U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

2015-2016 Post-Secondary Nominee Presentation Form

ELIGIBILITY CERTIFICATIONS

College or University Certifications

The signature of college or university President (or equivalent) on the next page certifies that each of the statements below concerning the institution's eligibility and compliance with the following requirements is true and correct to the best of their knowledge.

1. The college or university has been evaluated and selected from among institutions within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.
2. The college or university is providing the U.S. Department of Education Office of Civil Rights (OCR) access to information necessary to investigate a civil rights complaint or to conduct a compliance review.
3. OCR has not issued a violation letter of findings to the college or university concluding that the nominated college or university has violated one or more of the civil rights statutes. A violation letter of findings will not be considered outstanding if OCR has accepted a corrective action plan to remedy the violation.
4. The U.S. Department of Justice does not have a pending suit alleging that the college or university has violated one or more of the civil rights statutes or the Constitution's equal protection clause.
5. There are no findings by Federal Student Aid of violations in respect to the administration of Title IV student aid funds.
6. The college or university is in good standing with its regional or national accreditor.
7. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

U.S. Department of Education Green Ribbon Schools 2015-2016

☒ Public 4-Year　☐ Public 2-Year　☐ Private Non-Profit

Name of President/Chancellor: Dr. G. P. "Bud" Peterson, Ph.D.
　　　(Specify: Ms., Miss, Mrs., Dr., Mr., etc.) (As it should appear in the official records)
Official College or University Name: Georgia Institute of Technology
　　　　　　　　(As it should appear on an award)
College or University Street
Mailing Address: 225 North Avenue, NW, Atlanta, GA 30332
　　　　　　　　(If address is P.O. Box, also include street address.)
County: Fulton IPEDS Number*: 139755
Telephone: 404-894-5051 Fax: 404-894-1277
Web site/URL: www.gatech.edu E-mail: president@gatech.edu

*Integrated Postsecondary Education Data System

I have reviewed the information in this application and certify that to the best of my knowledge all information is accurate.

_____ 1/27/16 _____Date: 1/27/16
(President's/Chancellor's Signature)

Nominating Authority's Certifications

The signature by the Nominating Authority on this page certifies that each of the statements below concerning the college or university's eligibility and compliance with the following requirements is true and correct to the best of the Authority's knowledge.

1. The college or university has been evaluated and selected from among institutions within the Nominating Authority's jurisdiction, based on high achievement in the three ED-GRS Pillars: 1) reduced environmental impact and costs; 2) improved health and wellness; and 3) effective environmental and sustainability education.

2. The college or university meets all applicable federal, state, local and tribal health, environmental and safety requirements in law, regulations and policy and is willing to undergo EPA on-site verification.

Name of Nominating Agency: University System of Georgia (USG)

Name of Nominating Authority: Dr. Robert E. Anderson
                    (Specify: Ms., Miss, Mrs., Dr., Mr., Other)
I have reviewed the information in this application and certify to the best of my knowledge that the school meets the provisions above.
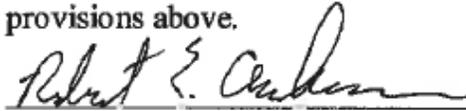
_____ Date: 1/29/16
(Nominating Authority's Signature)

SUMMARY AND DOCUMENTATION OF NOMINEE'S ACHIEVEMENTS

Provide a coherent summary that describes how your college or university is representative of your jurisdiction's highest achieving green school efforts. Summarize your strengths and accomplishments in all three Pillars and their underlying Elements. Then, include concrete examples for work in every Pillar and Element. Only institutions that document progress in every Pillar and Element can be considered for this award.

SUBMISSION

The nomination package, including the signed certifications and documentation of evaluation in the three Pillars should be converted to a PDF file and emailed to ed.green.ribbon.schools@ed.gov according to the instructions in the Nominee Submission Procedure.

OMB Control Number: 1860-0509
Expiration Date: March 31, 2018

Public Burden Statement

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. The valid OMB control number for this information collection is 1860-0509. Public reporting burden for this collection of information is estimated to average 37 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit P.L. 107-110, Sec. 501, Innovative Programs and Parental Choice Provisions. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4536 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1860-0509. Note: Please do not return the completed ED-Green Ribbon Schools application to this address.

