

## Engineering Physics (3-2) B.S. Adviser's Data Sheet (3 years at EIU, followed by 2 years at UIUC or SIUC)

**Note: Completion of a B.S. in Engineering degree from institutions other than UIUC or SIUC may also be accepted. Please contact the Pre-Engineering Coordinator for information.**

FRESHMAN YEAR (odd year fall, even year spring)			
Fall Semester		Spring Semester	
ENG 1001G, Composition I	3	ENG 1002G, Literature	3
MAT 1441G, Calculus I	5	MAT 2442, Calculus II	5
PHY 1351G, General Physics I	3	PHY 1361, General Physics II	3
PHY 1352G, General Physics I Lab	1	PHY1362, General Physics II Lab	1
CHM 1310G, General Chemistry I	3	CHM 1410, Chemistry II	3
CHM 1315G, General Chemistry I Lab	1	CHM 1415, Chemistry II Lab	1
	16	PHY 1001, Intro to Physics & Engineering	1
			17
SOPHOMORE YEAR (even year fall, odd year spring)			
Fall Semester		Spring Semester	
MAT 2443, Calculus III	4	MAT 3501, Differential Equations I	3
PHY 1371, General Physics III	3	Humanities & Fine Arts (G)	3
PHY 1372, General Physics III Lab	1	PHY Elective	3
CMN 1310G, Intro to Speech Communication	3	CSM 2170, Computer Science I	4
Social & Behavioral Sciences (G)	3	PHY 2450, Classical Dynamics	3
PHY 2390, Statics	3		
	17		16
JUNIOR YEAR (odd year fall, even year spring)			
Fall Semester		Spring Semester	
PHY elective (recommend _____)	3-4	PHY 4712, Experimental Physics II	1
Social & Behavioral Sciences (G)	3	PHY Elective (Recommend _____)	4
PHY 4711, Experimental Physics I	3	Social & Behavioral Sciences (G)	3-4
PHY 3150, Electronics	1	Scientific Awareness, Biological Sciences (G)	3
Humanities & Fine Arts (G)	4	Humanities & Fine Arts (G)	3
PHY 4000, Seminar in Physics	1	PHY elective (Recommend _____)	3-4
	16-17		17-19
<p>*All transfer students to UIUC must have completed the equivalent of the intermediate level (or 3 high school years) of a single foreign language with a grade of C or better.</p> <p>**The student must also submit 3 essays for the Electronic Writing Portfolio.</p> <p>***One (G) course must have a focus on cultural diversity.</p>			
<p>Additionally, students must take 12 semester hours of Physics from the categories listed below. A limit of 3 hours of 4444, 4555, 4600, 4644 or 4800 may be counted toward the degree.</p>			
<p><u>At least one course from Category A:</u></p> <p>PHY 3415 PHY 4855</p> <p><u>At least one course from Category B:</u></p> <p>PHY 3350 PHY 4320 PHY 4470 PHY 4750 PHY 4780</p> <p><u>Category C:</u></p> <p>PHY 3150 PHY 3270 PHY 3420 PHY 4100 PHY 4444 PHY 4555 PHY 4600 PHY 4644 PHY 4800 PHY 4865</p>		<p>(4 SH; F even) Electricity &amp; Magnetism I w/lab (3 SH; F odd) Quantum Mechanics</p> <p>(3 SH; On Demand) Introduction to Solid State Physics (4 SH; S even) Computational Physics (4 SH; F even) Optics (3 SH; F odd) Thermodynamics &amp; Statistical Mechanics (3 SH; S odd) Introduction to Plasma Physics</p> <p>(4 SH; F) Electronics (4 SH; S) Introduction to Circuit Analysis (4 SH; S odd) Electricity &amp; Magnetism II (3 SH; S odd) Astrophysics (3 SH) Honors Independent Study (3 SH) Honors Research (3 SH) Research in Physics (3 SH) Honors Thesis (1-6 SH) Advanced Independent Study (3 SH; S even) Advanced Quantum Mechanics</p>	

