

MY DEGREE MAP College of Arts and Sciences Approved Academic Plan Physics Major – Program year 2015-16

		1 st YEAR					
FALL SEMESTER	HRS	SPRING SEMESTER	HRS	SUMMER			
	1110		11100	SEMESTER			
TROY 1101	1	ENG 1102/04	3	SELECT COURSES THAT			
ENG 1101/03	3	PHY 2262/LAB	3/1	HAVE NOT BEEN COMPLETED FROM			
MTH 1125	4	MTH 1126	4	PREVIOUS 2 SEMESTERS 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 BEEN			
REQ_MAJ_ELEC (PHY 3359/LAB DR)	3/1	PHY 3310/LAB	3/1	COMPLETED FROM PREVIOUS 2 SEMESTERS			
MTH 2227	4	AREA II FINE ARTS COURSE	3	OR COURSES SUCH AS PREREQUISITE COURSES			
CS 2250	3	MTH 3364	3	OR COURSES TO BE			
		MINOR COURSE	3	RETAKEN			
TOTAL	17	TOTAL	16				
3 RD YEAR							
FALL SEMESTER	HRS	SPRING SEMESTER	HRS	SUMMER			
		SPRING SEMESTER		SEMESTER			
FREE ELEC	2	SPRING SEMESTER REQ_MAJ ELEC (PHY 4440 DR)	3	SEMESTER SELECT COURSES THAT HAVE NOT BEEN			
FREE ELEC PHY 4420	2 3	SPRING SEMESTER REQ_MAJ_ELEC (PHY 4440 DR) REQ_MAJ_ELEC (PHY 4438 DR)	3	SEMESTER SELECT COURSES THAT			
FREE ELEC PHY 4420 PHY 4435	2 3 3	SPRING SEMESTER REQ_MAJ ELEC (PHY 4440 DR) REQ_MAJ ELEC (PHY 4438 DR) MINOR COURSE	3 3 3	SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM			
FREE ELEC PHY 4420 PHY 4435 MINOR COURSE	2 3 3 3	SPRING SEMESTER REQ_MAJ_ELEC (PHY 4440 DR) REQ_MAJ_ELEC (PHY 4438 DR) MINOR COURSE AREA III SCI/LAB COURSE	3 3 3/1	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE			
FREE ELEC PHY 4420 PHY 4435 MINOR COURSE FREE ELEC	2 3 3 3 3 3	SPRING SEMESTER REQ_MAJ_ELEC (PHY 4440 DR) REQ_MAJ_ELEC (PHY 4438 DR) MINOR COURSE AREA III SCI/LAB COURSE AREA II HUM/FA COURSE	3 3 3/1 3/1	SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES			
FREE ELEC PHY 4420 PHY 4435 MINOR COURSE	2 3 3 3	SPRING SEMESTER REQ_MAJ_ELEC (PHY 4440 DR) REQ_MAJ_ELEC (PHY 4438 DR) MINOR COURSE AREA III SCI/LAB COURSE AREA II HUM/FA COURSE TOTAL	3 3 3/1	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE			
FREE ELECPHY 4420PHY 4435MINOR COURSEFREE ELECTOTAL	2 3 3 3 3 14	SPRING SEMESTER REQ_MAJ_ELEC (PHY 4440 DR) REQ_MAJ_ELEC (PHY 4438 DR) MINOR COURSE AREA III SCI/LAB COURSE AREA II HUM/FA COURSE TOTAL 4 TH YEAR	3 3 3/1 3 16	SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN			
FREE ELECPHY 4420PHY 4435MINOR COURSEFREE ELEC	2 3 3 3 3 3	SPRING SEMESTER REQ_MAJ_ELEC (PHY 4440 DR) REQ_MAJ_ELEC (PHY 4438 DR) MINOR COURSE AREA III SCI/LAB COURSE AREA II HUM/FA COURSE TOTAL	3 3 3/1 3/1	SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN			
FREE ELECPHY 4420PHY 4435MINOR COURSEFREE ELECTOTALFALL SEMESTER	2 3 3 3 3 14 HRS	SPRING SEMESTER REQ MAJ ELEC (PHY 4440 DR) REQ MAJ ELEC (PHY 4438 DR) MINOR COURSE AREA III SCI/LAB COURSE AREA II HUM/FA COURSE TOTAL 4 TH YEAR SPRING SEMESTER	3 3 3/1 3 16 HRS	SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN			
