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# SCIENCE & TECHNOLOGY STUDIES, BACHELOR OF ARTS

#### College of Letters & Science

The Science & Technology Studies (STS) major brings the perspectives of the humanities and social sciences together with science, technology, and medicine. It considers science, technology, and medicine in relation to their social, political, and economic contexts. The major combines history, philosophy, anthropology, sociology, cultural studies, environmental studies, law, business, literature, and media studies to address the impacts and implications of science, technology, and medicine. The major allows students to pursue a broader understanding of science than is available within a traditional science major, and it provides important skills for interpreting science, technology, and medicine with regard to society and culture.

### The Major

Graduation with a degree in Science & Technology Studies requires completion of courses in the social sciences and the humanities, as well as courses in the natural sciences. Upper division work includes 16 units in STS theories and methods, 20 units in a particular STS emphasis area, and 8 units of upper division science coursework (plus prerequisites) providing depth, concentration, and field work in the sciences. The STS emphasis areas are:

- · Law & Innovation
- · Health & Environment
- · Data & Media Technologies
- · History & Philosophy of Science

Students may alternatively choose not to specialize and instead pursue a more general STS emphasis. Prerequisites for courses in the sciences can be extensive and may require substantial advance planning. Students are encouraged to take advantage of faculty and staff advising to develop their plans of study.

#### **Career Alternatives**

The STS major enables students to analyze science and allied practices from historical, philosophical, sociological, political, anthropological, and cultural perspectives. STS prepares students for careers that address the broader ramifications of science, technology, and medicine. STS majors often pursue careers in health care & medicine, law, journalism, public policy, economics, government, media & technology industries, science education, non-profit health organizations, libraries & museums, public health administration, management consulting, and teaching. STS majors are also well prepared for advanced research careers in the sciences, the humanities, and the social sciences.

#### **Major Advisor**

Staff advisors are located in the Blue Ridge Office Building. For information about how to contact a major advisor; see Major Advising (https://yellowcluster.ucdavis.edu/advising/undergraduate/majoradvising/).

#### **Faculty Advisor**

Professor G (cnmilburn@ucdavis.edu)erardo Con Diaz (condiaz@ucdavis.edu)

The major requirements below are in addition to meeting University Degree Requirements (https://catalog.ucdavis.edu/undergraduate-education/university-degree-requirements/) & College Degree Requirements (https://catalog.ucdavis.edu/undergraduate-education/college-degree-requirements/); unless otherwise noted. The minimum number of units required for the Science & Technology Studies Bachelor of Arts is 60.

Code	Title	Units
Preparatory Subject Matter		
STS 001	Introduction to Science, Technology & Medicine Studies	4
Choose three addition	onal courses:	12
PHI 030	Introduction to Philosophy of Science	
PHI 031	Appraising Scientific Reasoning	
PHI 032	Understanding Scientific Change	
STS/HIS 002	Introduction to the History of Science & Technology	
or STS/HIS 002Y	Introduction to the History of Science & Technology	
STS 011	Science on Trial: Law, Science, & Technology in the United States	
STS/HIS 016	Sex, Science, & Society	
STS/ANT 032	Drugs, Science & Culture	
STS/CDM 040A/	Media History 1: Gutenberg to	
CTS 040A DISCON	NT <b>0plpl∈ib</b> heimer	
STS 040B/ CTS 040B DISCON	Media History 2: 1945-Present N1	
STS/CLA 050	Ancient Science	
STS/CLA 051	Ancient Medicine	
Preparatory Subject	Matter Subtotal	16
<b>Depth Subject Matte</b>	er	
Methods & Theories		
STS 100	Methods in Science, Technology, & Medicine Studies	4
Choose three:		12
STS 101	Data & Society	
STS 108	Intellectual Property in Science	
STS/ANT 121	Special Topics in Medical Anthropology	
STS 122	Health & Medical Technologies	
STS 150	Gender & Science	
STS 151	Media Theory	
STS/ENL 164	Writing Science	
STS 175	Laboratory Studies Lab	
STS/SOC 176	Sociology of Knowledge, Science, & Scientific Knowledge	

Note: Courses taken to fulfill the requirement above cannot also be used to fulfill the emphasis requirement.

#### Science Coursework

All STS majors are required to complete TWO upper division science courses in the same field. Science coursework should be planned in consultation with the faculty advisor or staff advisors.

