Advisor: \_\_\_\_\_

Minimum graduation credits: 124 Minimum gpa in major:

Name:	
Catalog.	2009 - 201

Catalog: 2009 – 2010 Transfer credits:

PHYSICS	
<b>Professional Concentration</b>	

CORE REQUIREMENTS MINIMUM OF 20 CREDITS AT GORDON

#### **COURSES IN MAJOR**

COMMON COURSES (36 credits)		REQUIRED COURSES		
COR 107 The Great Conversation	'' 4	PHY 121 Intro Physics I	4	
BCM 101 Old Testament	4	PHY 122 Intro Physics II	4	
BCM 103 New Testament	4 4 4 4 4 4	PHY 130 First Year Phys Sem	1	
PHI 118 The Examined Life	4	PHY 214 Math Meth Phys I	4	
HIS 121 Historical Perspectives	4	PHY 236 Modern Physics	4	
NSM 202 Scientific Enterprise	4 <u> </u>	PHY 314 Mechanics	4	
BCM 280 Christian Theology	4	PHY 339 Elect & Magn I	4	
Dem 200 Offisian meology		PHY 391 Junior Sem I	0	
FOREIGN LANGUAGE		PHY 392 Junior Sem II	0	
(First semester language)	1	PHY 471 Research I	1-4	
(Second semester language)	4 4	PHY 472 Research II	1-4	
	4	PHY 491 Senior Sem I	1	
PHYSICAL EDUCATION		PHY 492 Senior Sem II	1	
PED LaVida or Discovery	0	MAT 141 Calculus I	4	
	0	MAT 142 Calculus II	4 4 4	
(Concepts of Wellness by petition only)	0	MAT 223 Calculus III	2	
PED (PE Activity)	0	MAT 225 Differential Equations	4	
PED (PE Activity)	0		•	
THEMATIC COURSES (20 credit	s)	One of the Following Sequences:		
At least one must be fulfilled with an approved lite		Chemistry:		
minimum 3 courses at Gordon.		CHE 111 Principles of Chemistry I	4	
		CHE 112 Principles of Chemistry II	4	
Natural World Can be fulfilled with MAT141				
	4	Computer Science:		
		CPS 121 Introduction to Programming	4	
Human Person		CPS 122 Object-Oriented Software Development	4	
	4			
Aesthetic Sensibilities		Concentration Courses		
Aesthetic Sensibilities	4	PHY 225 Electric/Electronic Circuits	4	
	4	PHY 355 Quantum Mechanics	4	
Civia Baananaihility		PHY 372 Thermal Physics	4	
Civic Responsibility	1	,		
· · · · · · · _ · · _ · · · · · _ = ^ {	4	Recommended Courses		
Gobal Understanding*		PHY 313 Mathematical Methods in Physics II	4	
Cosal Charlotanang	0-4	PHY 340 Electricity and Magnetism II	4	
	0-4	PHY 341 Optics	4	
*Global Understanding may be fulfilled in a variety of	of ways through	PHY 371 Selected Topics in Physics	2	
study abroad, approved missions trips, or appropria				
oracy asiona, approved missions mps, or appropria				

### ELECTIVES – If required to reach 124 minimimum


Advisor:

Minimum graduation credits: 124 Minimum gpa in major: Name: \_\_\_\_\_

Catalog: 2009 – 2010 Transfer credits:

