# **SECONDARY EDUCATION**

# COMPUTER SCIENCE EDUCATION FOR TEACHER LICENSURE

 $See \ the \ College \ of \ Education \ and \ Health \ page \ for \ additional \ requirements.$ 

For teacher licensure, students must achieve the minimum score on the Praxis II Specialty Area and Principles of Learning and Teaching Tests as determined by the Arkansas Department of Education. For further requirements see Admission and Retention to Teacher Education and also the Criteria for Internships located on the College of Education home page.

#### Curriculum

The matrix below is a sample plan for all coursework required for this program.

#### Freshman

Fall	Credits
ENGL 1013 Composition I <sup>1</sup>	3
MATH 1113 College Algebra or higher-level Mathematics	3
TECH 1001 Orientation to the University <sup>2</sup>	1
SS 1XXX Social Science Courses <sup>1</sup>	3
CSEC 1113 Introduction to Networking	3
COMS 1333 Web and Mobile Technologies	3
Total Hours	16

Spring	Credits
ENGL 1023 Composition II <sup>1</sup>	3
FAH 1XXX Fine Arts and Humanities Courses <sup>1</sup>	3
COMS 1011 Programming I Lab and COMS 1013 Programming I	4
COMS 2703 Computer Hardware and Architecture	3
COMS 2713 Survey of Operating Systems <sup>4</sup>	3
Total Hours	16

### **Sophomore**

Fall	Credits
SEED 2002 Education as a Profession	2
COMS 2203 Programming II	3
SCIL 1XXX SCIENCE WITH LABORATORY <sup>1</sup>	4
MATH 2703 Discrete Mathematics	3
CSEC 2213 Network Forensics and Incident Response	3
Total Hours	15

Spring	Credits
COMM 2173 Business and Professional Speaking or COMM 2003 Public Speaking	3
USHG 1XXX U S HISTORY & GOVERNMENT <sup>1</sup>	3
ENGL 2053 Technical Writing	3
COMS 2213 Data Structures	3
STAT 2163 Introduction to Statistical Methods	3
Total Hours	15

## Junior

Fall	Credits
SS 1XXX Social Science Courses <sup>1</sup>	3
COMS 3053 Ethical Issues in Technology	3
COMS 3233 Database Design and Implementation	3
COMS 3413 App Development	3
Elective <sup>3</sup>	3
Total Hours	15

Spring	Credits
FAH 1XXX Fine Arts and Humanities Courses <sup>1</sup>	3
SEED 3702 Introduction to Educational Technology	2
COMS 3243 Data Mining	3
SCIL 1XXX SCIENCE WITH LABORATORY <sup>1</sup>	4
Elective <sup>3</sup>	3
Total Hours	15

### Senior

Fall	Credits
SEED 4054 Educating Developing, Diverse, and Exceptional Learners	4
SEED 4556 Classroom Application of Educational Psychology	6
COMS 4063 IT Project Administration	3
COMS 4813 Teaching Methods in Computer Science Education	3
Total Hours	16

Spring	Credits
SEED 4503 Seminar in Secondary Education	3
SEED 4809 Teaching in the Elementary and Secondary School	9

Spring	Credits
Total Hours	12

<sup>&</sup>lt;sup>1</sup>See appropriate alternatives or substitutions in "General Education Requirements".

<sup>&</sup>lt;sup>2</sup>TECH 1013 Introduction to the University Principles of Collegiate Success is a substitution for TECH 1001 Orientation to the University Orientation to the University; Electives would reduce from 3 hours to 1 hour.

<sup>&</sup>lt;sup>3</sup>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). This will make graduates more marketable.

<sup>&</sup>lt;sup>4</sup>COMS 3703 Advanced Operating Systems is a substitution for COMS 2713 Survey of Operating Systems.