light & Atomic Physics	3	Soph
PHYS 211L	Light & Atomic Physics Lab	1	Soph
PHYS 250	Electronics	3	Soph
PHYS 251L	Electronics Lab	1	Soph
PHYS 305L	Electro-Optics Lab	1	Jr
PHYS 309	Engineering Mechanics	3	Jr
PHYS 310	Analytical Mechanics	3	Jr
PHYS 311	Mechanics of Materials	3	Jr
PHYS 340	Engineering Thermodynamics	3	Jr
PHYS 345L	Engineering Measurements Lab	1	Jr
PHYS 350	Fluid Mechanics	3	Jr
PHYS 360	Electromagnetic Theory	3	Jr
CHEM 161	Acc Gen Chem for Science Majors	3	Fr
CHEM 163L	Acc Gen Chem for Sci Majors Lab	1	Fr
CHEM 131	General Chem for Sci Majors I	3	Fr
<i>*Prerequisite: Must have passed at least one year of high school chemistry or one semester of college chemistry equivalent to CHEM 105/107L or above AND at least one of the following: MATH ACT score of 20, MATH SAT score of 500, grade of C or better in one of the classes: MATH 103, 110, 112, 115, 130, 161.</i>			
CHEM 133L	General Chem for Sci Maj I Lab	1	Fr
CHEM 132	General Chem for Sci Majors II	3	Fr
CHEM 134L	General Chem for Sci Maj II Lab	1	Fr
CSCI 230	Scientific Programming	3	Soph
MATH 161	Calculus I	4	Fr
MATH 162	Calculus II	4	Fr
MATH 163	Technology for Calculus	1	Fr
MATH 223	Calculus III	4	Soph
MATH 230	Differential Equations	4	Soph
MATH 301	Advanced Engineering Math	3	Jr
65-69 total hrs			

Six credits of Wesleyan's general studies requirements may be transferred from the engineering university.

For more information regarding Physics/Engineering Dual Degree Programs at West Virginia University, Marshall University or the University of Virginia please contact Dr. Bert Popson, Chair of the Physics Department. Specific track information for Marshall programs is available in the catalog or from the dept.

NAME: _____

B.A. Degree: Physics/Engineering Dual-Degree (for students entering in Fall 2022/Spring 2023)
3 Years at WV Wesleyan College followed by 2 years of Engineering at either UVA, WVU or Marshall

In the "WHAT" column, enter the specific course number when applicable--e.g. HIST 121. In the "WHEN" column, enter the term and year in which the requirement is satisfied--e.g., sp '20.

General Education	
WHAT	WHEN
_____	ENGL 101* w/ C (2.0) [3 hrs]
_____	ENGL 110 w/ C (2.0)* [3 hrs]
_____	COMM 211 w/ C (2.0) [3 hrs]
_____	Dept senior seminar/writing course
	To be completed at WVU/UVA/Marshall
_____	FYEX 101 [3 hrs]
_____	FYEX 102 [1 hr]
_____	FYEX 103/104/105/106/107 [1 hr]
_____	FYEX 103/104/105/106/107 [1 hr]
_____	Foundational Scientific Inquiry [3-4 hrs]
_____	Foundational Quantitative Analysis [3-4 hrs]
_____	Ethical/Spiritual Explor Lens (ETSP) [3 hrs]
_____	Aesthetic Expression Lens (AEXP) [3 hrs]
_____	Per & Soc Well Being Lens (PSWB) [3 hrs]
_____	Cultural Expression Lens (CEXP) [3 hrs]
_____	Experimental Inquiry Lens (EXIN) [3 hrs]
_____	INDS 401 [1 hr]
_____	INDS 402 [1 hr]
	35 – 41 Total semester hours
_____	120 semester hours required for graduation

Physics/Engineering Dual-Degree WVWC Coursework	
WHAT	WHEN
_____	PHYS 145 [1 hr]
_____	PHYS 146 [1 hr]
_____	PHYS 161 [4 hrs]
_____	PHYS 162 [4 hrs]
_____	PHYS 210 [3 hrs]
_____	PHYS 211L [1 hr]
_____	PHYS 250 [3 hrs]
_____	PHYS 251L [1 hr]
_____	PHYS 305L [1 hr]
_____	PHYS 309 [3 hrs]
_____	PHYS 310 [3 hrs]
_____	PHYS 311 [3 hrs]
_____	PHYS 340 [3 hrs]
_____	PHYS 345L [1 hr]
_____	PHYS 350 [3 hrs]
_____	PHYS 360 [3 hrs]
_____	CHEM 161 [3 hrs]
_____	CHEM 163L [1 hr]
_____	CSCI 230 [3 hrs]
_____	MATH 161 [4 hrs]
_____	MATH 162 [4 hrs]
_____	MATH 163 [1 hr]
_____	MATH 223 [4 hrs]
_____	MATH 230 [4 hrs]
_____	MATH 301 [3 hrs]
_____	65-69 semester hours

*Enter NA (not applicable) if waived upon admission

➤Physics/Engineering dual-degree majors may count up to 52 hours in Physics and Engineering toward graduation. Three hours over the limit may count to accommodate an internship in the discipline.

➤Only six hours of any minor may overlap with the required credit hours of a student's chosen major. The overlap constraint is not applicable to courses that majors or minors MUST take in others departments.