U.S. DEPARTMENT OF EDUCATION

GreenRibbonSchools

ED-GRS Application for Colleges and Universities

Contact Information

College/University Name: **Georgia Institute of Technology**

Street Address: **225 North Avenue, NW**

City: **Atlanta** State: **Georgia** Zip: **30332**

Website: **www.gatech.edu** Facebook page: **https://www.facebook.com/georgiatech**

President/Chancellor Name: **Dr. G. P. "Bud" Peterson, PhD**

President/Chancellor Email Address: **president@gatech.edu** Phone Number:**404.894.5051**

Lead Applicant Name (if different): **Anne Rogers**

Lead Applicant Email: **anne.rogers@sustain.gatech.edu** Phone Number:**404.731.2834**

Basic Carnegie Classification	**Doctoral Universities: Highest Research Activity**	Minority-Serving Institution (check all that apply): AANAPISI ___ ANNH ___ HBCU ___ HSI ___ NASNTI ___ PBI ___ TCU ___ N/A
Enrollment Profile	Size and setting **Four-year, large, highly residential** Undergraduate Enrollment: **15,142** Graduate Enrollment: **9,892** Percent of Undergraduates Receiving Pell Grants:**14%**	Graduation rate (150% of normal time): **85%** Average Institutional Net Price: **$12,187**

1. Is your college or university participating in a local, state or national program which asks you to benchmark progress in some fashion in any or all of the Pillars?

(x) Yes ( ) No Program(s) and level(s) achieved: <u>Princeton Review Green Honor Roll (2014,2015),</u>
<u>Sierra Club Top (2014) Sustainability Tracking, Assessment & Rating System (STARS) Gold (2012)</u>

2. Has your college or university received any awards for facilities, health or environment?

(**x**) Yes ( ) No Award(s) and year(s)

<u>2015: Bee Campus USA, Princeton Review Top 50 Green Colleges (no. 23), Tree Campus USA,</u>
<u>Princeton Review Green Honor Roll, Green Cleaning Award. 2014: Game Day Recycling Challenge –</u>
<u>1st place in the ACC for Organics Reduction, Tree Campus USA, ACC Clean Energy Competition,</u>
<u>2013 Game Day Recycling Challenge- 1st place in the ACC for Waste Minimization,</u>

Summary Narrative: At Georgia Tech, sustainability is just how we do business. Sustainability principles and practices permeate practically every facet of campus life – from the locally sourced produce in our dining halls, our Game Day Recycling Program that minimizes the amount of waste sent to landfills during home football games to our Smart Energy Campus Program designed to reduce energy consumption and increase building operational effectiveness, we are continually aggregating, analyzing, and evaluating data from our programs and initiatives, including our plans for a future state of carbon neutrality. We see Georgia Tech and the surrounding community as a "living, learning, laboratory" for sustainability. We believe it is our role to foster an ecosystem of innovation, collaboration and creativity – where new knowledge, methods and technologies are tested, developed and applied for insights and solutions to critical sustainability challenges.

At any given time, you will find a multitude of sustainability initiatives underway on the Georgia Tech campus. They unite faculty, staff and students in our quest to provide solutions to the environmental, ecological and sustainability challenges of our times. We have made several public commitments – through various organizations, master plans and guidelines – to address the sustainability needs of the Georgia Tech campus. Our near and long-term strategic planning includes initiatives to:

- Ensure that all major capital construction projects meet the highest environment building standards in the industry.
- Establish the "Eco-Commons" as an open space landscape system that threads together existing and new campus spaces, improves stormwater retention and provides expanded informal recreational spaces
- Reduce stormwater runoff on campus by 50 percent
- Reduce energy use by 15 percent by 2020
- Expand renewable energy use to 10 percent of energy consumed on campus by 2040
- Reduce energy use to 50 percent below 2007 levels by 2040
- Become carbon neutral by 2050

In 2007, former Georgia Tech president Wayne G. Clough signed the American College and University Presidents' Climate Commitment (ACUPCC), which requires a university to develop an action plan to achieve climate neutrality and to publicly report progress toward that goal. In compliance with the ACUPCC, commitments were made by Georgia Tech to reduce energy use, expand our use of renewable energy, and

become carbon neutral by 2050. We've made strides toward our goal with significant greenhouse gas reductions – emissions per 1000 sf reduced by ~8% since 2011 – despite the challenges of operating world-class research and lab facilities with high energy requirements.

