

Sustainability Related Degrees at Georgia Tech

Georgia Tech has a goal that every student will take at least one course in sustainability. We have more than 260 courses with an emphasis in sustainability spanning every college at Georgia Tech. Sustainability is a focus of over 23 degrees available from Georgia Tech. Varied and numerous in nature, the educational aspects of Georgia Tech's commitment to environmental sustainability reflect our promise to produce the technological leaders of the future.

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Undergraduate Degree Programs Related to Sustainability

College of Architecture

College of Architecture

- Graduate and Undergraduate Program in Architecture
 - Offering several studios and degree concentrations with a green focus, including high-performance building and design for alternative energy
- Graduate and Undergraduate Program in Industrial Design
 - Offering studio projects and classes focused on sustainable product design
- Graduate Program in City and Regional Planning
 - Offering several dual degree programs with Architecture/Urban Design; Transportation Engineering; Water Resources
- Graduate and Undergraduate Program in Building Construction
 - Offering classes and projects with a green focus
- Bachelor of Science in Architecture
- Bachelor of Science in Building Construction
- Bachelor of Science in Industrial Design

College of Computing

- Bachelor of Science in Computer Science
- Bachelor of Science in Computational Media (Interdisciplinary with IAC)

College of Engineering

- Civil and Environmental Engineering
- Graduate Program in Environmental Fluid Mechanics and Water Resources
 - Sediment transport and bridge foundation scour
 - Beach erosion
 - Environmentally-friendly hydropower Installations
 - Cohesive sediment resuspension
 - Wastewater dispersion in coastal waters
- Graduate and Undergraduate Program in Environmental Engineering
 - Water and wastewater treatment
 - Chemical and environmental multiphase transport processes
 - Multimedia (air, water/groundwater) environmental simulations
 - Environmental biotechnology for bioremediation of contaminated soil, sediments & waters
 - Green chemistry and biochemistry
 - Sustainable technology and development
 - Physical, chemical, and biological processes influencing subsurface fate and transport of contaminants
 - Hazardous substances in sediments, soils, waters and residues
 - Air pollution: formation, transport, and disposition of aerosols
 - Characterization of ambient air quality and air pollutant source emissions
 - Atmospheric dynamics of air and contaminant dispersion
 - Atmospheric and oceanic dynamics
 - Nanotechnology in the environment
 - Carbon sequestration
- Graduate Program in Structural Materials, Mechanics and Engineering
 - Risk and Reliability
 - Seismic Hazard Mitigation
 - Earthquake Engineering
 - Smart Materials and Structures
 - Graduate Program in Transportation Systems Engineering
 - Estimating mobile emissions
 - Sustainable development and transportation
- Milton H. Stewart School of Industrial Systems Engineering
- Graduate and Undergraduate Program in industrial and systems engineering
 - Offering classes and research project advisement with a green focus

- Bachelor of Science in Aerospace Engineering
- Bachelor of Science in Biomedical Engineering
- Bachelor of Science in Chemical and Biomolecular Engineering
- Bachelor of Science in Civil Engineering
- Bachelor of Science in Computer Engineering
- Bachelor of Science in Electrical Engineering
- Bachelor of Science in Environmental Engineering
- Bachelor of Science in Industrial Engineering

- Bachelor of Science in Materials Science and Engineering
- Bachelor of Science in Mechanical Engineering
- Bachelor of Science in Nuclear and Radiological Engineering
- Dual Degree – BS Program in Computer Engineering – GT & Korea Advanced Institute of Science and Technology
- Dual Degree – BS Program in Electrical Engineering – GT & Korea Advanced Institut

