

Institution Name: Cornell College
Date approved: November 2007
Updated date: January 26, 2007

ENDORSEMENT NO. 156
IAC 14.141(17)g

DATE OF PROGRAM:
September 3, 2007

Physics
GRADE LEVEL: 5-12
 February 2006

Professional Education Core:
 Requirements unique to this endorsement:

STATE REQUIREMENTS Professional Core	INSTITUTIONAL REQUIREMENTS Course(s) for Demonstrating Competencies
Methods of teaching with an emphasis in Science	EDU 324 Secondary Mathematics, Science and Social Studies EDU 328 Reading in the Content Area
Student Teaching in Physics	EDU 410, 420, 430, 440 Student Teaching

Content:

- A. Completion of a thirty semester hour teaching major which must minimally include
- B. Completion of twenty-four semester hours in Physics or
- C. Thirty semester hours in the broad area of Science to include fifteen semester hours in Physics.

Option 1:

STATE REQUIREMENTS Content Categories	INSTITUTIONAL REQUIREMENTS Course Numbers and Titles	Credit Hrs.
24 semester hours in Physics	1. PHY 111 General Physics I	4
	2. PHY 112 General Physics II	4
	3. PHY 114 Laboratory Physics	4
	4. PHY 302 Electronics	4
	5. PHY 303 Modern Physics	4
	6. PHY 312 Advanced Experimental Physics	4
	7. Four courses from the following: PHY 221 Astronomy PHY 223 Acoustics PHY 228 Energy Alternatives PHY 305 Waves PHY 321 Mechanics PHY 322 Electricity and Magnetism PHY 334 Introduction to Quantum Mechanics	16
Other:	8. MAT 120 OR MAT 121 Calculus (Single Var.)	4
	9. MAT 122 Calculus (Several Variables)	4
	10. CSC 140 Foundations of Computer Science	4
Strongly recommended - not required	PHY 221 Astronomy	
TOTAL Credit Hours		52

OR Option 2:

STATE REQUIREMENTS Content Categories	INSTITUTIONAL REQUIREMENTS Course Numbers and Titles	Credit Hrs.
30 semester hours in the broad area of Science to include 15 semester hours in Physics	1. PHY 111 General Physics I	4
	2. PHY 112 General Physics II	4
	3. PHY 114 Laboratory Physics	4
	4. PHY 303 Modern Physics	4
	5. MAT 120 OR MAT 121 Calculus (Single Var)	4
Strongly recommended but not required	PHY 221 Astronomy	
	A major in any Cornell science	
TOTAL Credit Hours		20