

Engineering Science Major

2009-2010 - Option 1

(Dual-Degree Program)

Suggested Sequence of Courses

Bethel University/College of Arts & Sciences

<i>Fall</i>		<i>Interim</i>		<i>Spring</i>		<i>Year</i>			
<u>Freshman</u>									
PHY290D	General Physics I	4	BIB101	Introduction to the Bible	3	PHY295	General Physics II	4	
MAT124M	Calculus 1	4				MAT125	Calculus 2	4	
GES106	Introduction to the Liberal Arts	1				GES130	Christianity & Western Culture	4	
GES110	College Writing	3					Physical Well-being (Y) course	1	
GES125	Introduction to the Creative Arts	<u>4</u>					Nature of Persons (N) course	<u>3</u>	
		16			<u>3</u>			16	35
<u>Sophomore</u>									
CHE111D	General Chemistry I	4	THE201	Christian Theology	3	COS205	Scientific Computing	3	
MAT223	Multivariable Calculus	3				MAT222	Differential Equations	3	
^PHY300	Electronics	4				^PHY310	Modern Physics	4	
	Second Language (S) course*	<u>4</u>					Contemporary Western Life and Thought (L) course	<u>3</u>	
		15			<u>3</u>			13	31
<u>Junior</u>									
^PHY320	Math Methods in Physics & Eng.	4		Science, Technology, and	3	PHY350	Computer Methods in Physics and	4	
	Interpreting Biblical Themes (J) course	3		Society (K) course			Engineering ^a		
	World Cultures (U) course	3					Contemporary Christian Issues (P) course	3	
	Leisure and Lifetime Sports (Q) course	1					Comparative Systems (G) course	3	
	Elective	<u>3</u>					Elective (Science course recommended)	4	
		14			<u>3</u>			14	<u>31</u>
									97

This is a dual-degree Engineering Science program. It must be completed at a university which offers engineering degrees. Students receive their Bethel degree with an Engineering Science major only upon completion of the engineering degree at the other school.

____ Artistic Experience (A) ____ Cross-cultural Experience (Z)

* Students must complete through the second semester of a first year language course or equivalent. (Check the Catalog for details of this option.)

▪ This program assumes a student will use PHY290D and MAT124M to meet the general education Laboratory Science and Mathematics requirements.

^a MAT344 Numerical Methods may be substituted for PHY350.

[^] Elective choices depend on area of engineering interest. At least 12 credits must be chosen from *Electronics, Modern Physics, Mathematical Methods in Physics & Engineering, Mechanics, Fluid Mechanics, Topics in Applied Physics, Probability and Statistics, General Chemistry II*. Chemical Engineers must choose *Organic Chemistry I & II*.

Most financial aid packages stipulate 12 credits/semester; Minnesota state grants are reduced when credit load falls below 15 credits/semester. (Interim credits may be split between fall and spring for state grant purposes only.)

Engineering Science Major
 2009-2010 - Option 2 – Humanities Option
 (Dual-Degree Program)

Suggested Sequence of Courses

Bethel University/College of Arts & Sciences

<i>Fall</i>		<i>Interim</i>		<i>Spring</i>		<i>Year</i>			
<u>Freshman</u>									
PHY290D	General Physics I	4	BIB101	Introduction to the Bible	3	PHY295	General Physics II	4	
MAT124M	Calculus 1	4				MAT125	Calculus 2	4	
GES106	Introduction to the Liberal Arts	1				GES146	Western Humanity in Christian Perspective II	4	
GES145	Western Humanity in Christian Perspective I	4					Second Language (S) course*	4	
GES110	College Writing	<u>3</u>							
		<u>16</u>			<u>3</u>			<u>16</u>	35
<u>Sophomore</u>									
CHE111D	General Chemistry I	4				COS205	Scientific Computing	3	
MAT223	Multivariable Calculus	3				MAT222	Differential Equations	3	
^PHY300	Electronics	4				^PHY310	Modern Physics	4	
THE201	Christian Theology	3					Contemporary Western Life and Thought (L) course	3	
		<u>14</u>			<u>3</u>		Physical Well-being (Y) course	<u>1</u>	
								14	31
<u>Junior</u>									
^PHY320	Math Methods in Physics & Eng.	4				PHY350	Computer Methods in Physics and Engineering ^a	4	
	Interpreting Biblical Themes (J) course	3					Contemporary Christian Issues (P) course	3	
	World Cultures (U) course	3					Comparative Systems (G) course	3	
	Leisure and Lifetime Sports (Q) course	1					Elective (Science course recommended)	<u>4</u>	
	Elective	<u>3</u>			<u>3</u>			14	<u>31</u>
		14							97

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