# ARKANSAS STATE UNIVERSITY

## DEGREE AND MAJOR:

**M. S., COMPUTER SCIENCE**

**CATALOG YEAR:** 2015 - 2016

**revised:** 09/21/15

---

## CORE REQUIREMENTS: 9-27 hours

### Compilers or Automata Theory (one of next three)
- CS 5133: Compilers
- CS 5723: Automata Theory
- CS 6723: Computability Theory

### Computer Systems (one of next four)
- CS 5313: Computer Networks
- CS 6213: Parallel Processing
- CS 6823: Distributed Systems
- CS 6823: High Performance Computing

### Algorithms (one of next two)
- CS 5713: Analysis of Algorithms
- CS 6713: Advanced Analysis of Algorithms

---

## ELECTIVES: 6-24 hours (Total 33 hrs including core courses)

Selections may include up to 9 hrs. MATH/STAT, w/ prior approval.

- CS 5113: Software Engineering
- CS 5223: UNIX Systems Programming
- CS 5413: Computer Graphics I
- CS 5423: Computer Graphics II
- CS 5433: Artificial Intelligence
- CS 5543: Database Systems
- CS 583V: Internship
- CS 6313: Data Security
- CS 6413: Solid Modeling
- CS 6423: Robotic Software Control
- CS 6813: Seminar in Computer Science
- CS 6823: ST - Adv Computer Architecture
- CS 6823: ST - Bioinformatics
- CS 6823: ST - Computer & Network Security
- CS 6823: ST - Data Mining
- CS 6823: ST - DB System Implementation
- CS 6823: ST - Image Processing
- CS 6823: ST - Machine Learning
- CS 688V: Independent Study
- CS 689V: Thesis

---

## UNDERGRADUATE DEFICIENCIES

Required deficiencies bring M. S. candidate to level of B. S. degree graduate.

No 6000-level courses for credit until all deficiencies circled below have been completed.

### Computer Science:
- three of next three
  - CS 2114: Structured Programming
  - CS 2124: OOP & Fund Data Structures
  - CS 3113: Algorithms & Adv Data Structures

### Mathematics and Statistics:
- MATH 2183: Discrete Structures
- MATH 2204: Calculus I
- MATH 2214: Calculus II
- STAT 3233: Applied Statistics I

### GRADUATION CHECK LIST

Undergraduate deficiencies
- 18 hours of 6000 level coursework
- 3.00 average overall
- 3.00 average in major
- 33 hours for degree
- Comprehensive exam

### Current Enrollment:

<table>
<thead>
<tr>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

---

The above named student has met all requirements for graduation providing he/she satisfactorily completes the courses of current enrollment.

---

**Note:**

A minimum of thirty-three hours are required for this degree, eighteen of which must be 6000 level coursework.