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| **Catalog Year 2023-2024**BA, Physics | ***(For internal use only)***[x]  *No change*[ ]  *UCC proposal* |

A Major Academic Plan (MAP) is one way to complete a degree in a set number of semesters. The *example* below is an efficient strategy only. Actual plans for individual students will vary based on advisor recommendations and academic needs. Official Program Requirements including Major, General Education, Elective, and university requirements (see pg.2) are based on Catalog Year.

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| **Course Subject and Title** | **Cr.**  | **Min.** **Grade** | **\*GE,** **UU or UM** | **\*\*Sem. Offered** | **Prerequisite** | **Co Requisite** |
| Semester One |
| GE Objective 1: ENGL 1101 Writing and Rhetoric I | 3 | C- | GE | F, S, Su | Appropriate placement score |  |
| GE Objective 3: MATH 1170 Calculus I | 4 | C- | GE | F,S, Su | MATH 1147 or 1144 or appropriate placement score |  |
| GE Objective 4 | 3 |  | GE | F,S, Su |  |  |
| GE Objective 6 | 3 |  | GE |  F,S, Su |  |  |
|  Free Electives | 2 |  |  | F,S, Su |  |  |
|  Total | 15 |  |  |  |  |  |
| Semester Two |
| GE Objective 1: ENGL 1102 Writing and Rhetoric II | 3 | C- | GE | F, S, Su | ENGL 1101 or equivalent |  |
| MATH 1175 Calculus II | 4 | C- |  | F,S, Su | MATH 1170 |  |
| GE Objective 4 | 3 |  | GE | F,S,S u |  |  |
| GE Objective 9 | 3 |  | GE | F,S, Su |  |  |
|  Free Electives | 2 |  |  | F,S, Su |  |  |
|  Total | 15 |  |  |  |  |  |
| Semester Three |
| GE Objective 5: PHYS 1111 & 1113 Gen Physics I & Lab | 4-5 |  | GE | F | MATH 1143 or MATH 1147 or appropriate placement score |  |
|  **OR** PHYS 2211 & 2213 Engineering Physics I & Lab |  | F,S | MATH 1175 | MATH 1175 |
| MATH 2275 Calculus III | 4 | C- |  | F,S | MATH 1175 |  |
| GE Objective 2: COMM 1101 Principles of Speech  | 3 |  | GE | F,S, Su |  |  |
| Free Electives | 3-4 |  |  | F,S, Su |  |  |
|  Total | 15 |  |  |  |  |  |
| Semester Four |  |  |  |  |  |  |
| PHYS 1112 & 1114 General Physics II & Lab | 4-5 |  |  | S | PHYS 1111 & 1113 Gen Physics I & Lab |  |
| **OR**  PHYS 2212 & 2214 Engineering Physics II & Lab |  |  | F,S | PHYS 2211 & 2213 Engineering Physics I & Lab |  |
| MATH 3360 Differential Equations | 3 |  | UM | F,S | MATH 1175; MATH 2275 recommended |  |
| GE Objective 6 | 3 |  | GE | F,S, Su |  |  |
| Free Electives | 4-5 |  |  | F,S, Su |  |  |
|  Total | 15 |  |  |  |  |  |
| Semester Five |  |  |  |  |  |  |
| PHYS 3301 Modern Physics | 3 |  | UM | F | PHYS 2212 | MATH 3360 |
|  Free Upper Division Electives | 3 |  | UU | F,S, Su | See Catalog |  |
| GE Objective 5 (choose one course, not PHYS) | 3 |  | GE | F,S, Su |  |  |
|  Free Electives | 6 |  |  | F,S ,Su |  |  |
|  Total | 15 |  |  |  |  |  |
| Semester Six |  |  |  |  |  |  |
| PHYS Electives | 1-3 |  |  | F,S, Su | See Catalog |  |
| Upper Division PHYS Electives | 4 |  | UM | F,S, Su | See Catalog |  |
| GE Objective 7 or 8 | 3 |  | GE | F,S, Su |  |  |
|  Free Electives | 5-7 |  |  | F,S, Su |  |  |
|  Total | 15 |  |  |  |  |  |
| Semester Seven |  |  |  |  |  |  |
| 4000 Level PHYS Electives | 3 |  | UM | F,S, Su | See Catalog |  |
|  Free Upper Division Electives | 9 |  | UU | F,S, Su | See Catalog |  |
|  Free Electives | 3 |  |  | F,S, Su |  |  |
|  Total | 15 |  |  |  |  |  |
| Semester Eight |  |  |  |  |  |  |
| 4000 Level PHYS Electives | 3 |  | UM | F,S, Su | See Catalog |  |
|  Free Upper Division Electives | 8 |  | UU | F,S, Su | See Catalog |  |
|  Free Electives | 4 |  |  | F,S, Su |  |  |
|  Total | 15 |  |  |  |  |  |
| \*GE=General Education Objective, UU=Upper Division University, UM= Upper Division Major\*\*See Course Schedule section of Course Policies page in the e-catalog (or input F, S, Su, etc.)  |