Ivan Allen College of Liberal Arts

- Literature, Communication, & Culture
 - Numerous course offerings
 - Studies in Ecology and Ecocriticism
 - Research opportunities on the relationship between art, literature, philosophy and environmentalism.
 - Dwelling and the cultural and philosophical history of wood.
- School of Public Policy
 - Doctoral Program in Public Policy (PhD)
 - Specialization in Environmental Policy
 - Specialization in Energy Policy
 - Graduate Program in Public Policy (MSPP)
 - Concentration in Environmental Policy
 - Undergraduate Program in Public Policy (BSPP)
 - Requiring coursework on sustainability
 - Graduate and Undergraduate Program offering courses on:
 - Sustainable technology and policy
 - Environmental Policy
 - Environmental Economics
 - Environmental Ethics
 - Environmental Values and Policy Goals
 - Earth systems
 - Environmental Issues Seminar
 - Policy Tools for Managing the Environment
 - Sustainable Systems
 - Sustainability and Environmental Policy
 - Environmental Policy and Implementation
 - Environmental Law
 - Environmental and Technological Risk Management
- Bachelor of Science in Applied Language and Intercultural Studies
- Bachelor of Science in Computational Media (Interdisciplinary with COC)
- Bachelor of Science in Economics
- Bachelor of Science in Economics and International Affairs
- Bachelor of Science in Global Economics and Modern Languages
- Bachelor of Science in History, Technology, and Society

- Bachelor of Science in International Affairs
- Bachelor of Science in International Affairs and Modern Language
- Bachelor of Science in Public Policy
- Bachelor of Science in Science, Technology, and Culture

College of Management

- Graduate and Undergraduate course offerings with an emphasis in sustainability
 - Business and the Environment
 - Ethics of Sustainability
 - Social Entrepreneurship
- Bachelor of Science in Business Administration

College of Sciences

- Earth and Atmospheric Sciences
 - Undergraduate programs in Meteorology , Earth Science , and Environmental Science
- Biology
- Bachelor of Science in Applied Mathematics
- Bachelor of Science in Applied Physics
- Bachelor of Science in Biochemistry
- Bachelor of Science in Biology
- Bachelor of Science in Chemistry
- Bachelor of Science in Earth and Atmospheric Science
- Bachelor of Science in Physics

Graduate Degree Programs Related to Sustainability

College of Architecture

- Graduate and Undergraduate Program in Architecture
 - Offering several studios and degree concentrations with a green focus, including high-performance building and design for alternative energy
- Graduate and Undergraduate Program in Industrial Design
 - Offering studio projects and classes focused on sustainable product design
- Graduate Program in City and Regional Planning
 - Offering several dual degree programs with Architecture/Urban Design; Transportation Engineering; Water Resources
- Graduate and Undergraduate Program in Building Construction
 - Offering classes and projects with a green focus

- Master of Architecture
- Master of City and Regional Planning
- Master of Industrial Design
- Master of Science in Building Construction and Facility Management
- Master of Science in Urban Design
- Master of Science with a Major in Architecture

- Doctor of Philosophy with a Major in Architecture
- Doctor of Philosophy with a Major in Architecture (Concentration: Building Construction)
- Doctor of Philosophy with a Major in City and Regional Planning

College of Sciences

- Earth and Atmospheric Sciences
 - Graduate and Undergraduate programs in Meteorology , Earth Science , and Environmental Science

- Master of Science in Bioinformatics
- Master of Science in Biology
- Master of Science in Chemistry
- Master of Science in Computational Science and Engineering
- Master of Science in Earth and Atmospheric Science
- Master of Science in Human – Computer Interaction
- Master of Science in Mathematics
- Master of Science in Paper Science and Engineering
- Master of Science in Physics
- Master of Science in Prosthetics and Orthotics
- Master of Science in Psychology
- Master of Science in Quantitative and Computational Finance

