

FOR INFORMATION ACQUIRING CERTIFICATE IN Information Assurance - Committee on National Security Systems (CNS), National Security Agency (NSA), Oracle Certification Contact Southern University's Department of Computer Science

Phone: 225.771.2060

## LON

The Department is currently supporting the projects of the Louisiana Optical Network Initiative, or LONI, in Computational Materials Science and Computational Biomedical research. Our projects are funded by NASA, DOE, NSF, NIH, and Lovisiana BoR. We have robotics, computational biomedical, and high performance computing (HPC) labs to facilitate our students and faculty to perform the state-of-the-art computational science study.



FACULTY
Dr. Ebrahim Khosravi, Chair
Mr. Alvin L. Allen, Jr
Mrs. Deanna Allen-Roquemore
Dr. Marilyn Antoine
Dr. Shuju Bai
Dr. Nigel Gwee
Mr. Alonzo Johnson
Dr. Osman Kandara
Dr. Mathieu Kourouma
Dr. Douglas Moreman
Dr. Abdus Salam
Dr. Sudhir K. Trivedi
Dr. Rachel Vincent-Finley Dr. Shizhong Yang

Our Department's program incorporates several Fortune 500 companies including, but not limited to:

- Boeing
- IBM
- Texas Instrument
- Raytheon
- Century Link


FINANCIAL ASSISTANCE
The department offers a small number of scholarships over a period of eight(8) semesters to students who meet the requirements.

## SOUTHERN UNIVERSITY department of computer science

## THE DEPARTMENT

The Department of Computer Science was established as a distinct instructional unit in the College of Sciences at Southern University in 1968. The department offers two programs, BS and MS. The undergraduate program offers students the CS-Scientific and CS-Information Systems options, both leading to a Bachelor of Science. The program is accredited by the Computing Accreditation Commission (CAC) of the Accreditation Board of Engineering and Technology (ABET). The department also offers a minor in Computer Science. In addition, we offer courses that are certified under the Information Assurance Courseware Evaluation Program (http://nsa.gov/ia) as meeting the committee on National Security Systems (CNSS) Training Standards 4011 for Information System Security Professionals and 4013 for Systems Administrators (http://www.cnss.gov).

## MISSION

The Department's mission is to produce quality graduates who are capable of entering into careers in Computer Science possessing fundamental knowledge and experience necessary to support efforts of upward mobility. Our educational programs equip our students to be competitive in graduate work as well as to contribute to society.

## ADMISSIONS REQUIRMENTS

Prior to acceptance into the Department, the student must be accepted into the College of Sciences. In order to be admitted into the undergraduate program, a student must have completed CMPS 190, CMPS 191 and MATH 140 or MATH 264 with a minimum grade of " C " or better.

## DEGREE/GRADUATION REQUIRMENTS

- Scientific Option requires 120 semester hours, of which 54 hours must be in Computer Science, 12 hours in Natural science, and 14 hours in Mathematics.
- Information Systems Option requires a total of 120 semester hours, of which 42 hours of courses must be in Computer Science, 12 hours in Business, 12 hours in Natural Science and 14 hours in Mathematics.

Students have a choice of several electives, which can be chosen from a group of courses that emphasize the student's professional growth.

In addition to the information above, the Department of Computer Science also offers a concentration in Electronic Business and Supply Chain Management. For more information contact the department.

## RESEARCH

The faculty engages in research and professional development that allows them to remain current in their fields and to provide technologi-
 cal leadership to the university, the community and the region. The department makes conscious efforts to evaluate and incorporate new areas and technologies into its programs. The department is currently funded by several government grants through research such as LONI, Robotics and XML

## FACILITIES

- Computer Literacy Lab
- Teleconferencing/Distance Learning Lab
- Architecture and Simulation Lab
- $\quad$ Sun (Solaris) Workstation Lab (UNIX Lab)
- Computer Programming Lab
- Graduate Student/Network Simulation Lab
- Server Network Monitoring Lab
- Robotics Lab
- Smart (Multimedia) Laboratory
- Wireless Network Ready Classrooms

WHAT CAN YOU DO WITH A BACHELOR'S DEGREE IN COMPUTER SCIENCE?

The market for Computer Science professionals is still the fastestgrowing area in the job market today. Information Technology jobs are



## SELECTED COURSES

CMPS 190 Algorithm Development and Programming CMPS 200 Discrete Structures
CMPS 201 Data Structures
CMPS 302 Computer Organization
CMPS 315 Information Systems
CMPS 334 Digital Data Networks
CMPS 350 Web Based Programming
CMPS 360 Scientific Computing
CMPS 365 Computers, Information and Security
CMPS 370 Object-Oriented Programming
CMPS 375 Information Security
CMPS 378 Software Engineering
CMPS 380 Software Process Quality
CMPS 382 Statistical Methods
CMPS 385 Video Game Programming CMPS 387 Object-Oriented Design Patterns CMPS 400 Operating Systems CMPS 402 Computer Architecture CMPS 407 Numerical Methods CMPS 412 Theory of Computing CMPS 415 System Analysis and Design CMPS 420 Database Management Systems CMPS 432 Distributed Processing CMPS 433 Telecommunications CMPS 434 Graph Theory and Networks CMPS 435 Introduction to Neural Networks CMPS 450 Senior Seminar
CMPS 470 Computer Graphics
CMPS 480 Introduction to Artificial Intelligence

For more course offerings refer to the department's website (www.cmps.subr.edu).