FREE ELECPHY 4420PHY 4435MINOR COURSEFREE ELECTOTALFALL SEMESTERPHY 4445	2 3 3 3 3 14 HRS 3	SPRING SEMESTER REQ_MAJ_ELEC (PHY 4440 DR) REQ_MAJ_ELEC (PHY 4438 DR) MINOR COURSE AREA III SCI/LAB COURSE AREA II HUM/FA COURSE TOTAL 4 TH YEAR SPRING SEMESTER AREA II HUM/FA COURSE	3 3 3/1 3/1 16 HRS 3	SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN SUMMER SEMESTER SELECT COURSES THAT HAVE NOT BEEN			
FREE ELECPHY 4420PHY 4435MINOR COURSEFREE ELECTOTALFALL SEMESTERPHY 4445PHY 3325	2 3 3 3 3 3 14 HRS 3 3	SPRING SEMESTER REQ_MAJ_ELEC (PHY 4440 DR) REQ_MAJ_ELEC (PHY 4438 DR) MINOR COURSE AREA III SCI/LAB COURSE AREA II HUM/FA COURSE TOTAL 4 TH YEAR SPRING SEMESTER AREA II HUM/FA COURSE MINOR COURSE	3 3 3/1 3 16 HRS 3 3	SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN SUMMER SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS			
FREE ELECPHY 4420PHY 4435MINOR COURSEFREE ELECTOTALFALL SEMESTERPHY 4445PHY 3325MINOR COURSE	2 3 3 3 3 3 14 HRS 3 3 3	SPRING SEMESTER REQ_MAJ_ELEC (PHY 4440 DR) REQ_MAJ_ELEC (PHY 4438 DR) MINOR COURSE AREA III SCI/LAB COURSE AREA II HUM/FA COURSE TOTAL 4 TH YEAR SPRING SEMESTER AREA II HUM/FA COURSE MINOR COURSE MINOR COURSE	3 3 3/1 3 16 HRS 3 3 3 3	SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES			
FREE ELECPHY 4420PHY 4435MINOR COURSEFREE ELECTOTALFALL SEMESTERPHY 4445PHY 3325MINOR COURSEAREA IV HIS COURSE	2 3 3 3 3 3 14 HRS 3 3 3 3 3	SPRING SEMESTER REQ_MAJ_ELEC (PHY 4440 DR) REQ_MAJ_ELEC (PHY 4438 DR) MINOR COURSE AREA III SCI/LAB COURSE AREA II HUM/FA COURSE TOTAL 4 TH YEAR SPRING SEMESTER AREA II HUM/FA COURSE MINOR COURSE MINOR COURSE FREE ELEC	3 3 3/1 3 16 HRS 3 3 3 3 3 3	SELMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS			
FREE ELECPHY 4420PHY 4435MINOR COURSEFREE ELECTOTALFALL SEMESTERPHY 4445PHY 3325MINOR COURSEAREA IV HIS COURSEAREA IV SS COURSE	2 3 3 3 3 3 14 HRS 3 3 3 3 3 3 3	SPRING SEMESTER REQ_MAJ_ELEC (PHY 4440 DR) REQ_MAJ_ELEC (PHY 4438 DR) MINOR COURSE AREA III SCI/LAB COURSE AREA II HUM/FA COURSE TOTAL 4 TH YEAR SPRING SEMESTER AREA II HUM/FA COURSE MINOR COURSE MINOR COURSE FREE ELEC FREE ELEC	3 3 3/1 3 16 HRS 3 3 3 3 3 3 3	SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE			
FREE ELECPHY 4420PHY 4435MINOR COURSEFREE ELECTOTALFALL SEMESTERPHY 4445PHY 3325MINOR COURSEAREA IV HIS COURSEAREA IV SS COURSEAREA IV SS COURSEREMEMBER TO FILE YOUR INTENT TO GRADUATE TOTAL	2 3 3 3 3 3 14 HRS 3 3 3 3 3 3 3 15	SPRING SEMESTER REQ_MAJ_ELEC (PHY 4440 DR) REQ_MAJ_ELEC (PHY 4438 DR) MINOR COURSE AREA III SCI/LAB COURSE AREA II HUM/FA COURSE TOTAL 4 TH YEAR SPRING SEMESTER AREA II HUM/FA COURSE MINOR COURSE MINOR COURSE FREE ELEC	3 3 3/1 3 16 HRS 3 3 3 3 3 3 3 15	SEMESTER SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE RETAKEN SELECT COURSES THAT HAVE NOT BEEN COMPLETED FROM PREVIOUS 2 SEMESTERS OR COURSES SUCH AS PREREQUISITE COURSES OR COURSES TO BE			