- Master of Science in Statistics
- Doctor of Philosophy with a Major in Algorithms, Combinatorics, Optimization
- Doctor of Philosophy with a major in Applied Physiology
- Doctor of Philosophy with a Major in Bioinformatics
- Doctor of Philosophy with a Major in Biology
- Doctor of Philosophy with a Major in Chemistry
- Doctor of Philosophy with a Major in Computational Science and Engineering
- Doctor of Philosophy with a Major in Earth and Atmospheric Sciences
- Doctor of Philosophy with a Major in Mathematics
- Doctor of Philosophy with a Major in Paper Science and Engineering
- Doctor of Philosophy with a Major in Physics
- Doctor of Philosophy with a Major in Psychology – Cognitive Aging
- Doctor of Philosophy with a Major in Psychology – Cognitive and Brain Sciences
- Doctor of Philosophy with a Major in Psychology – Engineering Psychology
- Doctor of Philosophy with a Major in Psychology – Industrial/Organizational Psychology
- Doctor of Philosophy with a Major in Psychology – Quantitative Psychology

College of Engineering

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- Graduate Program in Transportation Systems Engineering
 - Estimating mobile emissions
 - Sustainable development and transportation
- Milton H. Stewart School of Industrial Systems Engineering
- Graduate and Undergraduate Program in industrial and systems engineering
 - Offering classes and research project advisement with a green focus
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- Master of Science in Bioengineering
- Master of Science in Chemical Engineering
- Master of Science in Civil Engineering
- Master of Science in Computational Science and Engineering
- Master of Science in Electrical and Computer Engineering
- Master of Science in Engineering Science and Mechanics
- Master of Science in Enterprise Transformation
- Master of Science in Environmental Engineering
- Master of Science in Health Systems
- Master of Science in Industrial Engineering
- Master of Science in International Logistics
- Master of Science in Materials Science and Engineering
- Master of Science in Mechanical Engineering
- Master of Science in Medical Physics
- Master of Science in Nuclear Engineering
- Master of Science in Operations Research
- Master of Science in Paper Science and Engineering
- Master of Science in Quantitative and Computational Finance
- Master of Science in Statistics
- Master of Science in Supply Chain Engineering
- Master of Science with a Major in Chemical Engineering
- Master of Science with a Major in Civil Engineering
- Master of Science with a Major in Environmental Engineering
- Master of Science with a Major in Materials Science and Engineering
- Dual MS program in ECE with GT Lorraine and European partner universities
- Dual MS program in ECE with Korea Advanced Institute of Science and Technology
- Dual MS program in ECE with Shanghai Jiao Tong University (SJTU)
- Dual MS program in ECE with The Politecnico di Torino (ITALY)
- Dual MS program City & Regional Planning & Civil and Environmental Engineering
- Professional Master's in Applied Systems Engineering
- Doctor of Philosophy with a Major in Aerospace Engineering
- Doctor of Philosophy with a Major in Algorithms, Combinatorics, and Optimization
- Doctor of Philosophy with a Major in Bioengineering
- Doctor of Philosophy with a Major in Bioinformatics
- Doctor of Philosophy with a Major in Biomedical Engineering

- Doctor of Philosophy with a Major in Chemical Engineering
- Doctor of Philosophy with a Major in Civil Engineering
- Doctor of Philosophy with a Major in Computational Science and Engineering
- Doctor of Philosophy with a Major in Electrical and Computer Engineering
- Doctor of Philosophy with a Major in Engineering, Science, and Mechanics
- Doctor of Philosophy with a Major in Environmental Engineering
- Doctor of Philosophy with a Major in Industrial Engineering
- Doctor of Philosophy with a Major in Materials Science and Engineering
- Doctor of Philosophy with a Major in Mechanical Engineering
- Doctor of Philosophy with a Major in Nuclear and Radiological Engineering
- Doctor of Philosophy with a Major in Operations Research
- Doctor of Philosophy with a Major in Paper Science and Engineering
- Doctor of Philosophy with a Major in Robotics
- Joint Degree – GT – PKU Doctor of Philosophy with a Major in Materials Science and Engineering

College of Management

- Graduate and Undergraduate course offerings with an emphasis in sustainability
 - Business and the Environment
 - Ethics of Sustainability
 - Social Entrepreneurship
- Master of Business Administration
- Master of Business Administration – Global Business
- Master of Business Administration in Management of Technology
- Master of Science in Quantitative and Computational Finance
- Master of Science with a Major in Management
- Doctor of Philosophy with a Major in Management

