

Updated July 16, 2004

Disclaimer: A number of organizational changes will be considered by the Board of Trustees and the Board of Regents. Please see your advisor. Updated information will be posted in the online catalog at the SUU website <http://www.suu.edu/academics/catalog/>.

College of Science

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Effective July 1, 2004,
Mathematics and Computer
Science was moved to the
College of Computing,
Integrated Engineering and
Technology
<http://www.suu.edu/ciet/>

Math Department
<http://www.suu.edu/ciet/math>

Computer Science and
Information Systems
Department
<http://www.suu.edu/ciet/csis>

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The College of Sciences at Southern Utah University is composed of four academic departments.

- Department of Biology
- ~~Mathematics and Computer Science~~
- Department of Nursing
- Department of Physical Science
- Department of Agriculture and Nutrition Science

Mission

The College of Science is made up of academic programs in agriculture, biology, chemistry, ~~computer science, engineering,~~ geology, ~~mathematics,~~ and nursing. These programs are housed in the departments of ~~agriculture and nutrition science,~~ biology, physical science, and ~~nursing mathematics and computer science.~~ We operate or participate in the operation of several special learning environments for students that include a KECK sponsored undergraduate research lab, an observatory, a GIS lab, certified water lab, scanning electron microscopy lab, the Southern Utah Natural History Museum, and the Cedar Mountain Science Center. We serve as the center of scientific learning for the undergraduate and graduate programs offered at SUU. We also serve as the resource center of scientific knowledge and expertise for Southern Utah. The purpose of the College of Science is to provide comprehensive classroom and experiential learning that emphasizes critical thinking, problem solving, decision-making, and communication in science for students from Utah and the Southwestern United States.

1. VISION

The College of Science will become the most respected undergraduate science unit in Utah and the Southwestern United States. Our graduates will demonstrate high levels of academic achievement through admission to graduate schools and professional schools and/or gainful employment. Our faculty will be renowned as educators and scholars, thereby increasing the value of our students' degrees.

2. PHILOSOPHY

The values and beliefs that guide the College of Science in all activities and serve as our basic foundation are:

- (A) Undergraduate education is our highest priority.
- (B) Well-planned and executed, pedagogically sound classroom, laboratory, and outdoor educational activities are expected.
- (C) Life-long learning will be modeled by our faculty by being professionally active and productive scholars in their fields.
- (D) Undergraduate research provides opportunities for students and faculty to create new knowledge and to apply knowledge they have learned in the classroom. Research also builds proficiency in the skills of critical thinking, problem solving, decision making, and communication.

3. GOALS AND OBJECTIVES

The observable, measurable goals of the College of Science and our objectives by which we will accomplish them are:

- (A) To prepare students for graduate schools and professional schools by offering coursework and active learning experiences appropriate to the prerequisites of specified post-baccalaureate programs.
- (B) To prepare students for careers using their baccalaureate degree by offering coursework appropriate for specified departmental majors or minors.
- (C) To help students develop skills in analysis, critical thinking, problem solving, and decision making by offering well-planned and pedagogically sound learning exercises in courses and in research projects.
- (D) To offer students hands-on experiences with state-of-the-art scientific and computational equipment by providing coursework and research opportunities.
- (E) To provide highly skilled teachers and professors that are also respected scholars by recruiting Ph.D.-prepared faculty, rewarding good teaching, encouraging faculty to conduct funded research and publish results, and encouraging participation in professional organizations.
- (F) To utilize the SUU Observatory, Water Lab, Scanning Electron Microscopy Lab, the Southern Utah Natural History Museum, the GIS lab, and the KECK Molecular genetics and ecology labs by enhancing the physical facilities and encouraging classroom and research utilization of these facilities.