Conserving energy through efficient systems, demand management, and utilizing alternative solutions are core objectives of Georgia Tech. Major solar power arrays on campus buildings not only generate clean electricity, but provide hands-on opportunities for students and researchers to directly study working PV (photovoltaic) system installations. We've also introduced our Smart Energy Camus Initiative, which collects data from energy utility systems all over campus. By utilizing data analysis, modeling and simulation tools, it provides insights to help us maximize efficiencies, reduce costs, and make a positive impact on energy planning and consumption. In January 2016, students began to have the opportunity to focus their time and energy on projects centered on "creating sustainable communities." As part of our Quality Enhancement Plan (QEP) for the period 2016 – 2021, Georgia Tech will introduce "Serve-Learn-Sustain." This program will equip students to effectively address sustainability challenges and community-level needs in their professional and civic lives. Students will work to develop ways to help make communities more livable, sustainable and prosperous. This could include developing services for the under-served, deploying community renewable energy, supporting a clean water infrastructure, or developing local, state, and federal environmental policy.

Georgia Tech has 21 endowed chairs and 23 research centers that include a significant sustainability component or focus. Interdisciplinary research centers, corporate partnerships, NSF and SEED funding all support major sustainability research at Georgia Tech.

We have many highly referenced (h-index), green chemistry award-winning researchers, as well as numerous accomplished graduate and undergraduate researchers in the area of environmental sustainability. The collaborative research environment at Georgia Tech invites all members of the campus community to be a part of our culture of innovation.

Pillar I: Reduced Environmental Impact and Costs

At Georgia Tech we consider ourselves to be leaders in implementing best practices that reduce our environmental impact on the community and the surrounding areas. Several of our departments on campus have proven this statement by the numerous programs that have been developed.

Green Cleaning

The Georgia Tech green cleaning program is a method of cleaning indoor facilities that reduces water used when cleaning as well as using environmentally safe cleaning products. The purpose of the program is to lower the amount of chemicals released into the air. Our cleaning equipment still achieves high quality results, while using 70 percent less water and 90 percent fewer chemicals than traditional equipment. Georgia Tech operates its own in-house laundry to wash micro-fiber mops and rags; replaced residential washing machines (28 gallons of water per load) with front-load washers (14 gallons of water per load).

After fully implementing the green cleaning program, a cost savings analysis revealed an annual savings of 84 percent over initial baselines. We've also noted a 56 percent reduction of chemical usage from 2008 through 2014. Comparable savings have been met year after year from reduced water usage, less chemical purchasing and new technology adoption. American School & University recently announced that Georgia Tech is the 2015 Grand Award winner in the higher education category for the Annual Green Cleaning Award for Schools & Universities. http://facilities.gatech.edu/green-cleaning

Recycling & Waste Diversion

Facilities Management's Office of Solid Waste and Recycling has been improving waste diversion on the Georgia Tech Atlanta campus since 1997. The department spearheads engagement programs such as our award winning game day recycling program which holds 1st place in the ACC for Organics Reduction (2014) and 1st place in the ACC for Waste Minimization (2013) award, "Tech Treasure" move-out diversion program and GT Earth Day. The Game Day recycling program has diverted a total of 166.4 tons of material from the landfill since the program's inception.

The office has also implemented the AWARE program (Actively Working to Achieve Resource Efficiency), an innovative waste minimization program that is implemented in numerous campus buildings to help the GT community be more aware of the critical role they play in waste minimization. The program encourages members of the campus community to make environmentally responsible choices regarding the waste they generate. Other areas where the office is making strides to increase recycling & waste diversion are:
- Source-separated containers are located amongst interiors and exteriors throughout the Georgia Tech campus.
- Office paper and cardboard is collected in all classrooms, offices and administrative spaces.

