

**2017-2018 Degree Map-Bachelor of Science in Computer Science Education**

This map is a term-by-term sample course schedule. The milestones listed to the right of each term are designed to keep you on course to graduate in four years. The Sample Schedule serves as a general guideline to help you build a full schedule each term. See course descriptions and prerequisites at <http://www.atu.edu/academics/catalog/>.

**Possible careers include:** Computer Science Teacher

#Prerequisite Courses: ENGL 0303 \_\_\_\_\_ ENGL 0404 \_\_\_\_\_ READ 0103 \_\_\_\_\_ MATH 0803 \_\_\_\_\_ MATH 1003 \_\_\_\_\_ MATH 0903 \_\_\_\_\_ MATH 0900 \_\_\_\_\_ MATH 1110 \_\_\_\_\_ COMS 1003 \_\_\_\_\_

**Sample Schedule**

| Semester 1  | Hrs.      | Grade      | Milestones/Notes                     | Semester 1 |
|---|-----------|------------|--------------------------------------|------------|
| ENGL 1013- Comp I (ACTS=ENGL 1013)                | 3         | #          | Required for Admission to Stage II   |            |
| MATH 1113- College Algebra (ACTS= MATH 1103)      | 3         | #          | Required for Admission to Stage II   |            |
| TECH 1001- Orientation to the University          | 1         |            |                                      |            |
| COMS 1333- Web Publishing I                       | 3         | #          | Prerequisite: COMS 1003 or BUAD 2003 |            |
| COMS 1403- Orientation to Computing, Info, & Tech | 3         | #          |                                      |            |
| COMS 1411- Computer and Information Science Lab   | 1         | #          |                                      |            |
| <b>Total hours</b>                                | <b>14</b> | <b>GPA</b> |                                      |            |

| Semester 2                                       | Hrs.      | Grade      | Milestones/Notes                   | Semester 2 |
|--|-----------|------------|------------------------------------|------------|
| ENGL 1023- Comp II (ACTS= ENGL 1023)             | 3         | #          | Required for Admission to Stage II |            |
| Social Sciences                                  | 3         |            |                                    |            |
| Fine Arts & Humanities                           | 3         |            |                                    |            |
| COMS 2104- Foundations of Computer Programming I | 4         | #          | Prerequisite: COMS 1403/1411       |            |
| COMS 2703/2700- Networks and Architecture/LAB    | 3         | #          | Prerequisite: COMS 1403/1411       |            |
| <b>Total hours</b>                               | <b>16</b> | <b>GPA</b> |                                    |            |

| Semester 3   | Hrs.      | Grade      | Milestones/Notes                            | Semester 3 |
|--|-----------|------------|---|------------|
| SEED 2002- Education as a Profession               | 2         | #          | Required for Admission to Stage II          |            |
| COMM 2173- Business and Professional Speaking      | 3         |            | COMM 2003 may substitute/Req'd for Stage II |            |
| COMS 2203- Foundations of Computer Programming II  | 3         | #          | Prerequisite: COMS 2104                     |            |
| COMS 2903-Discrete Structures for Technical Majors | 3         | #          | Prerequisite: COMS 2104                     |            |
| Science with Lab                                   | 4         |            |   |            |
| <b>Total hours</b>                                 | <b>15</b> | <b>GPA</b> |   |            |

| Semester 4                 | Hrs.      | Grade      | Milestones/Notes                        | Semester 4 |
|----------------------------|-----------|------------|---|------------|
| Social Sciences            | 3         |            |   |            |
| U.S. History/Government    | 3         |            |   |            |
| Science with Lab           | 4         |            |   |            |
| COMS 2213- Data Structures | 3         | #          | Prerequisites: COMS 2203, and COMS 2903 |            |
| *Elective                  | 3         |            | <b>2.70+ GPA REQUIRED</b>               |            |
| <b>Total hours</b>         | <b>16</b> | <b>GPA</b> | <b>COMS and SEED Advisor Assigned</b>   |            |

The Arkansas Course Transfer System (ACTS) is designed to assist in planning the academic progress of students. This system contains information about the transferability of courses within Arkansas public colleges and universities. The Arkansas Course Transfer System can be accessed at <http://acts.adhe.edu/>

\*The elective courses placed in the degree should be used by students to take either COMS courses or courses in another area that the student would like to get certified (i.e. mathematics, business - both of which offer a minor)

| Fine Arts and Humanities                                   | U.S. History & Government                                 |
|--|---|
| ART 2123 Experiencing Art (ACTS=ARTA1003)                  | HIST 1903 Survey of American History                      |
| MUS 2003 Introduction to Music (ACTS=MUSC1003)             | HIST 2003 United States History to 1877 (ACTS=HIST2113)   |
| TH 2273 Introduction to Theatre (ACTS=DRAM 1003)           | HIST 2043 Honors United States History to 1877            |
| ENGL 2173 Introduction to Film                             | HIST 2013 United States History from 1877 (ACTS=HIST2123) |
| JOUR 2173 Introduction to Film                             | POLS 2003 American Government (ACTS=PLSC2003)             |
| ENGL 2003 Introduction to World Literature (ACTS=ENGL2113) | <b>Science with Lab</b>                                   |
| ENGL 2013 Intro. to American Literature (ACTS=ENGL2653)    | BIOL 1014- Intro. to Biological Science (ACTS= BIOL1004)  |
| ENGL 2023 Honors World Literature                          | BIOL/PHSC 1004- Principles of Environmental Science       |
| PHIL 2003 Introduction to Philosophy (ACTS=PHIL1103)       | GEOL 1014- Physical Geology (ACTS= GEOL 1114)             |
| PHIL 2043 Honors Introduction to Philosophy                | PHSC 1013/1021- Physical Sci/Lab (ACTS= PHSC 1004)        |