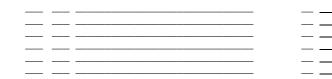
PHYSICS

**Computational Physics Concentration** 

## CORE REQUIREMENTS MINIMUM OF 20 CREDITS AT GORDON

#### **COURSES IN MAJOR**

COMMON COURSES (36 credits)	REQUIRED COURSES	
	PHY 121 Intro Physics I 4	
COR 107The Great Conversation4BCM 101Old Testament4BCM 103New Testament4PHI 118The Examined Life4HIS 121Historical Perspectives4NSM 202Scientific Enterprise4BCM 280Christian Theology4	PHY 122 Intro Physics II 4	
BCM 103 New Testament 4	PHY 130 First Year Phys Sem 1	
PHI 118 The Examined Life 4		
LIS 121 Listerial Derenatives	PHY 214 Math Meth Phys I 4 PHY 236 Modern Physics 4	
HIS 121 Historical Perspectives 4	PHY 314 Mechanics 4	
NSM 202 Scientific Enterprise 4	PHY 339 Elect & Magn I 4	
BCM 280 Christian Theology 4	PHY 391 Junior Sem I 0	
	PHY 392 Junior Sem II 0	
FOREIGN LANGUAGE	PHY 471 Research I 1-4	
(First semester language)         4           (Second semester language)         4	PHY 472 Research II 1-4	
(Second semester language) 4		
	PHY 491 Senior Sem I 1	
PHYSICAL EDUCATION	PHY 492 Senior Sem II 1	
PED LaVida or Discovery 0	MAT 141         Calculus I         4            MAT 142         Calculus II         4	
(Concepts of Wellness by petition only)	MAT 142 Calculus II 4	
PED (PE Activity) 0	MAT 223 Calculus III 2 MAT 225 Differential Equations 4	
PED(PE Activity)         0           PED(PE Activity)         0	MAT 225 Differential Equations 4	
THEMATIC COURSES (20 credits)	One of the Following Sequences:	
At least one must be fulfilled with an approved literature course;	Chemistry:	
minimum 3 courses at Gordon.	CHE 111 Principles of Chemistry I 4	
	CHE 112 Principles of Chemistry II 4	
Natural World Can be fulfilled with MAT141		
4	Computer Science:	
	CPS 121 Introduction to Programming 4	
Human Person	CPS 122 Object-Oriented Software Development 4	
4		
· ·		
Aesthetic Sensibilities	Concentration Courses	
4		
	2 courses numbered above PHY224:	
Civic Responsibility	PHY (Physics elective) 4	
4	PHY (Physics elective) 4	
T		-
Gobal Understanding*	Math/Comp Sci Courses (16 credits)	
0-4	PHY 313 Mathematical Methods in Physics II 4	
	CPS 221 Software Systems 4 CPS 222 Computational Structures and Algorithms 4	
*Global Understanding may be fulfilled in a variety of ways through	CPS 222 Computational Structures and Algorithms 4	
study abroad, approved missions trips, or appropriate courses.	CPS 311 Computer Organization 4	
study abroad, approved missions thps, or appropriate courses.	CPS 312 Computer Systems II 4	
	CPS 323 Programming Languagues 4	
	MAT 229 Discrete Mathematics for Comp Sci 2	
	MAT 231 Transition to Higher Mathematics 2	
ELECTIVES – If required to reach 124 minimimum	MAT 232 Linear Algebra 4	
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	MAT 310 Statistics A	
	MAT 319 Statistics 4	
	MAT 335 Algebraic Structures 4	
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Name: \_\_\_\_\_

Minimum graduation credits: 124 Minimum gpa in major: Advisor: \_\_\_\_\_\_ Catalog: 2009 - 2010 Transfer credits: \_\_\_\_\_\_

