

Pre-Engineering at Wittenberg

Wittenberg students have a choice of three strong paths to a successful engineering career. Whichever path you choose, it's important to start taking math and core science courses as early as possible, since these core courses will apply to any of the three paths. (See the next page for a sample schedule for the 3-2 engineering program.)

- **Dual degree (3-2 or 4-2) engineering program**

Study at Wittenberg for three or four years, completing courses required for a Wittenberg major (usually Physics, Chemistry, or Mathematics), general education requirements, and the science and math courses needed to form the core of the engineering curriculum. Then study at a participating engineering school for another two years to complete the program. Receive two degrees: a B.A. from Wittenberg and a B.S. in engineering from the engineering school. Two engineering schools currently participate in the program: Case Western Reserve University and Columbia University. Case requires a 3.0 or better grade point average overall as well as in science and math coursework. Columbia requires at least a 3.3 grade point average, with B or better grades in all core science and math courses. Admission to these schools is guaranteed for students recommended by Wittenberg. Besides the two official dual-degree programs, Wittenberg students have made similar arrangements with other engineering schools (recent examples include Ohio State, the University of Cincinnati, and SUNY-Buffalo).

- **Employment in engineering with a Physics B.S. degree**

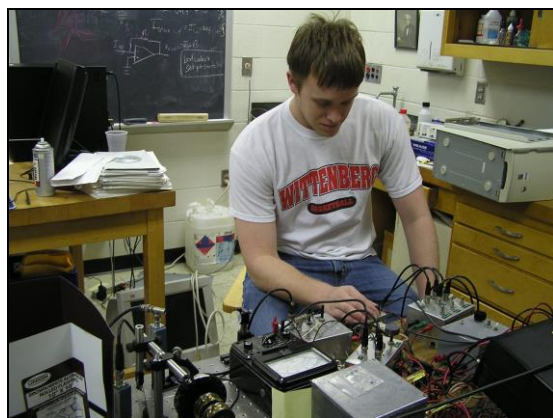
Physics majors are valued by many employers for their broad science and math background and their hands-on skills with computers and test equipment. Recent Wittenberg Physics B.S. degree recipients are working as engineers in the automotive, aerospace, and defense industries.

- **Graduate engineering programs**

Complete a bachelor's degree in math or science at Wittenberg and then enter a graduate (master's or Ph.D.) program in engineering. Graduate engineering degrees generally qualify you for jobs with higher starting salaries and more independent work responsibilities. Recent graduate school acceptances include Ohio State (electrical engineering) and the University of Michigan (biomedical engineering).

Get involved: research and internship opportunities

Our students have been placed in internships in a variety of engineering firms, academic institutions, and at Wright-Patterson Air Force Base. Funding for student research at Wittenberg is also available. The Wittenberg chapter of the Society of Physics Students frequently takes on projects that involve building demonstration and teaching equipment such as a radio telescope.



For more information

Prof. Elizabeth George, Physics Department chair: egeorge@wittenberg.edu, (937)327-7854, Science 308
or

Prof. Jeremiah Williams, Pre-engineering liaison: jwilliams@wittenberg.edu, Science 311

Sample 3-2 Engineering schedule (for a Wittenberg major in Physics)

Courses fulfilling specific pre-engineering requirements are marked with an asterisk: *.

AP credits and/or summer courses applied to general education requirements can provide additional flexibility in the schedule.

Note: Math 201 is offered every semester and is a prerequisite for the other math courses typically required by engineering programs. Physics 200 is offered every semester and is a prerequisite for all other 200-level physics courses. The prerequisite for Physics 200 and Math 201 is Math Placement 25 or Math 120Q.

Year 1:

<i>Fall</i>			<i>Spring</i>	
*Physics 200B	5		Physics 213/214/215	5
Language 112F	5		*Math 202Q	4
*Math 201Q	4		Gen Ed A (W)	4
First year seminar	1		English 101 (W)	4
			First year seminar	1
Total credits	15			18

Year 2:

<i>Fall</i>			<i>Spring</i>	
*Physics 218	5		Gen Ed A (W)	4
*Comp Sci 150	5		*Math 212	4
*Math 215	4		*Chem 162	5
*Chem 121B	5		Phys 220 (W)	5
Total credits	19			18

Year 3:

<i>Fall</i>			<i>Spring</i>	
Physics 311	4		Physics 330, 332, or 411	4
Physics 313	2		Physics 350 (W)	1
Gen Ed R (W)	4		Physics elective	2
Gen Ed H (W)	4		Gen Ed S	2
Physics 360	0		Gen Ed C (W)	4
Physics elective	2		Physics 360	1
Gen Ed S	2		Econ 190S	4
Total credits	18			18