Integrated Design Process

In addition to including multiple stakeholders in the traditional design process, true integrated design includes the synthesis of climate, use, the building and systems design. The intent is to create a more productive and comfortable environment that outperforms similar buildings. By questioning the users about the intended interactions between use, loads and systems, the professional design team can create the optimum environment to achieve high levels of efficiency. Construction savings can be achieved by fine tuning the building systems to reduce or eliminate systems that are not required. A more efficient building will allow the owner to use funds normally expended for utilities to be reinvested in core business activities. The overall environmental stewardship in a highly efficient building eliminates unnecessary use of natural resources and limited energy resources.

Strict Environmental Design & Construction Standards (Yellow Book)

The Georgia Tech Architecture and Design Standards for Building Technology (Yellow Book) is a guideline for design professionals to assist in creating the most efficient buildings and sites possible while responding to the programmatic needs of each project. Sustainable design standards and environmental stewardship are included

throughout the Yellow Book to assist the design teams in evaluating building design as well as construction and operation. The design teams are expected to incorporate Yellow Book sections that define standards for building site selection and erosion control, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. Sustainability and environmental stewardship continue to lower operating costs across the campus and lessen the impact on the environment outside our site boundaries.

Green Building Certifications

We build according to green certifications and standards because we are committed to producing high-performance buildings. From 2003 through 2015 Georgia Tech built or renovated 23 projects to LEED Silver-level certification or higher, certifying 2.9 million square feet of space. We also built or renovated another thirteen projects while following a green building standard which would meet or exceed a level of gold certification.

Beginning in fiscal year 2016 our green building policy was amended to build according to our own strict, environmental and efficient green building standards, and to pursue the state of Georgia's Peach Energy Efficiency and Sustainable Construction standard.

Construction Waste Recycling

In accordance with our Yellow Book design standards, all capital projects with a budget exceeding $1 million dollars are required to execute construction waste recycling. From 2003 through 2015 these projects have met or exceed an 85% waste offset.

In the beginning of fiscal year 2016 our Design & Construction team developed a pilot program for a construction waste management specification for small-scale construction projects. Criteria for implementation are being identified via data collection throughout the fiscal year. The intent is to develop an overarching construction waste management policy by 2017.

Energy Efficiency Projects

Georgia Tech's Energy Conservation team is committed to creating an energy efficient campus that enhances the living, working, and learning environments of the Institute. Located within the Department of Facilities Management, the Energy Conservation team manages the utilities for the entire campus and is in charge of retrofitting the campus to save energy and money in order to meet the Governor's Energy Challenge.

Since the inception of the Energy Conservation department we have completed $1.8 million dollars on (14) projects in the first 3 years of GRF plan. We also have $1.2 million on (3) projects, we are finishing this quarter. In addition, Georgia Tech is seeking approval for another $1.2 million on (3) additional projects. These projects consist of HVAC, lighting, energy, water and building energy conservation projects to increase the energy savings for Georgia Tech's buildings and services.

Pillar 2: Improve the health and wellness of students, faculty, and staff

Georgia Tech offers a comprehensive benefits package designed to meet the diverse needs of our faculty and staff. Our benefits are competitive and are an important component of the total compensation package. Georgia Tech offers a robust choice of health and welfare plans including medical, dental, vision, flexible spending, disability and life insurance plans.

Faculty & Staff Assistance Program

Georgia Tech encourages employees to maintain work-life balance, offering programs and resources that enhance their personal and professional lives. The Faculty and Staff Assistance Program (FSAP), which has been in place for twenty years, is a confidential service that assists employees in addressing emotional, mental health and work related concerns. The program is at no cost to employees and each faculty and staff member is eligible for one to three sessions per calendar year and one executive coaching session per calendar year. Provided services include, but are not limited to:

- Assessment for emotional issues such as depression, nervous, or emotional disorders, and substance abuse;
- Life transition assistance (divorce, retirement, marital distress, etc.); and
- Counseling, referral, case management, and follow-up.
- Career, performance enhancement, executive and wellness coaching

Green Cleaning: a healthier way to learn

Indoor air at schools is often polluted and much of this pollution originates from cleaning products. Certain ingredients in cleaning products can present hazard concerns to exposed populations. Young people, especially those with asthma, are at a high risk from polluted air and chemical exposures from conventional cleaning products. Our Georgia Tech green cleaning program reduces chemical exposures and supports positive outcomes.

