

PHYSICS MAJOR (PHYS.BA)

<u>Required Courses</u>		<u>Hrs.</u>	<u>Prereq.</u>	<u>Rec.Yr.</u>
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 equiv	Fr
MATH 223	Calculus III	4	C (2.0) or better in MATH 162 or equiv	Soph
MATH 230	Differential Equations	4	MATH 162	Soph
PHYS 151L	Gen Physics I Lab	1	Coreq PHYS-161	Fr
PHYS 152L	Gen Physics II Lab	1	Coreq PHYS-162	Fr
PHYS 161	General Physics I w/Calculus	3	Pre or coreq MATH 161	Fr
PHYS 162	General Physics II w/Calculus	3	Pre or coreq MATH 161	Fr
PHYS 210	Light & Atomic Physics	3	MATH 161, PHYS 152 or 162; Coreq PHYS 211L	Soph
PHYS 211L	Light & Atomic Phys Lab	1	Coreq PHYS 210	Soph
PHYS 220	Nuclear Physics	3	PHYS 210; Coreq PHYS 221L	Soph
PHYS 221L	Nuclear Physics Lab	1	Coreq PHYS 220	Soph
PHYS 305L	Electro-Optics Lab	1	PHYS 210	Jr
PHYS 310	Analytical Mechanics	3	PHYS 151 or 161, PHYS 152 or 162; MATH 162	Jr
PHYS 360	Electromagnetic Theory	3	PHYS 151 or 161, 152 or 162; Pre or coreq MATH 230	Jr
PHYS 401	Final Year Portfolio Showcase	1	Coreq PHYS 498	Sr
^PHYS 497	Research Seminar I	1	Physics Major	Sr
^PHYS 498	Research Seminar II	1	PHYS 497	Sr
<u>Take two of the following (including lab)</u>				
PHYS 250	Electronics +	3	PHYS 152 or 162, MATH 161; Coreq PHYS 251L	Soph
PHYS 251L	Electronics Lab	1	Coreq PHYS 250	Soph
PHYS 260	Digital Electronics +	3	PHYS 152 or 162; Coreq PHYS 261L	Soph
PHYS 261L	Digital Electronics Lab	1	Coreq: PHYS-260	
PHYS 330	Solid State Physics +	3	PHYS 152 or 162, MATH 162; Coreq PHYS 331L	Jr
PHYS 331L	Solid State Physics Lab	1	Coreq PHYS 330	Jr
PHYS 320	Materials Science +	3	PHYS 152 or 162, MATH 161	Jr
PHYS-321L	Materials Science Lab	1	Coreq PHYS-320	
PHYS 340	Engineering Thermodynamics	3	MATH 161, PHYS 151 or 161	Jr
PHYS 342	Quantum Mechanics	3	PHYS 151 or 161, 152 or 162, MATH 162	Jr

48-50 total hours

^Satisfies advanced writing requirement

PHYS 151 & PHYS 152 may be substituted for PHYS 161 & 162.

Students may not receive credit for PHYS 151 and PHYS 161 or PHYS 152 and PHYS 162.