**Sample Schedule**

| Semester 5  | Hrs.      | Grade      | Milestones/Notes                         | Semester 5 |
|---|-----------|------------|--|------------|
| SEED 3552- Child and Adolescent Development       | 2         | #          |  |            |
| SEED 3702- Introduction to Educational Technology | 2         | #          |  |            |
| COMS 3053- Implications of Technology on Society  | 3         | #          |  |            |
| COMS 3233- Database Design and Implementation     | 3         | #          | Prerequisites: COMS 2003, 2203, and 2903 |            |
| COMS 3903- Systems Software and Architecture      | 3         | #          | Prerequisites: COMS 2703 and 2104        |            |
| *Elective (BUAD 2053 or MATH 2163)                | 3         |            | *Pre-requisite for COMS 3243             |            |
| <b>Total hours</b>                                | <b>16</b> | <b>GPA</b> |  |            |

| Semester 6  | Hrs.      | Grade      | Milestones/Notes                                | Semester 6 |
|---|-----------|------------|---|------------|
| Fine Arts & Humanities                                | 3         |            |   |            |
| SEED 4052- Educating Diverse and Exceptional Learners | 2         | #          | Requires Stage II Admission                     |            |
| COMS 3243- Data Mining                                | 3         | #          | Prerequisite: BUAD 2053/MATH 2163 and COMS 3233 |            |
| COMS 3413- App Development                            | 3         | #          | Prerequisites: COMS 1333 and COMS 2213          |            |
| *Elective   | 4         |            |   |            |
| <b>Total hours</b>                                    | <b>15</b> | <b>GPA</b> | <b>APPLY FOR GRADUATION</b>                     |            |

| Semester 7   | Hrs.      | Grade      | Milestones/Notes                            | Semester 7 |
|--|-----------|------------|---|------------|
| SEED 4556- Classroom Application of Educational Psychology | 6         | #          | Requires Stage II Admission                 |            |
| COMS 4033- Systems Analysis and Design I                   | 3         | #          | Prerequisite: COMS 3233                     |            |
| COMS 4813- Teaching Methods in Computer Science Ed         | 3         | #          | Requires Stage II Admission and             |            |
| *Elective  | 3         |            | 75% of COMS courses completed, offered Fall |            |
| <b>Total hours</b>   | <b>15</b> | <b>GPA</b> | <b>APPLY FOR INTERNSHIP</b>                 |            |

| Semester 8   | Hrs.      | Grade      | Milestones/Notes  | Semester 8 |
|--|-----------|------------|---|------------|
| SEED 4503- Seminar in Secondary Education              | 3         | #          | <b>MUST BE ADMITTED TO INTERNSHIP</b>                                   |            |
| SEED 4809- Teaching in Elementary and Secondary School | 9         | #          |   |            |
| COMS 4801- Special Methods in Computer Science Ed      | 1         | #          |   |            |
| <b>Total Hours</b>                                     | <b>13</b> | <b>GPA</b> | <b>Graduation Requirements:</b><br>Min. hours required:120<br>2.70+ GPA |            |

**General Electives: 13 hours**

# indicates a "C" or better is required

| Social Sciences   |
|---|
| ECON 2013 Principles of Economics II (ACTS=ECON2203)      |
| SOC 1003 Introductory Sociology (ACTS=SOC1013)            |
| PSY 2003 General Psychology (ACTS=PSYC1103)               |
| ANTH 1213 Intro. to Anthropology (ACTS=ANTH1013)          |
| ANTH 2003 Cultural Anthropology (ACTS=ANTH2013)           |
| GEOG 2013 Regional Geography of the World (ACTS=GEOG2103) |
| AMST 2003 American Studies                                |
| HIST 1503 World Civilization to 1500 (ACTS=HIST1113)      |
| HIST 1513 World Civilization since 1500 (ACTS=HIST1123)   |
| HIST 1543 Honors World Civilization to 1500               |
| HIST 2003 U.S. History to 1877 (ACTS=HIST2113)            |
| HIST 2013 U.S. History since 1877 (ACTS=HIST2123)         |
| HIST 2043 Honors U.S. History to 1877                     |
| HIST 1903 Survey of American History                      |
| POLS 2003 American Government (ACTS=PLSC2003)             |
| ECON 2003 Principles of Economics I (ACTS=ECON2103)       |
| ECON 2103 Honors Principles of Economics I                |