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

COMPLETE ALL 6 SUB-REQUIREMENTS

A. AREA I:

TAKE THE FOLLOWING COURSES: MINIMUM GRADE OF "C" REQUIRED ENG-1101 COMP AND MODERN ENGLISH I ENG-1102 COMP AND MODERN ENGLISH II

B. AREA II:

TAKE ANY 1000-2000 LEVEL COURSE IN LITERATURE **3** HOURS Take any 1000-2000 level course with an expanded historical And Cultural Scope In **3** HOURS FINE ARTS, INCLUDING THE DISCIPLINES OF ART, MUSIC, THEATRE, FILM, OR OTHER FINE ARTS AREA. Take any two 1000-2000 level courses with an expanded Historical And Cultural **6 HOURS** SCOPE IN THE HUMANITIES/FINE ARTS DISCIPLINES, INCLUDING ENGLISH, FOREIGN LANGUAGES, RELIGION, PHILOSOPHY, CLASSICS, THEATRE, MUSIC, DANCE, COMMUNICATION, SIGN LANGUAGE, INTERDISCIPLINARY STUDIES, OR OTHER HUMANITIES/FINE ARTS AREAS.

C. AREA III:

TAKE MTH 1125 CALCULUS I ("C" OR BETTER) 4 HOURS Take any two 1000-2000 level science classes (class And corresponding Lab Both **8 HOURS** REQUIRED) FROM THE FOLLOWING SCIENCE DISCIPLINES: BIOLOGY, CHEMISTRY, PHYSICS, PHYSICAL SCIENCE, OR OTHER SCIENCE AREAS. SELECT 2: BIO-1100/L100, BIO 1101/L101, BIO 2202/L202, BIO 2229/L229, CHM 1115/L115, CHM 1142/L142, CHM 1143/L143, CHM 2242/L242, PHY 2252/L252, PHY 2253/L253, PHY 2262/L262, PHY 2263/L263, SCI 2233/L233, SCI 2234/L234.

D. AREA IV:

TAKE THE FOLLOWING COURSES: ECO 2251 PRINCIPLES OF MACROECONOMICS **3 HOURS** ECO 2252 PRINCIPLES OF MICROECONOMICS **3 HOURS** TAKE ANY 1000-2000 LEVEL COURSE WITH A PRIMARY FOCUS IN HISTORY **3 HOURS** Take One 1000 2000 Level Course From The Following Social science **3 HOURS** DISCIPLINES: ANTHROPOLOGY, BUSINESS, CRIMINAL JUSTICE, ECONOMICS, GEOGRAPHY, HISTORY, HUMAN SERVICES, LEADERSHIP, INTERDISCIPLINARY STUDIES, NURSING, POLITICAL SCIENCE, PSYCHOLOGY, RELIGION, SOCIAL WORK, SOCIOLOGY, OR OTHER SOCIAL SCIENCE AREAS.