- Protecting students' and other building occupants' health, thereby putting our students in a better position to learn.
- Protecting the health of custodial staff who works closely with the cleaning supplies.
- Protecting the environment by reducing potentially hazardous chemicals from being released.

Landscaping

How we manage, develop, and grow on our land is vitally important to Georgia Tech. A canopy of nearly 12,000 trees – approximately 130 species – not only contributes to our lush campus environment, but helps with our water conservation goals and the reduction of the heat island effect, ultimately helping to conserve energy. We also take an environmentally sensitive approach to pest management and encourage the use of non-toxic, natural herbicides. The department's goal is to maintain an attractive and safe campus environment where students, faculty, staff and visitors can live, work and study in comfort.

Student Health Insurance Plan

For those students that do not already have appropriate health insurance, Georgia Tech is proud to offer **StudentBlue**, underwritten by BlueCross BlueShield of Georgia^{TM}. This plan includes comprehensive covered benefits (medical, dental and vision) that meet the federal Patient Protection and Affordable Care Act (PPACA) mandates at the 80/20 coverage Gold Level. From: http://health.gatech.edu/finance/Pages/SHIP/Student-Health-Insurance-Program.aspx

Student Mental health peer counseling program--- Division of student life

This program trains Tech students to provide one-on-one support and education to their GT peers and offers peer counselors' ongoing supervision in the provision of these supportive services. The Counseling Center hopes that providing students with the option to speak with a peer, who is trained to help them address many of the common concerns they may face, will offer yet another way to seek the support students need to successfully pursue their personal and professional goals.

Student Dietitian program/Student meal plans--- health promotion and Dining services

Tips and tricks on how to structure meals and eating frequency.
http://healthpromotion.gatech.edu/promotion/news/Pages/Welcome-Back-Students.aspx
http://mealplan.gatech.edu/mealplans/Pages/freshman.aspx

CRC fitness program--- CRC

The G.I.T. FIT Program (Georgia Institute of Technology Fitness Program) offers an opportunity to learn life-long skills, increase fitness levels, and just have fun! We offer over 80 non-credit classes spanning from martial arts to golf to personal training and much more. Our mission is to provide the Georgia Tech community with opportunities to begin or continue a healthy lifestyle that will last well into the future.
http://www.crc.gatech.edu/gitfit/content/1/about-git-fit

Pillar 3: Effective Environmental and Sustainability Education

Campus as a Living-Learning-Laboratory

Sustainability Internship Programs--- Facilities Management

Vision: This consistent, organized internship program is developed to enhance the strategic sustainability position of the Institute and creates impactful leadership opportunities for students.
Program overview: Through the development of an established internship program, the Facilities sustainability committee is able to enhance the efficiency of its sustainable-related efforts while also developing structured, managed, and career-enhancing engagement opportunities for GT students. A fully-implemented internship program has identified tasks and responsibilities that support existing functions with Facilities and allow for the seamless integration of GT students and researchers.

Categories: Energy conservation internship; Performance of the built environment internship; Recycling & waste minimization internship.

Smart Energy Campus: A Partnership between Facilities Management's Energy Conservation team and the Aerospace Systems Design Lab

Smart Energy Campus is a joint sustainability research initiative with the School of Electrical and Computer Engineering, the Aerospace Systems Design Laboratory (ASDL), and Georgia Tech Facilities Management. Beginning in 2013, the idea behind this project was to see if Georgia Tech researchers could be of use to Facilities by utilizing data analysis as well as modeling and simulation tools to evaluate and optimize different energy systems on Tech's campus. The Energy Conservation department's seasoned energy and utility experts also engage with Georgia Tech researchers via our living laboratory programs.