Approved Science Fields (https://ucdavis.box.com/s/wawd8s9n1ilbtej6mv39scvlly8e15ek/)

Emphasis

Choose one of the following four options:	20-24
1. Complete five courses from one emphasis list.	
2. Complete four courses from one emphasis list and one additional upper division STS course.	
3. Complete four courses from one emphasis list and a research thesis in STS <sup>1</sup> . **The thesis option is open to all students. Students whose GPA meets the honors threshold may also qualify for High or Highest Honors in the College of Letters & Science.	
4. STS General Emphasis: Complete any five upper division STS courses (STS: 100-199). Note: Includes courses that are cross-listed with STS. $^{2}$	
Emphasis Lists:	
(1) Law & Innovation (p. 2)	
(2) Health & Environment (p. 2)	
(3) Data & Media Technologies (p. 2)	
(4) History & Philosophy of Science (p. 2)	
Depth Subject Matter Subtotal	44-48

(STS 194A & STS 194B)

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**Total Units** 

Including: STS 180, STS 190, STS 192, STS 194A, STS 194B, STS 195.

60-64

## **Law & Innovation Emphasis**

Code	Title	Units
STS 108	Intellectual Property in Science	4
STS/ANT 109	Visualization in Science: A Critical Introduction	4
STS 110	Computing, Data, & Law in the United States	4
STS 112	Visualizing Society with Data	4
STS 113	Business & Technology in the United States: From Electricity to E-Commerce	4
STS 114	The Global Information Age	4
STS/CTS 162	Surveillance Technologies & Social Media	4
STS/SOC 176	Sociology of Knowledge, Science, & Scientific Knowledge	4
CRD 118	Technology & Society	4
CRD 140	Dynamics of Regional Development	4

## **Health & Environment Emphasis**

Code	Title	Units
STS/ANT 109	Visualization in Science: A Critical Introduction	4
STS/ANT 121	Special Topics in Medical Anthropology	4
STS 122	Health & Medical Technologies	4
STS/ANT 129	Health & Medicine in a Global Context	4
STS 130A	From Natural History to the History of Nature	4
STS 130B	History of Modern Biology	4
STS 131	Darwin	4
STS 150	Gender & Science	4

STS 165	Built Environments	4
ANT 104N	Cultural Politics of the Environment	4
ANT 131	Ecology & Politics	4
PHI 120	Environmental Ethics	4

## **Data & Media Technologies Emphasis**

Title	Units
Data & Society	4
Visualization in Science: A Critical Introduction	4
Computing, Data, & Law in the United States	4
Visualizing Society with Data	4
Business & Technology in the United States: From Electricity to E-Commerce	4
The Global Information Age	4
Data Sense & Exploration: Critical Storytelling with Analysis	4
Media Theory I	5
Sounding Data: Critical Approaches to Sonification	4
Ghosts of the Machine: How Technology Rewires our Senses	4
Time: Mechanism & Measurement	4
Surveillance Technologies & Social Media	4
History of Communication Technologies	4
Writing Science	4
Video Games & Culture	4
Science Fiction	4
	Title Data & Society Visualization in Science: A Critical Introduction Computing, Data, & Law in the United States Visualizing Society with Data Business & Technology in the United States: From Electricity to E-Commerce The Global Information Age Data Sense & Exploration: Critical Storytelling with Analysis Media Theory Sounding Data: Critical Approaches to Sonification Ghosts of the Machine: How Technology Rewires our Senses Time: Mechanism & Measurement Surveillance Technologies & Social Media History of Communication Technologies Writing Science Video Games & Culture

## **History & Philosophy of Science Emphasis**

Code	Title	Units
STS 110	Computing, Data, & Law in the United States	4
STS 112	Visualizing Society with Data	4
STS 113	Business & Technology in the United States: From Electricity to E-Commerce	4
STS 114	The Global Information Age	4
STS 122	Health & Medical Technologies	4
STS/ANT 129	Health & Medicine in a Global Context	4
STS 130A	From Natural History to the History of Nature	4
STS 130B	History of Modern Biology	4
STS 131	Darwin	4
STS 150	Gender & Science	4
STS 161	Time: Mechanism & Measurement	4
STS/ENL 164	Writing Science	4
CLA 101E	Topics in Ancient Science	4
PHI 107	Philosophy of the Physical Sciences	4
PHI 108	Philosophy of the Biological Sciences	4
PHI 109	Philosophy of the Social Sciences	4
PHI 111	Philosophy of Space & Time	4

PHI 120	Environmental Ethics	4
PHI 121	Bioethics	4
PHI 131	Philosophy of Logic & Mathematics	4
PHI 189I	Special Topics in Philosophy: Philosophy of Science	4