Undergraduate Degrees and Majors

Bachelor of Arts and Bachelor of Science

- Family and Consumer Sciences
- Nutrition and Food Science emphasis
- Biology

Botany Emphasis
Education Emphasis
Forensic Emphasis
Zoology Emphasis

~~Integrated Engineering~~

- ~~—Mathematics~~
- ~~—Actuarial Science Emphasis~~
- ~~—Bioinformatics Emphasis~~
- ~~—Education Emphasis~~
- ~~—Pure Mathematics Emphasis~~
- Physical Science

Education Emphasis

Bachelor of Interdisciplinary Studies (see page 100, 239)

- Agricultural Science and Industry

Effective July 1, 2004,
The department of
Agriculture and Nutrition
Science was moved to the
College of Science.
<http://www.suu.edu/sci/>

Mathematics, Computer
Science, and Engineering
were moved to the College
of Computing, Integrated
Engineering and
Technology
<http://www.suu.edu/ciet/>

Math Department
[http://www.suu.edu/ciet/mat](http://www.suu.edu/ciet/math)
[h](http://www.suu.edu/ciet/math)

Computer Science and
Information Systems
Department
<http://www.suu.edu/ciet/csis>

Agribusiness emphasis
Animal Science emphasis
Plant Science emphasis
General Agriculture emphasis

Advisement Tracks for BIS for students interested in:

1. Natural Resources and Environmental Studies
2. Geographic Information Systems
 - Computer Aided Design Emphasis
 - Database/Information Systems Emphasis
 - Geography Emphasis
 - General Geography and GIS Emphasis
 - Natural Resource Emphasis
 - Programming Emphasis

Bachelor of Science

- Chemistry
 - Education Emphasis
 - Forensic Emphasis
 - Health Care Emphasis
 - Professional Emphasis
- Geology
 - Earth Science Emphasis
 - Professional Emphasis
- Nursing

Pre-Professional Curricula

(For further information regarding these programs, please refer to the Pre-Professional Curricula section of this catalog listed under the chapter on Other Programs.

Effective July 1, 2004, Engineering was moved to the College of Computing, Integrated Engineering and Technology
<http://www.suu.edu/ciet/et>

The department of Agriculture and Nutrition Science was moved to the College of Science.
<http://www.suu.edu/sci>

Associate of Pre-Engineering (two-year program)

- ~~Biological Engineering~~
- ~~Chemical Engineering~~
- ~~Civil Engineering~~
- ~~Computer Engineering~~
- ~~Electrical Engineering~~
- ~~Environmental Engineering~~
- ~~Materials Science Engineering~~
- ~~Mechanical Engineering~~

Associate of Applied Science

- Agriculture: Livestock and Farm Management
- #### Certificate Program
- Agriculture: Livestock Farm Management emphasis
 - Geographic Information Systems (GIS)

The requirements and programs of study in each of the College's departments are listed in the Departments section of this catalog.

Accreditation

We are in the process of applying for accreditation from the American Chemical Society (ACS) for Chemistry.

Student Advising

Students are assisted in selecting appropriate courses and majors through the joint efforts of faculty advisors, the Campus Student Services Center and the College of Science professional advisor, Ms. Deborah Franklin, Science Building, Room SC 311, (435) 865-8703, or franklin@suu.edu.

Student Scholarships

Scholarships are available to students demonstrating potential for excellence in science studies. Over \$52,000 is distributed each year among College of Science majors. Students must submit the appropriate applications by February 1. Interested students should

contact Student Financial Aid, Sharwan Smith Center, Room ST 167, (435) 586-7735.

Student Organizations

The way to get the best experience is to participate in one of the excellent college student organizations. Among the many student organizations of interest to College of Science majors are the following:

- American Chemical Society (ACS)
- Ecology Club (University Chapter)
- Geology Club
- National Science Teachers Association (NSTA)
- Sigma Gamma Epsilon
- Utah Wildlife Society

In addition, the College of Science has a chapter of Alpha Epsilon Delta (AED), a pre-healthcare professions honor society and a national chapter of the American Student Dental Association (ASDA) for College of Science students.

Special Learning Environments

The College of Science operates several special programs that provide students opportunities for enrichment of their classroom learning:

The Cedar Mountain Science Center offers summer science camps and courses for pre-service teachers and in-service teachers, held at the College Cabin on the SUU 2400 acre mountain property.

The SUU Astronomy Observatory offers college credit courses and weekly community viewing activities located near the SUU Valley Farm.

The G.I.S. Lab offers college course work and services to community and regional planners requiring expertise in Geospatial mapping.

The SUU Natural History Museum offers campus and community members the opportunity to view museum specimens from our regional ecosystems.

The SUU Water Lab is a certified analytical lab that offers students specialized training in analytical techniques and services to the public for their water quality needs.

