

I. CORE CURRICULUM 44
Math 1110 will count toward math requirement. PHY 1150, 1151 or CHE 1101, 1110, 1102, 1120 will count toward science requirement.

II. MAJOR REQUIREMENTS..... 70
2.0 major GPA is required for graduation. Major GPA calculation will include all courses taken in the major department, plus any other courses under II. Minimum of 18 semester hours of courses taken to fulfill major requirements must be courses offered by Appalachian. Course requirements for the Bachelor of Science degree in computer science are as follows (with program subject to the approval of the advisory committee):

A. Computer Science:

- C S 1440 _____ (3) Computer Science I (C)
- C S 2440 _____ (4) Computer Science II (C)
- C S 2450 _____ (3) Assembly Lang. & Machine Operation (C)
- C S 2490 _____ (3) Introduction to Theoretical Computer Science
- C S 3460 _____ (3) Data Structures (C)
- C S 3481 _____ (3) Computer Systems I (W, C)
- C S 3482 _____ (3) Computer Systems II (C)
- C S 3490 _____ (3) Programming Languages (C)
- C S 4100 _____ (1) Senior Seminar in Computer Science (W, S)
- C S 4667 _____ (3) Software Engineering (C)

<u>Major Designators</u>	
2 Writing (W)	_____
1 Speaking (S)	_____
Certified Proficiency in Communication (CPC)	
CPC is met with a grade of "C" or better in CS 4100	
<u>Other Designators</u>	
4 Writing (W)	_____
(English 1000 and 1100 will count as 2 W)	
4 Multi Cultural (MC)	_____
(History 1101 and 1102 will count as 2 MC)	
2 Numerical Data (ND)	_____
2 Computer (C)	_____
1 Cross Disciplinary (CD)	_____

B. Mathematics:

- C S 1100 _____ (3) Discrete Mathematics
- MAT 1110 _____ (4) Calculus with Analytic Geometry I (ND)
- MAT 1120 _____ (4) Calculus with Analytic Geometry II (ND)
- MAT 2240 _____ (3) Introduction to Linear Algebra (C)
- STT 3850 _____ (4) Introduction to Probability and Statistics (ND, C)

C. Eleven hours of Computer Science electives (approved by departmental Computer Science advisor)

These courses must be selected from Computer Science courses numbered above 2000 (excluding 3520) and may include MAT 4310 (ND, C). No more than three hours of CS 3470 may be included in the eleven hours.

D. Science Requirement: Complete a minimum of 12 semester hours:

1. One of the following science sequences:

- PHY 1150 _____ (5) Analytical Physics (W, ND) **OR** CHE 1101 _____ (3) Introductory Chemistry I (ND)
- PHY 1151 _____ (5) Analytical Physics (W, ND) CHE 1110 _____ (1) Introductory Chemistry I Lab
- CHE 1102 _____ (3) Introductory Chemistry II (ND)
- CHE 1120 _____ (1) Introductory Chemistry II Lab

2. Additional courses from the list below to complete minimum of twelve hours required, subject to the restriction that if you take PHY 1150-1151 to satisfy # 1, above, you may not take PHY 1103-1104 and that you must observe prerequisites.

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| BIO 1110 _____ (4) Concepts of Biology | GLY 1101 _____ (4) Intro. to Physical Geol (ND) |
| BIO 2000 _____ (4) Introduction to Botany | GLY 1102 _____ (4) Intro. to Historical Geol (CD, ND) |
| BIO 2001 _____ (4) Introduction to Zoology | GLY 1103 _____ (4) Intro. to Env. and Applied Geol (ND) |
| CHE 1101/1110 _____ (4) Intro. Chem. I (ND) &lab | GLY 1510 _____ (4) Geol. Science Honors–Phys (W, ND) |
| CHE 1102/1120 _____ (4) Intro. Chem. II (ND) &lab | GLY 1511 _____ (4) Geol. Science Honors–Hist (W, ND) |
| CHE 2201/2203 _____ (4) Organic Chem. I &lab | AST 1001 _____ (4), 1002 _____ (4) Intro. Astronomy I, II (ND) |
| CHE 2202/2204 _____ (3) Organic Chem. II & lab (W) | PHY 1150 _____ (5), 1151 _____ (5) Analytical Physics (W, ND) |
| CHE 2210 _____ (4) Quantitative Analysis (W) | PHY 1103 _____ (4), 1104 _____ (4) General Physics (W, ND) |
| CHE 3301 _____ (3), 3302 _____ (3) Physical Chem. I, II (C) | PHY 2010 _____ (4) PHY 2020 _____ (4) Intermediate Physics I, II |

III. MINOR (optional)

IV. ELECTIVES (taken to total 122 hours for the degree)..... 8
2 semester hours of free electives must be outside the major discipline. **122**