Science, Technology and Society - BS

What is the Science, Technology and Society Degree?

Farmingdale State College’s Bachelor of Science (BS) in Science, Technology and Society (STS) is a dynamic interdisciplinary program that allows students to explore the connections between science, technology, and social change. With a cutting-edge focus on globalization, scientific advancement, and technological innovation, the STS degree represents the epitome of the applied social science program of the 21st century. Our program addresses the employment needs of the region and the diverse academic interests of its majors by providing students with an interdisciplinary program of study that incorporates the practical uses of technological knowledge, scientific inquiry, the application of theory to complex problems, and an integrated approach to the learning process. Students examine the real-world effects of globalization, exploring the historical, political, economic, and sociological impact of worldwide industrialization, cross-border technology transfer, global environmental issues, transnational economic interdependence, the spread of information and communication technologies, and other important facets of the current process of globalization. In addition to hands-on training in the technology-related fields, STS majors also develop a strong background in the ways in which scientific, technological, and industrial development have influenced and continue to shape history, society, and culture on the local, national, and international levels.

Students will select one of the following concentrations: 1) Global Affairs; 2) Media Studies; 3) Environmental Policy; or 4) Health, Wellness, and Society. The completion of any of the concentrations within the Science, Technology and Society program:

- provides students with an opportunity to broaden their view of the applications of science and technology upon society,
- fosters an appreciation of the ways in which technology interacts with the social sciences and other disciplines,
- gives students the freedom to investigate a particular subject area deeply, while also exploring comparative and complex issues involving globalization, media, technological change, health and wellness, and environmental policy,
- promotes a holistic view of globalization through real-world applications and by viewing it from a variety of different disciplinary perspectives.

Graduates of the Science, Technology and Society program are suited for employment in a variety of settings where their broad view of the technologies, natural sciences, social sciences, and humanities are desirable for the solution of problems. In particular, the program prepares students for careers in technological professions, government and non-governmental organizations (NGOs), environmental agencies, health and wellness, law, diplomacy, and graduate work in the social sciences, liberal arts, and education. Students who are interested in environmental protection and sustainability are able to take advantage of Farmingdale State College’s various “green” initiatives, including our nationally-recognized Solar Energy Center, the Green Building Institute, and other facilities associated with sustainable energy.

As globalization places increasingly complex demands on the workforce of the new millennium, international corporations on Long Island have indicated that their future employment needs include graduates who possess the skills developed by completing the Science, Technology and Society program. While the primary focus of the Science, Technology and Society program is to prepare its graduates for careers in the local Long Island region and across New York State, graduates of the STS program have a wide variety of employment options available to them upon graduation. For example, graduates of the program may wish to pursue additional training in an area that they investigated in their selected concentration or may elect to pursue graduate studies in a related discipline. As a result, the STS program provides students with a breadth of choices to embark upon once they have completed their degree.

Curriculum Summary

<table>
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<tr>
<th>Degree Type:</th>
<th>BS</th>
<th>Total Required Credits:</th>
<th>120</th>
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For additional information:
- Dr. Robert Saunders, Chair
  Science, Technology and Society Department
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  631-420-2220

School of Arts & Sciences
- Dean’s Office: 631-420-2198
- Office of Admissions: 631-420-2200

Admission to Farmingdale State College - State University of New York is based on the qualifications of the applicant without regard to age, sex, marital or military status, race, color, creed, religion, national origin, disability or sexual orientation.

Program of Study

General Education and Liberal Arts & Sciences Requirements (53 credits):
- Communications (GE—other than EGL 101) . . . 3
- Humanities (GE) ........................................... 3
- Arts (GE) ..................................................... 3
- American History (GE) .................................. 3
- Other World Civilizations (GE) ....................... 3
- Western Civilization (GE) ............................. 3
- Mathematics (GE—one at 110 or higher) ............ 6
- Foreign Language—Level I (GE) ....................... 3
- Social and Behavioral Sciences (GE) ................ 3
- Natural Science (GE) .................................... 4
- Natural Science Elective/Lab ......................... 4
- EGL 101—Composition I: College Writing .......... 3
- EGL 102—Composition II: Writing about Literature . . . 3
- Arts and Science Free Electives ...................... 9

STS Technology Requirements (19 credits)
- BCS 160—Computers, Society and Technology      .3
- HIS 212—Technology, Politics, and the Modern World .3
- ENV 101—Energy Sustainability and Environment .3
- GEO 221—Introduction to Geographic Systems ... 4
- SOC 245—Technology, Society and Social Change .3
- STS 400W—STS Seminar or STS 401W—Internship* .3

STS Concentrations (48 credits)

- All students will choose one of the following concentration areas: Global Affairs, Media Studies, Environmental Policy or Health, Wellness and Society, Primary fields, secondary fields, and STS electives will vary by concentration.

