



UNIVERSITY OF WISCONSIN
WHITEWATER

**Sample 4 Year Plan (Fall 2015 Requirements)
 Physics, Engineering Emphasis
 Bachelor of Arts, COLLEGE OF LETTERS AND SCIENCES**

The 4 year Plan illustrates the type of curriculum a new freshman would take to complete a degree in 4 years; it is not an official document. Refer to Academic Advising Report for full requirements.

Sample Academic Advising Reports are available on-line at

<http://www.uww.edu/registrar/sample-aars-and-ars/sample-aars-undergraduate>.

| 1 st Semester | Units | 2 nd Semester | Units |
|--|-------|---|-------|
| Physics 180 Physics for Scientists & Engineers | 5 | Physics 181 Physics for Scientists & Engineers II | 5 |
| Physics 190 Frontiers of Engineering & Physics | 1 | Math 254 Calculus & Analytic Geometry II | 5 |
| Math 253 Calculus & Analytic Geometry I | 5 | GENED Core | 3 |
| English 101 Freshman English | 3 | English 102 Freshman English | 3 |
| Intrauniversity 104 New Student Seminar | 1 | | |
| Semester Total | 15 | Semester Total | 16 |
| 3 rd Semester | Units | 4 th Semester | Units |
| Physics 190 Frontiers of Engineering & Physics | 1 | Physics 310 Mechanics: Dynamics | 3 |
| Physics 221 Intermediate Laboratory | 2 | Physics 330 Electronics | 3 |
| Physics 305 Mechanics: Statistics | 3 | Physics 331 Electronics Laboratory | 1 |
| Physics 324 Methods of Theoretical Physics | 3 | Math 355 Matrices & Linear Algebra | 3 |
| Math 255 Calculus & Analytic Geometry III | 3 | GENED Core | 3 |
| GENED Core | 3 | Comm 110 Intro to Human Communication | 3 |
| Semester Total | 15 | Semester Total | 16 |
| 5 th Semester | Units | 6 th Semester | Units |
| Physics 364 Thermal Physics | 3 | Physics 325 Classical Electromagnetism | 3 |
| Math 361 Differential Equations | 3 | Physics 344 Modern Physics | 4 |
| Chemistry 102 Intro to Chemistry | 5 | Computer Science 172 OR 174 OR 347 | 3 |
| Gened 390 World of Ideas | 3 | Chemistry 104 Intro to Chemistry II | 5 |
| PEGNRL 192 Personal Health & Fitness | 1 | | |
| Semester Total | 15 | Semester Total | 15 |
| 7 th Semester | Units | 8 th Semester | Units |
| Physics 489 Senior Seminar | 2 | Physics 360 Optics | 4 |
| Physics 303 Microprocessors Laboratory | 2 | Minor Course | 3 |
| Physics 496 Special Topics: Digital Logic | 2 | General Ed Elective | 3 |
| English 370 Advanced Composition | 3 | Elective | 3 |
| U.S. Racial & Ethnic Diversity Course | 3 | Elective (if needed) | 3 |
| General Ed Elective | 3 | | |
| Semester Total | 15 | Semester Total | 13-16 |

Department Website: <http://www.uww.edu/cls/physics>

Transfer students may have different general education requirements than those listed. Refer to your Advising Report for requirements specific to you.

General Degree Notes

You must begin your Math and English sequences with the appropriate course. The English course you start with will be determined by your ACT/SAT score. The Math course you start with will be determined by your UW Math Placement score or AP Calculus results. Please refer to your Academic Advising Report and adjust the sample 4 year plan accordingly.

All students must complete a minimum of 120 credits including:

- 1) At least 32 units of general education, including specific Gen Ed core courses, as well as approved math and science, physical education, and elective courses. Your general education electives must come from the following categories: GA, GS, GH, GE, or GI.
- 2) All requirements for the BA or BS Degree.
- 3) All requirements for the major and minor (if required).

College of Letters and Sciences Degree Notes

This plan includes Bachelor of Science (BS) requirements. For the BS, students must complete two lab sciences **and** 5 credits of advanced math or two 3 credit courses chosen from advanced math, statistics or computer science instead of the BA requirements.

A Bachelor of Arts (BA) is also available. For the BA, students must demonstrate that they have achieved basic competency in a foreign language equivalent to one year of study at the college level. Students must also complete two 300/400 level courses outside of the major and minor subjects.

Major Notes

The Planning Guide begins with the most common placement for this major but students who place lower may need additional math credits.

Courses in **bold** typeface indicate specific courses that must be completed for the major.