Campus-Wide Sustainability Engagement Events:

Earth Day--- Facilities Management's Office of Solid Waste and Recycling (http://www.earthday.gatech.edu/)

The goal of Georgia Tech's Earth Day Celebration is to focus attention on the environment and increase people's awareness of the world around them. The event is free, open to the public, features over 70 exhibitors and includes eco-friendly giveaways, recycling opportunities, a clothing swap, an office supply exchange, live music, and organic popcorn.

Tech Beautification Day---GT student organization (https://gttbd.wordpress.com/)
Tech Beautification Day (TBD) is a student-run, non-profit organization to celebrate a fun day of service where the Georgia Tech community comes together to complete philanthropic projects such as planting trees, spreading pine straw, painting murals, etc. on campus. Each year, over 1,000 students, alumni, and faculty participate, executing several projects on and around campus.

Georgia Water Resources Institute (www.gwri.gatech.edu)
GWRI is a non-profit organization within Georgia Tech with a mission to improve the science and practice of water resources planning and management in ways that balance the quality of life, environmental sustainability, and economic growth.

Academic Undergraduate Sustainability Initiatives:
Through its research, policy, and practices, Georgia Tech is well known as an advocate for creating sustainable communities. Some examples of institutional leadership include:

Serve-Learn-Sustain (http://serve-learn-sustain.gatech.edu/)
Tech's new 10-Year Quality Enhancement Plan, housed in the Office of Undergraduate Education, is providing students with a multitude of courses and co-curricular opportunities focused on "creating sustainable communities" and integrating community engagement and service-learning. The initiative is designed to

help students combine their academic and career interests with their desire to improve the human condition.

Ray C. Anderson Center for Sustainable Business (c.gatech.edu/CBSS)
Housed within the Scheller College of Business, the Center acts as a catalyst and connector, bringing together students, research faculty, companies, and entrepreneurs to create an environment where business-driven solutions to sustainability challenges can take shape and thrive.

Brook Byers Institute for Sustainable Systems (www.sustainable.gatech.edu)
Enhances Georgia Tech's research, education, and service missions, and campus operations through leadership, communications, development, and decision making inspired and defined by the principles of sustainability.

Center for Biologically-Inspired Design (www.cbid.gatech.edu)
A group of interdisciplinary biologists, engineers and physical scientists who seek to facilitate research and education for innovative products and techniques based on biologically-inspired design solutions

Joint Laboratory of Ecological Urban Design (www.planning.gatech.edu/ecodesign)
Uses cities in China and the U.S. as "urban laboratory" for nurturing novel design methods and new technologies for ecological urban systems. It focuses on design, simulation and performance assessment of flow energy, renewable, and resilient urban systems.

Center for Organic Photonics and Electronics (cope.gatech.edu)
Works closely with many of the research centers and institutes at Georgia Tech to provide a focal point for campus-wide efforts on functional organic optical and electronic materials

Center for Quality Growth and Regional Development (www.cqgrd.gatech.edu)
An applied research center that studies solutions for communities through work in five program areas: air quality & the natural environment; community design & architecture; healthy places; land development & regional governance; and transportation & infrastructure.

Strategic Energy Institute (www.energy.gatech.edu)
Serves as a conduit for integrating, facilitating, and enabling Institute-wide programs in energy research and development. SEI develops technologies, policies, and educational programs that have the potential for offering high-impact solutions to pressing near-term energy issues.

Urban Climate Lab (www.urbanclimate.gatech.edu)
Explores the connections between climate change and the built environment. The UCL integrates expertise in the realms of environmental science, urban design, and public health to develop strategies to manage and counteract climate change at the urban scale.

The Center for Urban Innovation (www.urbaninnovation.gatech.edu)
Supports research that thinks globally, acts locally, and encourages researchers, students, and civic leaders to find innovative, interdisciplinary approaches to shaping sustainable cities.

Westside Communities Alliance (westsidecommunities.org)
The Alliance serves as a nexus point for area communities and institutions to tackle local challenges and find points of unity. It seeks to be a model for multi-institutional engaged scholarship and service for Atlanta, as well as a resource for communities in need of partners and expertise. In addition to foundational sponsorship, Georgia Tech students and faculty are involved in specific initiatives in support of WCA.