- 7 courses in a primary field (200 level or higher with at least
  2 courses at the 300-level or above) .............. 21
- 4 courses in a secondary field (at least 2 at the
  200-level or higher) .................................. 12
- 5 STS Perspectives electives (at least 2 at the
  300-level or above) ................................... 15

Total Credits Required for BS Degree........ 120

In addition to meeting General Education
requirements, STS students must take a Level II (second semester) or higher course in a
Foreign Language or demonstrate oral and written fluency.
- BCS 102 may be used by students who took the
course prior to Fall 2013.
- A grade of C or higher is required in the
  Capstone Course (STS 400W or 401W)
- Students enrolled in the Health, Wellness, and
  Society concentration may apply courses taken in
the Physical Sciences (BIO, CHM, and PHY)
  at the 100-level.
- All graduates must have 30 credits in residency
  and a total of 15 credits of Upper Division
  (300-level or higher) courses in residency.
## 1. Global Affairs

The Global Affairs concentration prepares students for career paths in a dynamic world connected by the flows of people, ideas, money, and goods, including but not limited to occupations in government service, diplomacy, and transnational advocacy. This track is also suitable for students planning to pursue graduate study in the fields of Global Studies, International Relations, Diplomacy, and Law. Students will pursue an applied social sciences curriculum examining such topics as world affairs, geopolitics, environmental issues, technological innovation, industrialization, economic interdependence, international trade, and cultural, social and political change around the globe.

- Seven courses (21 credits) in one of the following disciplines: History, Geography, Economics, Sociology, Anthropology, or Politics
- Four courses (12 credits) in a secondary field from one of the above listed disciplines, Philosophy, or Business Management (School of Business)
- Five STS Perspectives Electives (15 credits), including at least two courses at the 300 level; representative courses in Global Affairs include (others with permission of Department Chair):
  - ANT 210 — Anthropology and Globalization
  - HIS 341 — Terrorism and the Modern World
  - MLG 308 — Arabic Culture and Civilization
  - SOC 350 — Global Social Change
  - HIS 305 — Culture and Technology
  - MLG 305 — Hispanic Culture and Latin American Civilization
  - POL 371 — Geopolitics
  - PSY 304 — Multicultural Psychology

### Mini-Concentrations:

- Five STS Perspectives Electives (15 credits), including at least two courses at the 300 level; representative courses in Health, Wellness, and Society

- Seven courses (21 credits) in one of the following disciplines: History, Geography, Economics, Sociology, Anthropology, or Politics
- Four courses (12 credits) in a secondary field from one of the above listed disciplines, Philosophy, or Business Management, Computer Systems, Sport Management, or Visual Communications (School of Business)
- Five STS Perspectives Electives (15 credits), including at least two courses at the 300 level; representative courses in Health, Wellness, and Society include (others with permission of Department Chair):
  - BC 300 — Medical Ethics
  - BCH 110 — Chemistry and Disease
  - CHM 111 — Chemistry and the Public Interest
  - ECO 310 — Health Economics and Policy
  - ECO 320 — Internet and Network Economics
  - HIS 335 — Gender and Technology in Historical Perspective
  - HIS 320 — Europe since the Industrial Revolution
  - MLG 305 — Hispanic Culture and Latin American Civilization
  - MLG 308 — Arabic Culture and Civilization
  - MLT 305 — Language and Culture
  - POL 371 — Geopolitics
  - PSY 304 — Multicultural Psychology

## 2. Media Studies

The Media Studies concentration prepares students for career paths dependent on a critical understanding of the rapidly changing nature of mass media and information and communication technologies (ICTs), including but not limited to occupations in the cultural industries (film, TV, music, radio, etc.), new media companies, political communication, and corporate/media relations. This track is also suitable for students planning to pursue graduate study in the fields of Media or Cultural Studies, as well as certain Area Studies program. Students will pursue an applied social sciences/humanities curriculum examining such topics as media studies, cultural exchange, political identity, immigration and multiculturalism, intercultural communication, the evolution of media platforms, and issues of gender, ethnicity, and race.