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- Environmental Ethics
- Environmental Values and Policy Goals
- Earth systems
- Environmental Issues Seminar
- Policy Tools for Managing the Environment
- Sustainable Systems
- Sustainability and Environmental Policy
- Environmental Policy and Implementation
- Environmental Law
- Environmental and Technological Risk Management

- Master of Science in Digital Media
- Master of Science in History and Sociology of Technology and Science
- Master of Science in Human – Computer Interaction
- Master of Science in International Affairs
- Master of Science in Public Policy
- Master of Science with a Major in Economics

- Doctor of Philosophy with a Major in Digital Media
- Doctor of Philosophy with a Major in Economics
- Doctor of Philosophy with a Major in History and Sociology of Technology and Science
- Doctor of Philosophy with a Major in International Affairs, Science, and Technology
- Doctor of Philosophy with a Major in Public Policy
- Joint Doctor of Philosophy with a Major in Public Policy (GT – Georgia State University)

College of Computing

The College of Computing works interdisciplinary research across modeling for energy, biology, sustainable systems, engineering, biomedicine, human interaction and communications, economics, etc.

- Master of Science in Bioengineering
- Master of Science in Computational Science and Engineering
- Master of Science in Computer Science
- Master of Science in Human – Computer Interaction
- Master of Science in Information Security

- Doctor of Philosophy with a Major in Algorithms, Combinatorics, Optimization
- Doctor of Philosophy with a Major in Bioengineering
- Doctor of Philosophy with a Major in Bioinformatics
- Doctor of Philosophy with a Major in Computational Science and Engineering

- Doctor of Philosophy with a Major in Computer Science
- Doctor of Philosophy with a Major in Human – Centered Computing
- Doctor of Philosophy with a Major in Robotics

Professional Education:

- [Acquisition & Government Contracting](#)
- [Civil Engineering Training and Education](#)
- [Cold Chain Management](#)
- [Economic Development](#)
- [Electrical Engineering](#)
- [Engineering Exam Preparation](#)
- [English as a Second Language](#)
- [Environmental & ISO 50001](#)
- [Foreign Languages](#)
- [Geotechnical Science & Engineering](#)
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- [Health Care](#)
- [Home & Work Accommodations](#)
- [Humanitarian Logistics](#)

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(<http://www.dlpe.gatech.edu/dl/>)

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- [Medical Physics](#)
- [Operations Research](#)
- [Professional Masters in Applied Systems Engineering](#)

Certificate programs related to sustainability

The School of City and Regional Planning does not offer an undergraduate degree, but it does offer a **certificate in land development** as well as numerous undergraduate courses

<http://www.planning.gatech.edu/undergraduate/home>

The School of Public Policy offers a **certificate in public policy** to graduate students (masters and doctorate) from other Schools around campus. The program is designed to address the needs of scientists, engineers, management scholars and others who seek to be more aware of policy, regulatory, ethical, and societal implications of science, technology and innovation.

<http://www.spp.gatech.edu/mc/gcpublicpolicy>

The Office of Organizational Development is pleased to present the new **Emergency Preparedness Certificate program**. Designed primarily for Building Managers, the Emergency Preparedness certificate is open to everyone in the Georgia Tech Community.

<http://www.training.gatech.edu/courses/programs#programs-22>

The **Advanced Emergency Preparedness Certificate Program** offers GA Tech faculty and staff who have already completed the basic Emergency Preparedness Certificate Program the opportunity for additional training and skill development in disaster preparedness.

<http://www.training.gatech.edu/courses/programs#programs-33>

Sources

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<http://www.gatech.edu/greenbuzz/education.html>

<http://www.gatech.edu/degrees/>

<http://www.stewardship.gatech.edu/educationsustainability.php>