

Sample schedule for BS in physics (computational physics concentration) for transfer students

This sample schedule assumes that the student has already taken the equivalent of MATH 113, 114, 213, 214; PHYS 160, 161, 260, 261 and has completed the lower-level Mason core requirements.

Number of credits in parentheses. Courses designated “Elective” are entirely at the student's discretion. At least 45 credits must be upper-level (300 or above). This sample schedule satisfies this requirement, assuming at least one elective is upper-level.

Students who are not completing a second major take 9 credits of physics and astronomy electives. In this sample schedule, ASTR 210, PHYS 306, and PHYS 412 are selected. Other options are possible, but note that most physics and astronomy courses are offered only in fall or only in spring (and sometimes only every other year). The tentative course offering schedule for future semesters can be found here: <http://physics.gmu.edu/~joe/course-schedule.pdf>

Fall of Year 1 (15)

| | | |
|----------|-----|---|
| PHYS 251 | (3) | Intro to Computer Techniques in Physics |
| PHYS 262 | (3) | University Physics III |
| PHYS 301 | (3) | Analytical Methods of Physics |
| PHYS 303 | (3) | Classical Mechanics |
| PHYS 305 | (3) | Electromagnetic Theory |

Spring of Year 1 (15)

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| PHYS 306 | (3) | Wave Motion and Electromagnetic Radiation |
| PHYS 307 | (3) | Thermal Physics |
| PHYS 325 | (3) | Intermediate Computer Methods in Physics |
| PHYS 402 | (3) | Introduction to Quantum Mechanics and Atomic Physics |
| CDS 303 | (3) | Scientific Data Mining |

Fall of Year 2 (16)

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|-----------------|-----|---------------------------------------|
| PHYS 311 | (3) | Instrumentation |
| PHYS 403 | (3) | Quantum Mechanics II |
| PHYS 410 | (4) | Computational Physics Capstone |
| PHYS 408 or 409 | (3) | Senior Research or Physics Internship |
| ENGH 302 | (3) | Advanced Composition |

Spring of Year 2 (15)

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|----------|-----|--------------------------------------|
| PHYS 412 | (3) | Solid State Physics and Applications |
| MATH 203 | (3) | Linear Algebra |
| CDS 302 | (3) | Scientific Data and Databases |
| Elective | (3) | |
| Elective | (3) | |