- Seven courses (21 credits) in one of the following disciplines: History, Geography, Economics, Sociology, Anthropology, English, Modern Languages, or Politics
- Four courses (12 credits) in a secondary field from one of the above listed disciplines, Philosophy, Psychology, or in Business Management, Computer Systems, Sport Management, or Visual Communications (School of Business)
- Five STS Perspectives Electives (15 credits), including at least two courses at the 300 level; representative courses in Media Studies include (others with permission of Department Chair):
  - BCS 130 — Website Development
  - ECL 308 — The City in Literature, Art, Film and Theatre
  - ECO 320 — Internet and Network Economics
  - EGO 310 — Economics of Global Disasters
  - EGO 435 — Environmental Economics and Policy
  - ECL 308 — The City in Literature, Art, Film and Theatre
  - HIS 320 — Europe since the Industrial Revolution
  - MLG 305 — Hispanic Culture and Latin American Civilization
  - MLT 305 — Language and Culture
  - MLG 308 — Arabic Culture and Civilization
  - POE 320 — Internet and Network Economics
  - POL 371 — Geopolitics
  - SMU 220 — Media and Sport
  - SOC 315 — Sociology and the Movies

## 3. Environmental Policy

The Environmental Policy concentration prepares students for policy-related career paths in the evolving realm of “green” technologies, renewable energy, sustainable development, and the protection of ecosystems. This track is also suitable for students planning to pursue graduate study in the fields of Environmental Studies, Public Policy, and International Development. Students will pursue an applied social sciences curriculum examining such topics as ecology, climate change, environmental policy-making, energy sustainability, ethics in the global sphere, green technologies, and regulatory issues.

- Seven courses (21 credit hours) in a single discipline within the Social Sciences (History, Geography, Sociology, Economics, Anthropology, Psychology, or Politics) or Physics
- Four courses (12 credits) in a secondary field from one of the above listed disciplines, Mathematics, Philosophy, or in Environmental Sciences (School of Engineering) or Horticulture (School of Business)
- Five STS Perspectives Electives (15 credits), including at least two courses at the 300 level; representative courses in Environmental Policy include (others with permission of Department Chair):
  - BIO 353 — Essentials of Plant Pathology
  - BUS 230 — Environmental Law
  - ECO 350 — Economics of Global Disasters
  - ECO 435 — Environmental Economics and Policy
  - ENV 210 — Energy and Policy Standards
  - HIS 320 — Europe since the Industrial Revolution
  - PHI 307 — Philosophy of Science and Technology
  - HIS 320 — Europe since the Industrial Revolution
  - PHI 307 — Philosophy of Science and Technology
  - POL 371 — Geopolitics
  - POL 390 — Environmental Politics

## 4. Health, Wellness, and Society

The Health, Wellness, and Society concentration prepares students for career paths in a variety of occupations associated with health, medicine, dentistry, nutrition, and well-being, both on the local and international levels. This track is also suitable for students planning to pursue graduate study in the fields of Public Health, Applied Healthcare, and Global Health Policy or degrees/professional programs in Medicine, Dentistry, Medical/Physician’s Assistant, Nutrition, Gerontology, Chiropractic, Holistic/Homeopathic Medicine, Midwife, Acupuncture, or other areas of healthcare. Students will pursue an applied social sciences/natural sciences curriculum examining such topics as nutrition, disease and hygiene, the history of healthcare, alternative approaches to medicine, public policy, and the relationship between the human behavior, the environment, and well-being.

- Seven courses (21 credit hours) in one of the following disciplines: History, Geography, Sociology, Anthropology, Economics, Psychology, Politics, Physics, Chemistry, or Biology
- Four courses (12 credits) in a secondary field from one of the above listed disciplines, Philosophy, or Health Studies (School of Health Sciences)
- Five STS Perspectives Electives (15 credits), including at least two courses at the 300 level; representative courses in Health, Wellness, and Society include (others with permission of Department Chair):
  - BIO 240 — Bioethics
  - BIO 353 — Essentials of Plant Pathology
  - BUS 230 — Environmental Law
  - ECO 310 — Health Economics and Policy
  - ECO 435 — Environmental Economics and Policy
  - ECO 320 — Internet and Network Economics
  - ENV 210 — Energy and Policy Standards
  - HIS 320 — Europe since the Industrial Revolution
  - HIS 320 — Europe since the Industrial Revolution
  - PHI 307 — Philosophy of Science and Technology
  - HIS 335 — Gender and Technology in Historical Perspective
  - PHI 307 — Philosophy of Science and Technology
  - SOC 315 — Sociology and the Movies
  - SOC 351 — Global Health Systems
  - STS 300 — Special Topics in Science, Technology and Society
  - PSY 328 — Introduction to Human Factors