## 2018-19 COMPUTER SCIENCE

Name:

|  | CORE REQUIREMENTS ( 56 credit hours) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Semester | Requirement | Course Options | Credits |
|  |  | Leader-Servant | SER 103 | 2 |
|  |  | Fresh. Writing | WRI 120 | 3 |
| Complete by Sophomore Year |  | Philosophy | LIB 110 | 3 |
|  |  | Am. Republic | LIB 120 | 3 |
|  |  | Literature | LIB 130 | 3 |
|  |  | Civilization I | ART 210, HIS 210, HUM 210, or POL 210 | 3 |
|  |  | Civilization II | ART 215, HIS 215, HUM 215, MUS 215, POL 215 or THE 215 | 3 |
|  |  | Mathematics | MAT 114, 115, 206, 221, 241, 242, CSC 213, or PHI 223 | 3-4 |
|  |  | Life Science | BIO 114, 126, 201, 212 or 228 | 3-4 |
|  |  | Physical Science | CHE 114, 201, PHY 114, 117, 126 , or 201 | 3-4 |
|  |  | One of the above life or physical science courses must have a LAB component BIO 126, PHY 117, and PHY 126 are non-lab courses. |  |  |
|  |  | Foreign Lang. 1 | FRE 101, GER 101, GRK 101, LAT 101, SPN 101 or equivalency exam | 3 |
|  |  | Foreign Lang. 2 | FRE 102, GER 102, GRK 102, LAT 102, SPN 102 or equivalency exam | 3 |
| $\begin{aligned} & \text { 坒 } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | Foreign Lang. 3 | FRE 201, GER 201, GRK 201, LAT 201, SPN 201 or competency exam | 3 |
|  |  | Foreign Lang. 4 | FRE 202, GER 202, GRK 202, LAT 202, SPN 202 or competency exam | 3 |
|  |  | Fine Arts | ART113, 120, 130, 223, MUS 108, 129R, 139, 151, 167, THE 106, or 110 | 3 |
|  |  | Social Sciences | ECN 210, 215, EDU 200, EDU 250, FHD 210, 250, POL 223, 233, 245, and PSY 105 | 3 |
|  |  | Health \& Wellness | PER 143 | 2 |
|  |  | Phys. Activity 1 | A Phys. Activity course from PER 100-199 or, $231,232 \text {, or 259R. }$ <br> - Athletes may only count their sport twice. <br> - Only classes with course numbers that end in ' $R$ ' may be repeated for credit. <br> - PER 203 does not count as an activity course | 0.5-1 |
|  |  | Phys. Activity 2 |  | 0.5-1 |
|  |  | Phys. Activity 3 |  | 0.5-1 |
| \% |  | Adv.Writing | WRI 320 <br> *must be completed by the end of your Junior year. | 3 |

Advisor:

| MAJOR REQUIREMENTS (35 credit hours) |  |  |
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| MAJOR Core (20 HOURS) |  |  |
| SEmESTER |  | Credits |
|  | CSC 120 Programming Fundamentals | 3 |
|  | CSC 220 Data Structures \& Algorithms | 3 |
|  | CSC 222 Discrete Mathematics | 3 |
|  | CSC 230 Computer Organization | 3 |
|  | CSC 240 Theory of Computation | 3 |
|  | CSC 250 Software Engineering | 3 |
|  | CSC 498 Senior Capstone | 2 |
| Electives I (9-15 Hours)(9 to 15 credits from among CSC 210, CSC 330, CSC 332, CSC 334,CSC 340, CSC 342, CSC 350, CSC 352 |  |  |
|  |  | 3 |
|  |  | 3 |
|  |  | 3 |
|  |  |  |
| Electives II (0-6 Hours)(0-6 credits from among CSC 110, MAT 221, MAT 341, MAT 343, PHI223, PHI 325R) |  |  |
|  |  |  |
|  |  | 3 |
|  |  | 3 |
|  |  |  |
| Course Sequence Suggestions |  |  |


| Other Courses Toward Graduation (Required: 120 credit hours) |  |  |
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## BACHELOR OF ARTS Graduation Requirements

## THE STUDENT MUST DO THE FOLLOWING TO RECEIVE A BACHELOR OF ARTS DEGREE:

1. COMPLETE A MINIMUM OF 120 CREDIT HOURS OF STUDY, AT LEAST 60 OF WHICH OR AT LEAST THE LAST 30 CREDITS BEFORE GRADUATION ARE AT SOUTHERN VIRGINIA. No MORE THAN 9 CREDIT HOURS WILL BE GRANTED FOR INTERNSHIP COURSES
2. COMPLETE ALL REQUIREMENTS OF THE SOUTHERN VIRGINIA CORE.
3. COMPLETE ALL REQUIREMENTS OF AT LEAST ONE MAJOR.
4. EARN A MINIMUM GRADE POINT AVERAGE OF 2.00 ON ALL COURSE WORK TAKEN AT THE UNIVERSITY.
5. COMPLY WITH ALL UNIVERSITY STANDARDS, REGULATIONS, AND PROCEDURES, FROM THE DATE OF MATRICULATION THROUGH THE DATE OF FINAL GRADUATION.

SOURCE: HTTP://SVU.EDU/ACADEMICS/CATALOG/GRADUATION-REQUIREMENTS

## COMPUTER SCIENCE Major Requirements

Computer science is the systematic study of computational systems and computability. It includes theories for understanding the analysis, design, implementation, validation and verification of solutions to complex problems, and for the elicitation, representation, manipulation and visualization of knowledge. More simply put, computer scientists learn to understand what a computer can and cannot do, how computers can efficiently perform specific tasks, how computers can store and retrieve specific types of information, how computers can most effectively organize and display information, and how computers can appear to behave intelligently. Building on the core ideas of a liberal education, the computer science major combines theory with practical experiences to develop skills in problem solving, programming, communication, and collaboration in order to help students realize their potential to assume leadership roles in an increasingly technical world.
Computer science majors can prepare for careers in research, development and teaching by pursuing graduate degrees, or they can apply their skills in virtually any industry, from business to biochemistry, and from education to entertainment.
Program coordinator: Dr. Alan Whitehurst
Major Requirements ( 35 credit hours)
Major Core (20 credit hours):
CSC 120 Programing Fundamentals (GE)(3)
CSC 220 Data Structures \& Algorithms (3)
CSC 222 Discrete Mathematics (3)
CSC 230 Computer Organization (3)
CSC 240 Theory of Computation (3)
CSC 250 Software Engineering (3)
CSC 498 Senior Capstone (2)
Electives I ( $9-15$ credits from among the following)
CSC 210 Advanced Web Authoring (3)
CSC 330 Operating Systems (3)
CSC 332 Networking Systems (3)
CSC 334 Programming Languages (3)
CSC 340 Artificial Intelligence (3)
CSC 342 Cyber Security (3)
CSC 350 Database Systems (3)
CSC 352 Platform Development (3)
Electives II: ( $0-6$ credit hours from among the following)
CSC 110 Authoring for the Web (3)
CSC 375R Topics in Computer Science (3)
CSC 385R Directed Study in Computer Science (3)
MAT 221 Statistics (3)
MAT 341 Calculus III (3)
MAT 343 Linear Algebra (3)
PHI 223 Introduction to Logic (3)
PHI 325R Intermediate Logic (3)

