

College of Basic and Applied Sciences Upper Division Form 2019-2020 Catalog

Student name _____ Student # _____
 Major **PHYSICS** Minor _____ (Optional)
 Concentration **PROFESSIONAL PHYSICS** E-mail _____

Instructions: For students graduating in Summer 2019 or later, one (1) copy signed by major and minor advisors should be filed in DSB 120 three (3) semesters prior to graduation. An Intent to Graduate form must be submitted with this form.

General Education Area	Course	Semester	Grade	Prerequisites/Notes	Credit Hours
COMMUNICATION (9 hours)	ENGL 1010			Must earn a grade of C- or better	3
	ENGL 1020			Must earn a grade of C- or better	3
	COMM 2200				3
HISTORY (6 hours) Choose two: HIST 2010, HIST 2020, HIST 2030	HIST _____				3
	HIST _____				3
HUMANITIES AND/OR FINE ARTS (9 hours) Choose one: ENGL 2020, 2030 or HUM 2610. Choose two different subjects: ANTH 2210, ART 1030, 1920, DANC 1000, HIST 1010, 1020, 1110, 1120, MUS 1030, PHIL 1030, THEA 1030					3
					3
					3
MATHEMATICS (3 hours) Choose one: MATH 1010, 1530, 1630, 1710, 1720, 1730, 1810, 1910	MATH 1910			MATH 1910 is required for major	3
NATURAL SCIENCES (8 hours) Choose two different subjects: ASTR 1030/1031, BIOL 1030/1031, BIOL 1110/1111, BIOL 2010/2011, BIOL 2020/2021, CHEM 1010/1011, CHEM 1030/1031, CHEM 1110/1111 , GEOL 1030/1031, GEOL 1040/1041, PGEO 1030, PHYS 1110, PHYS 2010/2011, PHYS 2110/2111 , PSCI 1030/1031, PSCI 1130/1131	CHEM 1110/1111			CHEM 1110/1111 is required for the major	4
	PHYS _____			See below for prerequisites; PHYS is required for the major	4
SOCIAL/BEHAVIORAL SCIENCES (6 hours) Choose two different subjects: AAS 2100, ANTH 2010, ECON 2410, ECON 2420, EMC/JOUR/RIM 1020, GEOG 2000, GS 2010, HLTH 1530/1531, PS 1010, PS 1005, PSY 1410, RS 2030, SOC 1010, SOC 2010, WGST 2100					3
					3
Total:					41

Major Core (included in major GPA; 2.0 or better)	Course	Semester	Grade	Prerequisites/Notes	Credit Hours
Physics Colloquium (Fall only)	PHYS 1010				1
Introductory Physics I <i>PHYS 2010/2011 or PHYS 2110/2111</i> (PHYS 2110/2111 is offered in the Fall only)	PHYS _____ PHYS _____			PHYS 2010/2011: MATH 1710 with minimum grade of C (2.0 GPA), MATH 1730, or MATH 1910 PHYS 2110/2111: MATH 1910 with a minimum grade of C	4
Introductory Physics II <i>PHYS 2020/2021 or PHYS 2120/2121</i> (PHYS 2120/2121 is offered in the Spring only)	PHYS _____ PHYS _____			PHYS 2020/2021: PHYS 2011 PHYS 2120/2121: PHYS 2111 and MATH 1920 with a minimum grade of C	4
Modern Physics I (Fall only)	PHYS 3100			PHYS 2021 or 2121 and MATH 1920 with a minimum grade of C	3
Modern Physics II (Spring only)	PHYS 3110			PHYS 3100	3
Modern Physics Lab (Spring only)	PHYS 3111			PHYS 3100	1
Thermodynamics (Fall of even yrs. only)	PHYS 3610			PHYS 3110 and PHYS 3150 or consent of instructor	3
Physics Seminar (Spring only)	PHYS 3800			PHYS 3110	1
Physics Practicum	PHYS 3900			PHYS 3100 and consent of instructor	1
Research (<i>PHYS or ASTR</i>)	____ 4850			Consent of instructor	2
Senior Thesis (<i>PHYS or ASTR</i>)	____ 4900			PHYS 4850 or PHYS 4860 and consent of department chair	2
Major/concentration requirements are continued on the next page.					

Concentration (included in major GPA; 2.0 or better)	Course	Semester	Grade	Prerequisites/Notes	Credit Hours
Topics & Methods of Theoretical Physics I (Fall only)	PHYS 3150			PHYS 2021 or 2121 and MATH 1920 with a minimum grade of C	3
Topics & Methods of Theoretical Physics II (Spring only)	PHYS 3160			PHYS 3150	3
Scientific Modeling & Problem Solving (Spring of odd yrs. only)	PHYS 3200			PHYS 2021 or 2121 and MATH 1920 or consent of instructor	2
Classical Mechanics (Fall of odd yrs. only)	PHYS 3300			PHYS 3150 (or PHYS 2120 and MATH 3120)	3
Electricity and Magnetism I (Fall of odd yrs. only)	PHYS 4310			PHYS 3160	3
Electricity and Magnetism II (Spring of even yrs. only)	PHYS 4330			PHYS 4310	3
Quantum Mechanics (Fall of even yrs. only)	PHYS 4380			PHYS 3110 and PHYS 3160	3
45 hours in major GPA					Total: 45

Supporting (excluded from major GPA)	Course	Semester	Grade	Prerequisites/Notes	Credit Hours
Calculus I	MATH 1910			Pre-req: MATH 1730 with a C(2.0) or higher, ACT MATH of 26, or Calculus Placement test with satisfactory score; must earn a grade of C(2.0) or higher; 3 credits count in general education	1
Calculus II	MATH 1920			MATH 1910 with a minimum grade of C	4
General Chemistry I	CHEM 1110/1111			High school chemistry; credits counted in general education	0
General Chemistry II	CHEM 1120/1121			CHEM 1110/1111 with a minimum grade of C-	4
Computer Science I	CSCI 1170			MATH 1730 with a C(2.0) or higher, ACT MATH of 26, or Calculus Placement test with satisfactory score	4
Total:					13

Note: At least 6 credits of elective hours must be upper division (3000/4000 level).

Minor (Minor is Optional)	Course	Semester	Grade	Notes	Credit Hours
Total:					
Signed:					
	Minor Advisor (if applicable)				Date

1. Degrees require a minimum of 120 semester hours (12 of the last 18 at MTSU) with a 2.0 GPA, a minimum of 42 upper-division hours (30 at MTSU) with a 2.0 GPA, and a minimum of 60 senior college hours.

2. Learning Support courses count toward the 120-hour requirement and the overall GPA.

Signed:				
	Physics Advisor			
				Date