

**MY DEGREE MAP  
COLLEGE OF ARTS AND SCIENCES  
BACHELOR OF SCIENCE IN PHYSICS AND MATHEMATICS  
PROGRAM YEAR 2023-24**

| <b>1<sup>ST</sup> YEAR</b>           |              |                                       |              |
|--------------------------------------|--------------|---------------------------------------|--------------|
| <b>1<sup>ST</sup> SEMESTER</b>       | <b>HOURS</b> | <b>2<sup>ND</sup> SEMESTER</b>        | <b>HOURS</b> |
| TROY 1101                            | 1            | ENG 1102/04                           | 3            |
| ENG 1101/03                          | 3            | MTH 1126                              | 4            |
| MTH 1125                             | 4            | PHY 2262/L262                         | 3/1          |
| AREA IV SS COURSE                    | 3            | STAT 2210                             | 3            |
| AREA III SCI/LAB COURSE              | 3/1          | AREA IV SS COURSE                     | 3            |
|                                      |              |                                       |              |
| <b>TOTAL</b>                         | <b>15</b>    | <b>TOTAL</b>                          | <b>17</b>    |
| <b>2<sup>ND</sup> YEAR</b>           |              |                                       |              |
| <b>3<sup>RD</sup> SEMESTER</b>       | <b>HOURS</b> | <b>4<sup>TH</sup> SEMESTER</b>        | <b>HOURS</b> |
| PHY MAJ ELEC (DR PHY 3359/L359)      | 3/1          | PHY 3310/L310                         | 3/1          |
| MTH 2227                             | 4            | AREA IV HIS COURSE                    | 3            |
| MTH 3331                             | 3            | MTH 3311                              | 3            |
| PHY 2263/L263                        | 3/1          | MTH 3318                              | 3            |
|                                      |              | CS 2250 OR MTH 2220                   | 3            |
|                                      |              |                                       |              |
| <b>TOTAL</b>                         | <b>15</b>    | <b>TOTAL</b>                          | <b>16</b>    |
| <b>3<sup>RD</sup> YEAR</b>           |              |                                       |              |
| <b>5<sup>TH</sup> SEMESTER</b>       | <b>HOURS</b> | <b>6<sup>TH</sup> SEMESTER</b>        | <b>HOURS</b> |
| AREA II LIT COURSE                   | 3            | AREA IV SS COURSE                     | 3            |
| PHY 3325                             | 3            | AREA II HUM/FA COURSE                 | 3            |
| MTH 4424                             | 3            | REQ PHY ELEC (DR PHY 4446)*           | 3            |
| PHY 4445                             | 3            | REQ MTH/STAT ELEC                     | 3            |
| MTH 4441                             | 3            | STAT 4451 OR REQ MTH 4425 OR MTH 4442 | 3            |
|                                      |              |                                       |              |
| <b>TOTAL</b>                         | <b>15</b>    | <b>TOTAL</b>                          | <b>15</b>    |
| <b>4<sup>TH</sup> YEAR</b>           |              |                                       |              |
| <b>7<sup>TH</sup> SEMESTER</b>       | <b>HOURS</b> | <b>8<sup>TH</sup> SEMESTER</b>        | <b>HOURS</b> |
| PHY 4420                             | 3            | AREA II HUM/FA COURSE                 | 3            |
| PHY 4435                             | 3            | AREA II FINE ARTS COURSE              | 3            |
| REQ PHY ELEC (DR PHY 3320)           | 3            | REQ PHY ELEC (DR PHY 3321)            | 3            |
| STAT 3350                            | 3            | REQ PHY ELEC (DR PHY 4438 OR 4440) *  | 3            |
| REQ MTH/STAT ELEC                    | 3            | REQ MTH/STAT ELEC (DR STAT 4467)      | 3            |
| <b>SUBMIT GRADUATION APPLICATION</b> |              | REQ PHY ELEC                          | 1            |
|                                      |              |                                       |              |
| <b>TOTAL</b>                         | <b>15</b>    | <b>TOTAL</b>                          | <b>16</b>    |
| <b>TOTAL HOURS</b>                   |              |                                       | <b>124</b>   |



**COMPLETE ALL REQUIREMENTS (49 HOURS)**

**AREA I**

|                               |                            |         |
|-------------------------------|----------------------------|---------|
| ENG 1101                      | COMP AND MODERN ENGLISH I  | 3 HOURS |
| ENG 1102                      | COMP AND MODERN ENGLISH II | 3 HOURS |
| MINIMUM GRADE OF "C" REQUIRED |                            |         |

**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 FINE ARTS, INCLUDING THE DISCIPLINES OF ART, MUSIC, THEATRE, FILM, OR OTHER FINE ARTS AREA. 3 HOURS

TAKE ANY TWO 1000-2000 LEVEL COURSES WITH AN EXPANDED HISTORICAL AND CULTURAL 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. 6 HOURS

**NOTE: A SEQUENCE IN LITERATURE OR HISTORY IS REQUIRED. WHEN SELECTING COURSEWORK IN AREAS II OR IV, PLEASE CONSIDER THIS REQUIREMENT.**