## Engineering Physics (3-2) B.S. Adviser's Data Sheet (3 years at EIU, followed by 2 years at UIUC or SIUC)

**Note: Completion of a B.S. in Engineering degree from institutions other than UIUC or SIUC may also be accepted. Please contact the Pre-Engineering Coordinator for information.**

FRESHMAN YEAR (even year fall, odd year spring)			
Fall Semester		Spring Semester	
ENG 1001G, Composition I	3	ENG 1002G, Literature	3
MAT 1441G, Calculus I	5	MAT 2442, Calculus II	5
PHY 1351G, General Physics I	3	PHY 1361, General Physics II	3
PHY 1352G, General Physics I Lab	1	PHY1362, General Physics II Lab	1
CHM 1310G, General Chemistry I	3	CHM 1410, Chemistry II	3
CHM 1315G, General Chemistry I Lab	1	CHM 1415, Chemistry II Lab	1
	16	PHY 1001, Intro to Physics & Engineering	1
			17
SOPHOMORE YEAR (odd year fall, even year spring)			
Fall Semester		Spring Semester	
MAT 2443, Calculus III	4	MAT 3501, Differential Equations I	3
PHY 1371, General Physics III	3	Humanities & Fine Arts (G)	3
PHY 1372, General Physics III Lab	1	PHY Elective	3
CMN 1310G, Intro to Speech Communication	3	CSM 2170, Computer Science I	4
Social & Behavioral Sciences (G)	3	PHY 2450, Classical Dynamics	3
PHY 2390, Statics	3		
PHY 4000, Seminar in Physics	1		
	18		16
JUNIOR YEAR (even year fall, odd year spring)			
Fall Semester		Spring Semester	
PHY elective (recommend _____)	3-4	PHY 4712, Experimental Physics II	1
Social & Behavioral Sciences (G)	3	PHY Elective (Recommend _____)	4
PHY 4711, Experimental Physics I	3	Social & Behavioral Sciences (G)	3-4
PHY 3150, Electronics	1	Scientific Awareness, Biological Sciences (G)	3
Humanities & Fine Arts (G)	4	Humanities & Fine Arts (G)	3
	15-16	PHY elective (Recommend _____)	3-4
			17-19
<p>*All transfer students to UIUC must have completed the equivalent of the intermediate level (or 3 high school years) of a single foreign language with a grade of C or better.  **The student must also submit 3 essays for the Electronic Writing Portfolio.  ***One (G) course must have a focus on cultural diversity.</p>			
<p>Additionally, students must take 12 semester hours of Physics from the categories listed below. A limit of 3 hours of 4444, 4555, 4600, 4644 or 4800 may be counted toward the degree.</p>			
<u>At least one course from Category A:</u> PHY 3415 PHY 4855 <u>At least one course from Category B:</u> PHY 3350 PHY 4320 PHY 4470 PHY 4750 PHY 4780 <u>Category C:</u> PHY 3150 PHY 3270 PHY 3420 PHY 4100 PHY 4444 PHY 4555 PHY 4600 PHY 4644 PHY 4800 PHY 4865		(4 SH; F even) Electricity & Magnetism I w/lab (3 SH; F odd) Quantum Mechanics (3 SH; On Demand) Introduction to Solid State Physics (4 SH; S even) Computational Physics (4 SH; F even) Optics (3 SH; F odd) Thermodynamics & Statistical Mechanics (3 SH; S odd) Introduction to Plasma Physics (4 SH; F) Electronics (4 SH; S) Introduction to Circuit Analysis (4 SH; S odd) Electricity & Magnetism II (3 SH; S odd) Astrophysics (3 SH) Honors Independent Study (3 SH) Honors Research (3 SH) Research in Physics (3 SH) Honors Thesis (1-6 SH) Advanced Independent Study (3 SH; S even) Advanced Quantum Mechanics	