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| BA, Physics Page 2 |
| **2023-2024 Major Requirements** | **CR** | **GENERAL EDUCATION OBJECTIVES****Satisfy Objectives 1,2,3,4,5,6 (7 or 8) and 9** | **36 cr. min** |
| **MAJOR REQUIREMENTS** | **30-31** | 1. Written English (6 cr. min) ENGL 1101 | 3 |
| MATH 1170 Calculus I (Counted in Objective 3) |  ENGL 1102 | 3 |
| MATH 1175 Calculus II | 4 | 2. Oral Communication (3 cr. min) COMM 1101 | 3 |
| MATH 2275 Calculus III | 4 | 3. Mathematics (3 cr. min) MATH 1170 | 4 |
| MATH 3360 Differential Equations | 3 | 4. Humanities, Fine Arts, Foreign Lang. **(2 courses; 2 categories; 6 cr. min)** |
| **At least 24 credits of Physics courses including:** (includes Obj 5 counted course) |  |  |
| PHYS 1111 & 1113 General Physics I w/ Lab (Counted in Objective 5) | 4 |  |  |
|  AND PHYS 1112 & 1114 General Physics II w/ Lab | 5. Natural Sciences **(2 lectures-different course prefixes, 1 lab; 7 cr. min)** |
| **OR** PHYS 2211 & 2213 Engineering Physics I w/ Lab (Counted in Obj 5) | 5 | PHYS 1111 and PHYS 1113 | 4-5 |
|  AND PHYS 2212 & 2214 Engineering Physics II w/ Lab |  OR PHYS 2211 and PHYS 2213 |
| PHYS 3301 Modern Physics | 3 |  |  |
| ^11-13 credits of electives with at least 6 credits of PHYS 4000-level  | 11-13 | 6. Behavioral and Social Science **(2 courses-different prefixes; 6 cr. min)** |
| courses, excluding PHYS 4492 |  |  |
|  |  |  |  |
|  |  | One Course from EITHER Objective 7 OR 8 **(1course; 3 cr. min)** |
|  |  | 7. Critical Thinking |  |  |
|  |  | 8. Information Literacy  |
|  |  | 9. Cultural Diversity **(1 course; 3 cr. min)** |
|  |  |  |  |
|  |  | General Education Elective to reach 36 cr. min. **(if necessary)** |
|  |  |   |  |
|  |  |  |  |
|  |  |  Total GE | 38-39 |
|  |  | Undergraduate Catalog and GE Objectives by [Catalog Year](https://www.isu.edu/advising/academic-support/general-education/)  *http://coursecat.isu.edu/undergraduate/programs/* |
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|  |  |  |  |
|  |  | **MAP Credit Summary** | **CR** |
|  |  | Major  | 30-31 |
|  |  | General Education  | 38-39 |
|  |  | Upper Division Free Electives to reach 36 credits | 20 |
|  |  | Free Electives to reach 120 credits | 31 |
|  |  |  TOTAL | 120 |
|  |  |  |
|  |  | **Graduation Requirement Minimum Credit Checklist** | **Confirmed** |
|  |  | Minimum 36 cr. General Education Objectives (15 cr. AAS) | x |
|  |  | Minimum 15 cr. Upper Division in Major (0 cr. Associate) | x |
|  |  | Minimum 36 cr. Upper Division Overall (0 cr. Associate) |  | x |
|  |  | Minimum of 120 cr. Total (60 cr. Associate) |  | x |
|  |  |  |
|  |  | ***MAP Completion Status (for internal use only)*** |
| **Advising Notes** |  | *Date* |
| ^ The number of Physics electives needed (11 or 13) will depend on which  | *Department:*  |  |
| Physics sequence was selected. | *CAA or COT:* |  |
|  | *Registrar:*  |  |
|  | **Complete College American Momentum Year****Math and English course in first year-Specific GE MATH course identified****9 credits in the Major area in first year****15 credits each semester (or 30 in academic year)****Milestone courses** |
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 Form Revised 9.10.2019