**AREA III**

MTH 1125 CALCULUS I 4 HOURS  
MINIMUM GRADE OF "C" REQUIRED

PHY 2262/LAB PHYSICS I W/ CALCULUS AND LAB 3/1 HOURS  
TAKE ANY ONE 1000-2000 LEVEL SCIENCE CLASSES (CLASS AND CORRESPONDING LAB BOTH 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, SCI 2233/L233, SCI 2234/L234. 3/1 HOURS

**AREA IV**

TAKE ANY 1000-2000 LEVEL COURSE WITH A PRIMARY FOCUS IN HISTORY. 3 HOURS

TAKE ANY THREE 1000-2000 LEVEL COURSES FROM THE FOLLOWING SOCIAL SCIENCE 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. 9 HOURS

**AREA V**

|           |                           |         |
|-----------|---------------------------|---------|
| CS 2250   | COMPUTER SCIENCE I        | 3 HOURS |
| TROY 1101 | THE UNIVERSITY EXPERIENCE | 1 HOUR  |
| STAT 2210 | INTRODUCTORY STATISTICS   | 3 HOURS |



**PHYSICS MAJOR**  
**2.0 GPA REQUIRED**

**(37 HOURS)**

TAKE THE FOLLOWING COURSES:

|               |                              |           |
|---------------|------------------------------|-----------|
| PHY 2263/L263 | PHYSICS II WITH CALCULUS/LAB | 3/1 HOURS |
| PHY 3310/L310 | MODERN PHYSICS/LAB           | 3/1 HOURS |
| PHY 3325      | THERMODYNAMICS               | 3 HOURS   |
| PHY 4420      | MECHANICS                    | 3 HOURS   |
| PHY 4435      | ELECTRICITY & MAGNETISM      | 3 HOURS   |
| PHY 4445      | QUANTUM MECHANICS I          | 3 HOURS   |

**PHYSICS MAJOR ELECTIVES**

TAKE AN ADDITIONAL 17 HOURS FROM THE FOLLOWING:

17 HOURS

PHY 3320 (3), PHY 3321 (3), PHY 3359/L359 (3/1),  
 PHY 4438 (3), PHY 4440 (3), PHY 4446 (3), PHY 4460 (3),  
 PHY 4475 (3), PHY 4478 (3), PHY 4482 (3), PHY 4483 (1), PHY 4484 (1),  
 PHY 4485 (1), PHY 4495 (3), PHY 4491 (3), PHY 4492 (3), PHY 4493 (3),  
 PHY 4494 (3), MTH 3364 (3)

**MATHEMATICS MAJOR**

**(38 HOURS)**

TAKE THE FOLLOWING COURSES:

|          |                                    |         |
|----------|------------------------------------|---------|
| MTH 1126 | CALCULUS II                        | 4 HOURS |
| MTH 2227 | CALCULUS III                       | 4 HOURS |
| MTH 3311 | DIFFERENTIAL EQUATIONS             | 3 HOURS |
| MTH 3318 | INTRO TO ADVANCED MATHEMATICS      | 3 HOURS |
| MTH 3331 | LINEAR ALGEBRA                     | 3 HOURS |
| MTH 3350 | STATISTICAL METHODS & COMPUTATIONS | 3 HOURS |
| MTH 4424 | REAL ANALYSIS I                    | 3 HOURS |
| MTH 4441 | ABSTRACT ALGEBRA I                 | 3 HOURS |

**OPTION 1:**

|           |                           |         |
|-----------|---------------------------|---------|
| MTH 4425  | REAL ANALYSIS II          | 3 HOURS |
| MTH 4442  | ABSTRACT ALGEBRA          | 3 HOURS |
| STAT 4451 | MATHEMATICAL STATISTICS I | 3 HOURS |

TAKE 3 ADDITIONAL HOURS OF UPPER-LEVEL (3000 OR 4000) MATHEMATICS OR STATISTICS COURSES. (EXCLUDING MTH 4481) 3 HOURS

**OPTION 2:**

|           |                            |         |
|-----------|----------------------------|---------|
| STAT 4451 | MATHEMATICAL STATISTICS I  | 3 HOURS |
| STAT 4452 | MATHEMATICAL STATISTICS II | 3 HOURS |

TAKE 6 ADDITIONAL HOURS OF UPPER-LEVEL (3000 OR 4000) STATISTICS COURSES. 6 HOURS  
 STAT 3355, STAT 4459, STAT 4465, STAT 4466, STAT 4467, STAT 4456, OR STAT 4464.

DR DENOTES DEPARTMENTAL RECOMMENDED COURSE.

MOST 3000- AND 4000-LEVEL COURSES IN PHYSICS ARE OFFERED ONCE EVERY OTHER YEAR, BUT THE SCHEDULE MAY CHANGE ACCORDING TO DEMAND. CONSULT A PHYSICS ADVISOR FOR PLANNED COURSE OFFERINGS.

\*UNDER THIS SCHEDULE, DURING THE 8TH SEMESTER (SPRING 4TH YEAR), A STUDENT MAY CHOOSE TO TAKE BOTH PHY 4438 AND PHY 4440, THEREBY REPLACING ONE REQUIRED MAJOR ELECTIVE DURING THE 6TH SEMESTER (SPRING 3RD YEAR) OR 7TH SEMESTER (FALL 4TH YEAR)