

10

MY DEGREE MAP COLLEGE OF ARTS AND SCIENCES APPROVED ACADEMIC PLAN PHYSICS MAJOR – PROGRAM YEAR 2015-16

		1 ^{s⊤} YEAR		
FALL SEMESTER	HRS	SPRING SEMESTER	HRS	SUMMER
				SEMESTER
TROY 1101	1	ENG 1102/04	3	SELECT COURSES THAT HAVE NOT BEEN
ENG 1101/03	3	PHY 2262/LAB	3/1	COMPLETED FROM PREVIOUS 2 SEMESTERS
MTH 1125	4	MTH 1126	4	OR COURSES SUCH AS
AREA III SCI/LAB COURSE	3/1	AREA II LIT COURSE	3	PREREQUISITE COURSES OR COURSES TO BE
AREA IV SS COURSE	3			RETAKEN
TOTAL	15	TOTAL	14	
		2 ND YEAR		
FALL SEMESTER	HRS	SPRING SEMESTER	HRS	SUMMER
				SEMESTER
PHY 2263/LAB	3/1	AREA IV SS COURSE	3	SELECT COURSES THAT Have not geersing

HAVE



Complete all 6 sub-requirements

A. AREA I:

10

Take the following courses: Minimum Grade of "C" required (54 hours)

