

University of Arkansas

ADVISING GUIDE: Computer Science Bachelor of Arts (B.A.)

with **STEM Education Minor and Computer Science Teacher Licensure (grades 4-12)**

Fall Semester	Spring Semester
<p>MATH 2554 Calculus I ENGL 1013 Composition I Science Elective (4) – University Core Social Science Elective: HIST 2003 or HIST 2013 or PLSC 2003 ARSC 1201* Intro to Teaching STEM Subjects <i>(*ARSC 1201 fulfills freshmen requirement: UNIV 1001 University Perspectives)</i></p> <p>Total Credit Hours:</p>	<p>CSCE 2004 Programming Foundations I CSCE 2114 Digital Design MATH 2603C Discrete Math ENGL 1023 Composition II ARSC 1212 Field Experience in Teaching STEM Subjects</p> <p>Total Credit Hours:</p>
<p>CSCE 2014 Programming Foundations II CSCE 2214 Computer Organization Social Science Elective (3)- University Core STEM 2103 Knowing & Learning (Fa)</p> <p>Total Credit Hours:</p>	<p>CSCE 3193 Programming Paradigms STAT 2303 Principles of Statistics Science Elective (4)- University Core STEM 3203 Classroom Interactions (Sp)</p> <p>Total Credit Hours:</p>
<p>CSCE 3513 Software Engineering CSCE Elective (3) (3000-level or higher) PHIL 3103 Ethics and the Professions Social Science Elective (3)- University Core Fine Arts Elective (3)- University Core</p> <p>Total Credit Hours:</p>	<p>CSCE 3613 Operating Systems CSCE Elective (3) (3000-level or higher) Social Science Elective (3)- University Core CATE 4073 Teaching Programming in Secondary Schools</p> <p>Total Credit Hours:</p>
<p>CSCE Elective (3) (3000-level or higher) CSCE Elective (3) (3000-level or higher) COMM 1313 Public Speaking <i>(students can petition to substitute STEM 4409 Clinical Teaching)</i> ENGL 3053 Technical Writing</p> <p>Total Credit Hours:</p>	<p>STEM 4506 Supervised Teaching Internship – Computer Science <i>(full time teaching in secondary schools for 16 weeks beginning a week before U of A semester begins, and a seminar that meets one night a week on campus)</i> CIED 4023 Teaching in Inclusive Secondary Settings <i>(this online course is also offered during Summer Session 1 and fall semester)</i></p> <p>Total Credit Hours:</p>

The following courses are recommended for CSCE electives as they further support passing of the Computer Science PRAXIS exam, necessary to teach Computer Science in Arkansas:

- CSCE 4133 Algorithms
- CSCE 4523 Database Management

Add electives to have a minimum of 120 credit hours to graduate.

Notes:

Students who choose not to complete the licensure program should consider completing the 9 credit hour Certificate in STEM Education or the 15 credit hour Minor in STEM Education.

Recommended for those interested in adding Mathematics Licensure (grades 7-12):

SEED 4303 Teaching Secondary Mathematics I (fall)

SEED 4313 Teaching Secondary Mathematics II (spring)

Recommended for those interested in coaching sports in secondary schools: Coaching endorsement (24 credit hours)– some courses are online or in the summer.

Advisor: Dr. Jack Kern (jkern@uark.edu)

Go to stem.uark.edu for more information about the STEM Education Program for Mathematics, Science, & Computer Science.

Contact Dr. Kim McComas with questions about Computer Science teacher licensure (or the STEM Ed Minor or STEM Ed Certificate) through the STEM Education program: kmccomas@uark.edu