## Alabama State University CURRICULUM GUIDE COMPUTER SCIENCE <br> (Leading to the Bachelor of Science Degree)

NAME
SID\# $\qquad$ DATE $\qquad$

AREAS I-V - CORE CURRICULUM - 42 Hours

| Course | Hrs | Grade | Term | Course | Hrs | Grade | Term |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGLISH COMPOSITION - 6 Hours |  |  |  | HISTORY, SOCIAL AND BEHAVIORAL SCIENCES - 12 Hours |  |  |  |
| ENG 131 English Comp. (or 140 Honors) | 3 |  |  | GEO 206 World Geography * | 3 |  |  |
| ENG 132 English Comp. (or 141 Honors) | 3 |  |  | HIS 131 World History ** | 3 |  |  |
| HUMANITIES AND FINE ARTS - 12 Hours |  |  |  | HIS 132 World History ** | 3 |  |  |
| HUM 103 Hum. through the African..* | 3 |  |  | History, Social, and Behavioral Sciences Electives (Choose two)** |  |  |  |
| ENG 209 Introduction to Literature ** | 3 |  |  | ANT 113 Societies Around the World | 3 |  |  |
| ENG 210 Introduction to Literature** | 3 |  |  | ECO 251 Principles of Economics 1 | 3 |  |  |
| Choose 1 from the following....... |  |  |  | ECO 254 Introduction to Economics | 3 |  |  |
| ART 131 Art Appreciation | 3 |  |  | POS 207 American Government | 3 |  |  |
| THE 111 Introduction to Theatre Arts | 3 |  |  | PSY 251 General Psychology | 3 |  |  |
| MUS 121 Music Appreciation | 3 |  |  | SOC 110 Introduction to Sociology | 3 |  |  |
| Humanities Electives (Choose one of the following)** |  |  |  | NATURAL SCIENCES AND MATHEMATICS - $\mathbf{1 1}$ Hours *** |  |  |  |
| CMS 200 Voice \& Diction | 3 |  |  | Natural Sciences |  |  |  |
| CMS 205 Public Speaking | 3 |  |  | PHY 210 General College Physics | 4 |  |  |
| PHL 201 Logical Reasoning | 3 |  |  | PHY 211 General College Physics II | 4 |  |  |
| HUM 101 Interdisciplinary Humanities | 3 |  |  | Mathematics |  |  |  |
| HUM 102 Interdisciplinary Humanities | 3 |  |  | MAT 137 Precalculus Algebra | 3 |  |  |
| ORIENTATION - 1 Hour |  |  |  |  |  |  |  |
| ORI 100 Freshman Orientation | 1 |  |  |  |  |  |  |
|  |  |  |  | TOTAL REQUIRED CORE HOURS | 42 |  |  |

*Students originating at ASU requirement.
**Students satisfying the 6 semester hour literature sequence (ENG 209 and 210) are only required to complete 3 semester hours of history sequence (HIS 131 or 132) and are not required to take a humanities elective. Students satisfying the 6 semester hour history only required to take one history, social and behavioral science elective. sequence (HIS 131 and 132 ) are not required to complete the 6 semester hour literature sequence (ENG 209 or 210) and are only required to take one (1) history, social science, and behavior science elective.
***MAT 165 Precalculus Trig (BIO Majors)
***MAT 265 Calculus and Geometry (PHY and CHE Majors)
PRE-PROFESSIONAL COURSES - 22 HOURS

| Course | Hrs | Grade | Term |
| :--- | :---: | :---: | :---: |
| MAT 165 Precalculus Trigonometry | 5 |  |  |
| MAT 251 Introduction to Linear Algebra | 8 |  |  |
| MAT 256 Discrete Mathematics | 3 |  |  |


| Course | Hrs | Grade | Term |
| :--- | :---: | :---: | :---: |
| MAT 265 Calculus \& Analy. Geometry I | 4 |  |  |
| MAT 266 Calculus \& Analy. Geometry II | 4 |  |  |
| MAT 472 Probability \& Statistics I | 3 |  |  |
| TOTAL PRE-PROFESSIONAL HOURS | $\mathbf{1 9}$ |  |  |