COLLEGE OF ARTS AND SCIENCES APPROVED ACADEMIC PLAN PHYSICS MAJOR – PROGRAM YEAR 2015-16

UN

Minimum 2.0 overall GPA Required Take the following courses: MTH 2227 Calculus Iii4 hours 3 hours 9 hours 9 HY 2263 /L263 Physics Ii With Calculus/Lab 9 HY 3310/L310 Modern Physics/Lab 9 HY 3310/L310 Modern Physics/Lab 9 HY 3325 Thermodynamics 9 HY 4420 Mechanics 9 HY 4435 Electricity & Magnetism 9 HY 4445 Quantum Mechanics I4 hours 3 hoursMAJOR ELECTIVES(10 hours From The Following Courses: 9 HY 3322 Mathematical Methods For Physics 9 HY 3321 9 Electricity and Magnetism 9 HY 3321 9 HY 33223 hours 9 HY 3322 9 Mathematical Methods For Physics 9 HY 3321 9 Optics w/Lab 9 HY 4435 9 Electricity and Magnetism 9 HY 4435 9 Electricity and Magnetism 9 HY 4435 9 Electricity and Magnetism 9 HY 4446 9 Cuantum Mechanics II 9 HY 4446 9 Cuantum Mechanics II 9 HY 4446 9 Phy 4466 9 Special Relativity 9 HY 4475 9 HY 4470 9 Nuclear Physics 9 HY 4475 9 HY 4475 9 HY 4476 9 HY 4476 9 HY 4477 9 Anticle Physics 9 HY 4478 9 HY 4478 9 HY 4478 9 HY 4479 9 HY 4479 9 Hy 4478 9 HY 4478 9 HY 4478 9 HY 4479 9 Hy 4478 9 HY 4478 9 HY 4478 9 HY 4479 9 Hy 4478 9 Hy 4478 9 HY 4478 9 HY 4478 9 HY 4479 9 Hy 4478 9 Hy 4478 9 HY 4478 9 HY 4478 9 Hy 4479 9 Hy 4479 9 Hy 4478 9 Hy 4478 9 Hy 4478 9 Hy 4480 9 Hy 4478 9 Hy 4482 9 H
Take the following courses:4MTH 2227 Calculus Iii4MTH 3364 Vector Calculus3MTH 3364 Vector Calculus3PHY 2263/L263 Physics Ii With Calculus/Lab4PHY 3310/L310 Modern Physics/Lab4PHY 3325 Thermodynamics3PHY 3425 Electricity & Magnetism3PHY 4435 Electricity & Magnetism3PHY 4435 Electricity & Magnetism3PHY 4435 Quantum Mechanics I3MAJOR ELECTIVES(10 hours)Take An Additional 10 hours From The Following Courses:3PHY 3320Mathematical Methods For Physics3PHY 3321Equations Of Mathematical Physics3PHY 3329/1359Optics w/Lab4PHY 4435Electricity and Magnetism3PHY 4440Dynamics Of Particles & Systems3PHY 4446Quantum Mechanics II3PHY 4446Quantum Mechanics II3PHY 4470Nuclear Physics3PHY 4475Particle Physics3PHY 4476Nuclear Physics3PHY 4476Nuclear Physics3PHY 4478Introduction To General Relativity3PHY 4478Introduction To Black Holes & cosmology3
MTH 2227 Calculus Iii4 hoursMTH 3364 Vector Calculus3 hoursPHY 2263/L263 Physics Ii With Calculus/Lab4 hoursPHY 310/L310 Modern Physics/Lab4 hoursPHY 325 Thermodynamics3 hoursPHY 4420 Mechanics3 hoursPHY 4435 Electricity & Magnetism3 hoursPHY 4445 Quantum Mechanics I3 hoursMAJOR ELECTIVES(10 hours)Take An Additional 10 hours From The Following Courses:1PHY 3320Mathematical Methods For Physics3 hoursPHY 3321Equations Of Mathematical Physics3 hoursPHY 3359/1359Optics w/Lab4 hoursPHY 4435Electricity and Magnetism3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4460Special Relativity3 hoursPHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
MTH 3364 Vector Calculus (1997) PHY 2263/L263 Physics Ii With Calculus/Lab 4hours PHY 3310/L310 Modern Physics/Lab 4hours PHY 3325 Thermodynamics 3hours PHY 4420 Mechanics PHY 4435 Electricity & Magnetism 3hours PHY 4435 Electricity & Magnetism 3hours PHY 4445 Quantum Mechanics I 3hours PHY 4445 Quantum Mechanics I 3hours Take An Additional 10 hours From The Following Courses: PHY 3320 Mathematical Methods For Physics 3hours PHY 3321 Equations Of Mathematical Physics 3hours PHY 3321 Equations Of Mathematical Physics 3hours PHY 3359/1359 Optics w/Lab 4hours PHY 4435 Electricity and Magnetism 3hours PHY 4446 Quantum Mechanics II 3hours PHY 4446 Quantum Mechanics II 3hours PHY 4446 Quantum Mechanics II 3hours PHY 4446 Physics 3hours PHY 4446 Autor Physics 3hours PHY 44470 Nuclear Physics 3hours PHY 4470 Nuclear Physics 3hours PHY 4475 Particle Physics 3hours PHY 4478 Introduction To General Relativity PHY 4480 Introduction To Black Holes & cosmology 3hours PHY 4480 Introduction To Black Holes & cosmology
PHY 2263/L263 Physics II With Calculus/Lab4 hoursPHY 3310/L310 Modern Physics/Lab4 hoursPHY 3325 Thermodynamics3 hoursPHY 3325 Thermodynamics3 hoursPHY 4420 Mechanics3 hoursPHY 4435 Electricity & Magnetism3 hoursPHY 4445 Quantum Mechanics I3 hoursMAJOR ELECTIVES(10 hours)Take An Additional 10 hours From The Following Courses:3 hoursPHY 3320Mathematical Methods For Physics3 hoursPHY 3321Equations Of Mathematical Physics3 hoursPHY 3359/1359Optics w/Lab4 hoursPHY 4445Electricity and Magnetism3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4460Special Relativity3 hoursPHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4476Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 3310/L310 Modern Physics/Lab4 hoursPHY 3325 Thermodynamics3 hoursPHY 4420 Mechanics3 hoursPHY 4420 Mechanics3 hoursPHY 4435 Electricity & Magnetism3 hoursPHY 4445 Quantum Mechanics I3 hoursMAJOR ELECTIVES(10 hours)Take An Additional 10 hours From The Following Courses:10 hours)PHY 3320Mathematical Methods For Physics3 hoursPHY 3321Equations Of Mathematical Physics3 hoursPHY 3359/1359Optics w/Lab4 hoursPHY 4435Electricity and Magnetism3 hoursPHY 4440Dynamics Of Particles & Systems3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4460Special Rel ativity3 hoursPHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 3325 Thermodynamics3 hoursPHY 4420 Mechanics3 hoursPHY 4420 Mechanics3 hoursPHY 4435 Electricity & Magnetism3 hoursPHY 4445 Quantum Mechanics I3 hoursMAJOR ELECTIVES(10 hours)Take An Additional 10 hours From The Following Courses:(10 hours)PHY 3320Mathematical Methods For Physics3 hoursPHY 3321Equations Of Mathematical Physics3 hoursPHY 3359/1359Optics w/Lab4 hoursPHY 4435Electricity and Magnetism3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4446Special Relativity3 hoursPHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4476Nuclear Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 4420 Mechanics3 hoursPHY 4435 Electricity & Magnetism3 hoursPHY 4445 Quantum Mechanics I3 hoursMAJOR ELECTIVES(10 hours)Take An Additional 10 hours From The Following Courses:(10 hours)PHY 3320Mathematical Methods For Physics3 hoursPHY 3321Equations Of Mathematical Physics3 hoursPHY 3359/1359Optics w/Lab4 hoursPHY 4435Electricity and Magnetism3 hoursPHY 4440Dynamics Of Particles & Systems3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4446Special Relativity3 hoursPHY 4475Particle Physics3 hoursPHY 4475Anticle Physics3 hoursPHY 4476Nuclear Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 4435 Electricity & Magnetism PHY 4445 Quantum Mechanics I3 hours 3 hoursMAJOR ELECTIVES(10 hours)Take An Additional 10 hours From The Following Courses: PHY 33203 hoursPHY 3320Mathematical Methods For Physics3 hoursPHY 3321Equations Of Mathematical Physics3 hoursPHY 3359/1359Optics w/Lab4 hoursPHY 4435Electricity and Magnetism3 hoursPHY 4440Dynamics Of Particles & Systems3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4460Special Relativity3 hoursPHY 4475Particle Physics3 hoursPHY 4476Nuclear Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 4445 Quantum Mechanics I3 hoursMAJOR ELECTIVES(10 hours)Take An Additional 10 hours From The Following Courses:3 hoursPHY 3320Mathematical Methods For Physics3 hoursPHY 3321Equations Of Mathematical Physics3 hoursPHY 3359/1359Optics w/Lab4 hoursPHY 4435Electricity and Magnetism3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4460Special Relativity3 hoursPHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
MAJOR ELECTIVES(10 hours)Take An Additional 10 hours From The Following Courses:3 hoursPHY 3320Mathematical Methods For Physics3 hoursPHY 3321Equations Of Mathematical Physics3 hoursPHY 3359/1359Optics w/Lab4 hoursPHY 4435Electricity and Magnetism3 hoursPHY 4440Dynamics Of Particles & Systems3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4460Special Relativity3 hoursPHY 4475Particle Physics3 hoursPHY 4475Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
Take An Additional 10 hours From The Following Courses:PHY 3320Mathematical Methods For PhysicsPHY 3321Equations Of Mathematical PhysicsPHY 3359/1359Optics w/LabPHY 4435Electricity and MagnetismPHY 4440Dynamics Of Particles & SystemsPHY 4446Quantum Mechanics IIPHY 4460Special RelativityPHY 4470Nuclear PhysicsPHY 4475Particle PhysicsPHY 4475Particle PhysicsPHY 4478Introduction To General RelativityPHY 4480Introduction To Black Holes & cosmology
Take An Additional 10 hours From The Following Courses:PHY 3320Mathematical Methods For PhysicsPHY 3321Equations Of Mathematical PhysicsPHY 3359/1359Optics w/LabPHY 4435Electricity and MagnetismPHY 4440Dynamics Of Particles & SystemsPHY 4446Quantum Mechanics IIPHY 4460Special RelativityPHY 4470Nuclear PhysicsPHY 4475Particle PhysicsPHY 4475Particle PhysicsPHY 4478Introduction To General RelativityPHY 4480Introduction To Black Holes & cosmology
PHY 3320Mathematical Methods For Physics3 hoursPHY 3321Equations Of Mathematical Physics3 hoursPHY 3359/1359Optics w/Lab4 hoursPHY 4435Electricity and Magnetism3 hoursPHY 4440Dynamics Of Particles & Systems3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4460Special Rel ativity3 hoursPHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4476Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 3320Mathematical Methods For Physics3 hoursPHY 3321Equations Of Mathematical Physics3 hoursPHY 3359/1359Optics w/Lab4 hoursPHY 4435Electricity and Magnetism3 hoursPHY 4440Dynamics Of Particles & Systems3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4460Special Rel ativity3 hoursPHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4476Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 3321Equations Of Mathematical Physics3 hoursPHY 3359/1359Optics w/Lab4 hoursPHY 4435Electricity and Magnetism3 hoursPHY 4440Dynamics Of Particles & Systems3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4460Special Relativity3 hoursPHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 3359/1359Optics w/Lab4 hoursPHY 4435Electricity and Magnetism3 hoursPHY 4440Dynamics Of Particles & Systems3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4460Special Relativity3 hoursPHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 4435Electricity and Magnetism3 hoursPHY 4440Dynamics Of Particles & Systems3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4460Special Relativity3 hoursPHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 4440Dynamics Of Particles & Systems3 hoursPHY 4446Quantum Mechanics II3 hoursPHY 4460Special Relativity3 hoursPHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 4446Quantum Mechanics II3 hoursPHY 4460Special Relativity3 hoursPHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 4460Special Relativity3 hoursPHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 4470Nuclear Physics3 hoursPHY 4475Particle Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 4475Particle Physics3 hoursPHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 4478Introduction To General Relativity3 hoursPHY 4480Introduction To Black Holes & cosmology3 hours
PHY 4482 String Theory 3 hours
PHY 4495 Topics In Physics 3 hours 3 hours
PHY 4491 Guided Independent Research 3 hours 3 hours
PHY 4492 Guided Independent Research 3 hours 3 hours
PHY 4493 Guided Independent Study 3 hours 3 hours
PHY 4494 Guided Independent Study 3 hours 3 hours
MINOR (18 hours)
At Least One 18 Semester Hour Minor Is Required Complete ThisDegree Program.
Additional Majors Are Also Acceptable.
FREE ELECTIVES REQUIREMENT (11 hours)
(THOURS)
Take 2 semester hours of free elective credit. 11 Hours

My Degree Map serves as a guide to assist you with the proper sequence and selec. on of courses. It does not replace your Program Evalua on (available through Trojan Web Express), which depicts the o_cial document used to clear students for gradua on. My Degree Map includes the required coursework and suggested sequence of courses for a par-cular degree program. Every reasonable a -empt has been made to ensure accuracy of content. Please keep in mind that some courses, such as developmental or pre-requisite courses, are not reflected in My Degree Map. Comple- on of degree requirements is based on the specific catalog year under which you were admined to TROY. Please consult the college catalog, your academic advisor, your specific school, department, or your Program Evalua on for any addi- onal requirements.