PHYSICS	
<b>Engineering Physics Concentration</b>	

## CORE REQUIREMENTS MINIMUM OF 20 CREDITS AT GORDON

### **COURSES IN MAJOR**

COMMON COURSES (36 credits)	REQUIRED COURSES
	PHY 121 Intro Physics I 4
COR 107       The Great Conversation       4         BCM 101       Old Testament       4         DOM 102       Num Testament       4	PHY 122 Intro Physics II 4
BCM 103 New Testament 4	PHY 130 First Year Phys Sem 1
BCM 103New Testament4PHI 118The Examined Life4HIS 121Historical Perspectives4	PHY 214 Math Meth Phys I 4
HIS 121 Historical Perspectives 4	PHY 236 Modern Physics 4
NSM 202 Scientific Enterprise – waived by major	PHY 314 Mechanics 4
BCM 308 Christian Theology 4	PHY 339 Elect & Magn I 4
	PHY 391 Junior Sem I 0
FOREIGN LANGUAGE	PHY 392 Junior Sem II 0
	PHY 471 Research I 1-4
(Begin Lang I)   4	PHY 472 Research II 1-4
	PHY 491 Senior Sem I 1
PHYSICAL EDUCATION	PHY 492 Senior Sem II 1
PED LaVida or Discovery 0	MAT 141 Calculus I 4
(Concepts of Wellness by petition only)	MAT 142 Calculus II 4
PED (PE Activity) 0	MAT 223 Calculus III 2
PED         (PE Activity)         0           PED         (PE Activity)         0	MAT 225 Differential Equations 4
	· · · · · · · · · · · · · · · · · · ·
THEMATIC COURSES (20 credits)	One of the Following Sequences:
At least one must be fulfilled with an approved literature course:	Chemistry:
minimum 3 courses at Gordon.	CHE 111 Principles of Chemistry I 4
	CHE 112 Principles of Chemistry II 4
Natural World Can be fulfilled with MAT141	
4	Computer Science:
	CPS 121 Introduction to Programming 4
Human Person	CPS 122 Object-Oriented Software Development 4
4	
Aesthetic Sensibilities	Concentration Courses
4	PHY 125       Intro to Engineering/Appl Sci       2         PHY 216       Statics       4
	PHY 216 Statics 4
Civic Responsibility	PHY 225 Electronics 4
4	PHY 328 Strength of Materials OR 4
	PHY 371 Selected Topics 1-4
Global Understanding*	Cáran alta Dagamman da d
0-4	Strongly Recommended
	PHY 355 Quantum Mechanics 4
*Global Understanding may be fulfilled in a variety of ways through	PHY 372 Thermal Physics 4
study abroad, approved missions trips, or appropriate courses.	

ELECTIVES – If required to reach 124 minimum

Advisor: \_\_\_\_\_

Minimum graduation credits: 124 Minimum gpa in major:

Name:	
Catalog.	2009 - 2010

Catalog: <u>2009 – 2010</u> Transfer credits: \_\_\_\_\_

PHYSICS 3-2 Engineering Program

### CORE REQUIREMENTS MINIMUM OF 20 CREDITS AT GORDON

COMMON COURSES (36 creCOR 107The Great ConversationBCM 101Old TestamentBCM 103New TestamentPHI 118The Examined LifeHIS 121Historical PerspectivesNSM 202Scientific EnterpriseBCM 280Christian Theology	dits) 4	
FOREIGN LANGUAGE	4	
PHYSICAL EDUCATION         PED LaVida or Discovery         (Concepts of Wellness by petition only)         PED (PE Activity)         PED (PE Activity)	0 0	
THEMATIC COURSES (20 cre At least one must be fulfilled with an approved minimum 3 courses at Gordon.		
Natural World Can be fulfilled with MAT141	4	
Human Person	4	
Aesthetic Sensibilities 4		
Civic Responsibility	4	
Gobal Understanding*		

\*Global Understanding may be fulfilled in a variety of ways through study abroad, approved missions trips, or appropriate courses.

### **COURSES IN MAJOR**

	REQUIRED COURSES
PHY 121	Intro Physics I
PHY 122	Intro Physics II
PHY 125	Intro to Engineering and Applied Sciences
PHY 214	Mathematical Methods in Physics I
PHY 216	Statics
PHY 225	Electrical and Electronic Circuits
PHY 236	Modern Physics
PHY 314	Mechanics
PHY 328	Strength of Materials
CHE 111	Principles of Chemistry I
CPS 121	Introduction to Programming
MAT 141	Calculus I
MAT 142	Calculus II
MAT 223	Calculus III
MAT 225	Differential Equations

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### ELECTIVES

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