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## MASTER OF SCIENCE IN SYSTEMS TECHNOLOGY

### Overview

The Master of Science in Systems Technology is an interdisciplinary program with components from the areas of computer science and management. It is administered by the Computer Science Department within the College of Sciences. An interdisciplinary steering committee composed of faculty from the Department of Computer Science and from the College of Business Administration recommends policy and curriculum for the program. A more technical computer science concentration is available. Contact the Coordinator of the Master of Science in Systems Technology program for more details (797-5093).

### Entrance Requirements

The Master of Science in Systems Technology assumes baccalaureate preparation has included courses in calculus and statistics. Further, a course in programming in a high-level computing language (such as Java or C++) is assumed. Prerequisite courses are held to a minimum. Students who possess an undergraduate degree in computer science will bypass CST 701 and CST 703 and substitute more advanced work. All applicants must have an admission interview before being allowed to enter the program. They must also take the Graduate Record Examination by the end of the first regular term and achieve a combined score on the verbal and quantitative portions of at least 900.

### Degree Requirements

This is a non-thesis degree requiring the successful completion of 30 term hours (a five-course core and five elective courses) and a comprehensive examination. Six hours of approved graduate courses may be transferred.

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**Total Hours: 30**

<i>Core Courses</i>
<i>CST 701 - Computer Systems Organization</i> <i>CST 703 - Data Models</i> <i>CST 717 - Decision Support Tools</i> <i>CST 730 - Systems Administration</i> <i>CST 741 - Models in Decision Making</i>
<i>Sequences</i> - Choose one of the following sequences:
<i>Database Systems:</i> CST 707 - Data Modeling and Database Design CST 715 - Concurrency, Recovery & Security in Database Systems <i>Software Engineering:</i> CSC 680 – Software Engineering Concepts CSC 681 – Software Engineering Project <i>Data Communications:</i> CST 630 - Computer Networks CST 633 - Maintaining and Administering a Network Operating Systems
<i>Electives</i> - Choose remaining courses from the following list or from the sequences listed above:
CST 723 - Expert Systems CST 760 - Computer Graphics Applications CST 790 - Selected Topics CSC 600-level courses (CSC 600-level courses can be used to satisfy program requirements; however, at least one-half of the requirements toward the degree must be at the 700-level)
<i>Comprehensive Written Exam (Core and Sequence)</i> : Each student must pass a comprehensive written exam which covers the core courses and the student's chosen sequence.

## **TECHNICAL CONCENTRATION**

As an alternative to the program above, students who desire a program with a stronger computer science orientation can choose the Technical Concentration.

### **CORE (21 hours):**

CST 701	Computer System Organization
CST 703	Data Models
CST 707 or CSC 615	Data Modeling and Database Design
CST 715	Concurrency, Recovery and Security
CSC 680	Software Engineering Concepts
CSC 681	Software Engineering Project
CSC 630	Data Communications and Computer Networks

### **ELECTIVES (9 hours):**

CSC 605	Programming Languages
CSC 642	Operating Systems
CSC 650	Computer Graphics
CSC 660	Rapid Application Development (RAD)
CST 717	Decision Support Tools
CST 723 or CSC 670	Expert Systems or Artificial Intelligence
CST 741	Models in Decision Making
CST 760 or CSC 655	Computer Graphics Applications or CAD
CST 790	Selected Topics
Approved elective graduate systems science courses from LSU-BR.	

### **COMPREHENSIVE WRITTEN EXAM:**

Each student in this concentration must pass a comprehensive written exam on the core courses listed above.