AREA VI - REQUIRED MAJOR COURSES - 41 HOURS

| Course | Hrs | Grade | Term | Course | Hrs | Grade | Term |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CSC 210 Introduction to Computer Science | 3 |  |  | CSC 315 Data Communications And Networking | 4 |  |  |
| CSC 211 Program Concepts, Standards, Methods \& Algorithms | 4 |  |  | CSC 330 Architecture of Digital Computers | 3 |  |  |
| CSC 212 Introduction to Data Structure | 4 |  |  | CSC 414 Operating Systems | 4 |  |  |
| CSC 280 Introduction to Software Engineering I | 4 |  |  | CSC 421 Data Structure and Algorithm Analysis | 4 |  |  |
| CSC 311 Introduction to Computer Organization | 4 |  |  | CSC 431 Organization of Programming Languages | 3 |  |  |
| CSC 312 Introduction to Computer Systems | 4 |  |  |  |  |  |  |
|  |  |  |  | TOTAL REQUIRED MAJOR COURSE HOURS | 41 |  |  |

AREA VII - MAJOR COURSE ELECTIVES* - 10 HOURS

| Course | Hrs | Grade | Term | Course | Hrs | Grade | Term |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CSC 380 Algorithms | 3 |  |  | CSC 442 Computer Graphics | 3 |  |  |
| CSC 420 Numerical Methods | 3 |  |  | CSC 445 Supercomputing | 4 |  |  |
| CSC 435 Database and Information Retrieval | 3 |  |  | CSC 447 Object Oriented Programming | 4 |  |  |
| CSC 437 Software Engineering II | 3 |  |  | CSC 460 Artificial Intelligence | 3 |  |  |
| CSC 440 Automata, Computability \& Formal Lang. | 3 |  |  | CSC 490 Special Topics | 3 |  |  |
| CSC 441 Compiler Design | 4 |  |  | CSC 491 Special Topics | 3 |  |  |
|  |  |  |  | CSC 492 Special Topics | 3 |  |  |
|  |  |  |  | TOTAL MAJOR COURSE ELECTIVE HOURS | 10 |  |  |

*Students must select a minimum of 10 hours of coursework from the Major Course Elective list above.
AREA VIII - GENERAL ELECTIVE COURSES - 6 HOURS

| Course | Hrs | Grade | Term |
| :---: | :---: | :---: | :---: |
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| Course | Hrs | Grade | Term |
| :--- | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
| TOTAL GENERAL ELECTIVE <br> HOURS |  |  |  |

TOTAL SEMESTER HOURS $\qquad$

Expected Date of Graduation $\qquad$

## REMINDERS - FULFILL BEFORE GRADUATION: All Students

- ALL GRADES below a "C" must be repeated before graduation - University Policy.
- The UNIVERSITY READING requirement is to score a minimum of 13.0 on the Nelson Denny Reading Test. (currently suspended)
- The ENGLISH PROFICIENCY EXAMINATION is required to exit University College. (currently suspended)
- The SENIOR COMPREHENSIVE EXAMINATION is required before graduation. (currently suspended)
- The BACCALAUREATE WRITING COMPETENCY TEST is required before being admitted to senior status and must be passed before being eligible to file for a degree from ASU. (currently suspended)
- ALL GRADES below a "C" must be repeated before graduation - University Policy.


## REMINDERS - FULFILL BEFORE GRADUATION: Computer Science Majors

- The SENIOR COMPREHENSIVE EXAMINATION is required before graduation.


## SIGNATURES

## Student Signature

Advisor Signature

Chairperson Signature
$\overline{\text { Date }}$
Date
$\qquad$
Date