E. AREA V:

TAKE THE FOLLOWING CO	OURSES:	
TROY 1101	University Orientation	1 HOUR
CS 2250	Computer Science I	3 hours
MTH 1126	CALCULUS II	4 HOURS
PHY 2262/L26	52 Physics I With Calculus W/Lab	4 HOURS

Every reasonable attempt to ensure accuracy has been made. Some courses (such as developmental or pre-requisite courses) are not reflected in this DEGREE MAP. COMPLETION OF DEGREE REQUIREMENTS IS BASED ON THE SPECIFIC CATALOG YEAR FOR EACH STUDENT. A MINIMUM OF 120 HOURS IS REQUIRED FOR ALL BACCALAUREATE DEGREE PROGRAMS.

AT LEAST 50% OF REQUIRED COURSEWORK MUST BE EARNED AT A SENIOR INSTITUTION

At least 25% of the credit hours required for the degree must be completed In residency with Troy University. At least 12 semester hours of residency must be completed in each major field(s) of study.

NOTE: Please consult the College of Arts & Sciences or current catalog for other requirements not covered in this document. NOTES: A sequence in literature or history is required. When selecting coursework in AREAS II or IV, please consider this requirement.

(54 HOURS)

3 HOURS

3 HOURS

A MINIMUM GPA OF 2.0 OVERALL AND IN THE MAJOR IS REQUIRED TO GRADUATE.



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

PHYSICS MAJOR

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TAKE 2 SEMESTER HOURS OF FREE ELECTIVE CREDIT.

(37 HOURS)

11 HOURS

TA M Ph Ph Ph Ph Ph Ph	AKE THE FOLLO TH 2227 Calc TH 3364 Vecto HY 2263/L263 I HY 3310/L310 M HY 3325 Therm HY 4420 Mech. HY 4435 Electi	or Calculus Physics II With Calculus/Lab Modern Physics/Lab Modynamics	4 HOURS 3 HOURS 4 HOURS 4 HOURS 3 HOURS 3 HOURS 3 HOURS 3 HOURS
AJOR	ELECTIVES		(10 HOURS)
PF PF	KE AN ADDITIC HY 3320 HY 3321 HY 3359/L359 HY 4435 HY 4440 HY 4440 HY 4446 HY 4446 HY 4460 HY 4470 HY 4475 HY 4475 HY 4475 HY 4482 HY 4495 HY 4491 HY 4492 HY 4493 HY 4494	DNAL 10 HOURS FROM THE FOLLOWING COURSES: MATHEMATICAL METHODS FOR PHYSICS EQUATIONS OF MATHEMATICAL PHYSICS OPTICS W/LAB ELECTRICITY AND MAGNETISM DYNAMICS OF PARTICLES & SYSTEMS QUANTUM MECHANICS II SPECIAL RELATIVITY NUCLEAR PHYSICS PARTICLE PHYSICS INTRODUCTION TO GENERAL RELATIVITY INTRODUCTION TO BLACK HOLES & COSMOLOGY STRING THEORY TOPICS IN PHYSICS GUIDED INDEPENDENT RESEARCH GUIDED INDEPENDENT RESEARCH GUIDED INDEPENDENT STUDY GUIDED INDEPENDENT STUDY	3 HOURS 3 HOURS 4 HOURS 3 HOURS
AINOR			(18 HOURS)
		Semester Hour Minor Is Required Complete ThisDegree Program. Jors Are Also Acceptable.	
FREE ELECTIVES REQUIREMENT			(11 HOURS)
			11 Hours

My Degree Map serves as a guide to assist you with the proper sequence and selection of courses. It does not replace your Program Evaluation (available through Trojan Web Express), which depicts the official document used to clear students for graduation. My Degree Map includes the required coursework and suggested sequence of courses for a particular degree program. Every reasonable attempt 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. Completion of degree requirements is based on the specific catalog year under which you were admitted to TROY. Please consult the college catalog, your academic advisor, your specific school, department, or your Program Evaluation for any additional requirements.