NAME: _____

B.A. Degree: Physics/Engineering Dual-Degree (for students entering in Fall 2025/Spring 2026)
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.

Liberal Arts Core

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 transfer university
	_____	FYEX 101 [3 hrs]
	_____	FYEX 102 [1 hr]
_____	_____	FYEX 103/104/105/106/107 [1 hr]
_____	_____	FYEX 103/104/105/106/107 [1 hr]
	_____	FYEX 401 [1 hr]
_____	_____	Foundational Scientific Inquiry [3-4 hrs]
_____	_____	Foundational Quantitative Analysis [3-4 hrs]
_____	_____	Foundational Humanities & Liberal Arts [3 hrs]

No more than two lens courses may come from same departmental prefix and one lens must be taken at 300 level or above.

_____	_____	Ethical/Spiritual Explor Lens (ETSP) [3 hrs]
_____	_____	Aesthetic Expression Lens (AEXP) [3 hrs]
_____	_____	Per & Soc Well Being Lens (PSWB) [3 hrs]
_____	_____	Cultural Perspectives Lens (CEXP) [3 hrs]
_____	_____	Experimental Inquiry Lens (EXIN) [3 hrs]
		40 - 42 Total semester hours
	_____	120 semester hours required for graduation

*Enter NA (not applicable) if waived upon admission

Six credits of Wesleyan's liberal arts core requirements may be transferred in from the engineering university.

For students classified as transfers, FYEX course requirements are dependent upon total transferrable credit hours.

Physics/Engineering Dual-Degree WVWC Coursework

WHAT	WHEN	
	_____	PHYS 145 [1 hr]
	_____	PHYS 146 [1 hr]
	_____	PHYS 151L [1 hr]
	_____	PHYS 152L [1 hr]
	_____	PHYS 161 [3 hrs]
	_____	PHYS 162 [3 hrs]
	_____	PHYS 210 [3 hrs]
	_____	PHYS 211L [1 hr]
	_____	PHYS 250 [3 hrs]
	_____	PHYS 251L [1 hr]
	_____	PHYS 309 [3 hrs]
	_____	PHYS 310 [3 hrs]
	_____	PHYS 311 [3 hrs]
	_____	PHYS 340 [3 hrs]
	_____	PHYS 345L [1 hr]
	_____	PHYS 360 [3 hrs]
	_____	CHEM 161 [3 hrs]
	_____	CHEM 163L [1 hr]
		OR
	_____	CHEM 131 [3 hrs]
	_____	CHEM 133L [1 hr]
	_____	CHEM 132 [3 hrs]
	_____	CHEM 134L [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 311 [3 hrs]
	_____	61-65 semester hours

➢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.

PHYSICS/ENGINEERING DUAL MAJOR

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

Required Courses		Hrs.	Prereq.	Rec.Yr.
PHYS 145	Engineering Design I	1		Fr
PHYS 146	Engineering Design II	1		Fr
PHYS 161/151L	Gen Physics I w/Calculus + lab	3/1	Pre or coreq MATH 161	Fr
PHYS 162/152L	Gen Physics II w/Calculus + lab	3/1	Pre or coreq MATH 161	Fr
PHYS 210	Light & Atomic Physics	3	PHYS 152 or 162, MATH 161; Coreq PHYS 211L	Soph
PHYS 211L	Light & Atomic Physics Lab	1	Coreq PHYS 210	Soph
PHYS 250	Analog Electronics	3	PHYS 152 or 162, MATH 161; Coreq PHYS 251L	Soph
PHYS 251L	Analog Electronics Lab	1	Coreq PHYS 250	Soph
PHYS 309	Engineering Mechanics	3	PHYS 152 or 162, MATH 161	Jr
PHYS 310	Analytical Mechanics	3	PHYS 151 or 161, 152 or 162, MATH 162	Jr
PHYS 311	Mechanics of Materials	3	MATH 162, PHYS 151 or 161, PHYS 152 or 162	Jr
PHYS 340	Engineering Thermodynamics	3	MATH 161, PHYS 151 or 161	Jr
PHYS 345L	Engineering Measurements Lab	1	Pre or coreq PHYS 162	Jr
PHYS 360	Electromagnetic Theory	3	PHYS 151 or 161, 152 or 162; Pre or coreq MATH 230	Jr
CHEM 161	Acc Gen Chem for Science Majors	3	HS Chemistry or CHEM 105, 107L; Coreq CHEM 163L	Fr
CHEM 163L	Acc Gen Chem for Sci Majors Lab	1	HS Chemistry of CHEM 105, 107L; Coreq CHEM 161	Fr
	OR			
CHEM 131	General Chem for Sci Majors I	3	Coreq CHEM 133L	Fr
	**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.*			
CHEM 133L	General Chem for Sci Maj I Lab	1	Coreq CHEM 131	Fr
	AND			
CHEM 132	General Chem for Sci Majors II	3	C- or better in CHEM 131, 133L; Coreq CHEM 134L	Fr
CHEM 134L	General Chem for Sci Maj II Lab	1	Coreq CHEM 132	Fr
CSCI 230	Scientific Programming	3	PHYS 152 or 162	Soph
MATH 161	Calculus I	4	C or better in MATH 130 or equiv or placement	Fr
MATH 162	Calculus II	4	C (2.0) or better in MATH 161 or equivalent	Fr
MATH 163	Technology for Calculus	1	Coreq MATH 162	Fr
MATH 223	Calculus III	4	C (2.0) or better in MATH 162; Pre or coreq MATH 163	Soph
MATH 230	Differential Equations	4	MATH 162;Pre or coreq MATH 163	Soph
MATH 311	Applied Linear Algebra	3	Pre or coreq: MATH 223	Jr
		61-65 total hrs		

Six credits of Wesleyan's liberal arts core requirements may be transferred in 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.