GEORGIA INSTITUTE OF TECHNOLOGY

INSTITUTIONAL MISSION AND STUDENT BODY PROFILE

The Georgia Institute of Technology (Georgia Tech) is a science and technology-focused research university with a deeply-held commitment to improving the human condition. Georgia Tech's motto of "Progress and Service" is achieved through effectiveness and innovation in teaching and learning, research advances, and entrepreneurship in all sectors of society.

A member of the Association of American Universities (AAU), Georgia Tech seeks to influence major technological and policy decisions. For nearly 20 years, Georgia Tech has been ranked among the top ten public universities in the United States by *U.S. News and World Report*. The Institute is consistently rated among the top universities in the nation for the graduation of underrepresented minorities in engineering, computer science, and mathematics. Georgia Tech also awards more engineering degrees to women than any other U.S. institution. The typical Georgia Tech undergraduate is of traditional age (≤ 24), enters as a first-year student, lives on campus, attends full-time, and is seeking a first undergraduate degree.

In fall 2018 Georgia Tech attained a record high enrollment of 16,047 undergraduates, 78% of whom were enrolled in STEM majors[1]. In addition to its undergraduate population, the Institute had a fall 2018 enrollment of 16,675 graduate students for a total enrollment of 32,722. Between 2011 and 2018, the Institute experienced a 15% increase in undergraduate enrollment. In 2018-19, 3,721 degrees were earned by Tech undergraduates, a 30% increase since 2011-12, when 2,873 degrees were conferred. Employment offers, with a median starting salary of $75,000, were made to 88% of our undergraduates by the time they graduated. Appendix B illustrates undergraduate enrollment and degree trends.

Georgia Tech values the diversity of its student population. In 2018-19, Tech achieved a historic high in its undergraduate female enrollment of 6,116 students. Current enrollment of women has increased by 36% since 2011-12, when female enrollment was 4,489. The proportion of women has risen from 32% of the undergraduate student body in 2011-12 to 38% in 2018-19. Underrepresented minorities comprise 17% of the undergraduate student body.

To improve access for low-income students, the Tech Promise program is offered to dependent Georgia residents whose families have an annual income of less than $33,300 and who are seeking a first undergraduate degree. This program is designed to fill a gap in the financial aid support system, picking up where other financial aid options leave off. As a founding member of *American Talent Initiative*[2], Georgia Tech will continue its partnership with nearly 100 public and private institutions nationally to increase the number of low-income, first-generation and Pell-eligible undergraduates.

Five years ago, Georgia Tech created the Atlanta Public Schools (APS) Scholars Program, which offers automatic acceptance and financial scholarships for APS valedictorians and salutatorians. As of spring 2019, there were 34 APS scholars in the program, 32 of which were in good academic standing. In addition, Georgia Tech has entered into a partnership with *Achieve Atlanta*. The collaboration will provide scholarship support to APS graduates and facilitate interventions designed to increase the number who attend and support their success at Georgia Tech. As of spring 2019, including the APS scholars, there were 51 *Achieve Atlanta* scholars participating in the program, 46 of which were in good academic standing. With the fall 2018 freshman cohort, Georgia Tech launched the Georgia Tech Scholars program, guaranteeing admission to valedictorians and salutatorians from every high school in the state. In fall 2018 applications from Georgia valedictorians and salutatorians increased by more than 100%, with 137 applicants enrolling.

As of fall 2018 Georgia Tech had achieved a first-to-second-year retention rate of 97% for the first-time, full-time freshman 2017 cohort and a six-year graduation rate of 87% for the 2012 first-time, full-time cohort. The 97% retention rate has been maintained for four consecutive years, and our 87% graduation rate is a record high for the Institute. Preliminary data from fall 2019 indicate that the first-to-second year retention rate for first-time, full-time freshmen in the 2018 cohort is 97%, while the six-year graduation rate for

[1] STEM majors include students in the Colleges of Computing, Engineering, and Sciences.

[2] https://americantalentinitiative.org

students in the 2013 first-time, full-time cohort is a record high of 90%.[3] See Appendix A for a historical illustration of institutional retention and graduation rates.

Georgia Tech's positive enrollment trends, retention and graduation rates, and number of degrees conferred underscore the Institute's ability to help meet future workforce needs.

MOMENTUM YEAR UPDATE

Georgia Tech's Momentum Year plan for 2018-19 focused on redesigning the first-year seminar (GT 1000) curriculum, initiating implementation of the spring 2018 recommendations of the Academic Advising Task Force, and partnering with Gateways to Completion (G2C) to analyze introductory physics courses and continue enhancements to linear algebra instruction. As part of redesigning the first-year seminar curriculum, GT 1000 course learning outcomes were streamlined, and common assignments for all sections were revised to align with the new outcomes. The redesigned curriculum focuses on encouraging self-efficacy, community building, and sense of belonging for our first-year students. The resulting curriculum shifts the course from an extended orientation model to focus more heavily on self-reflection, intentional academic planning, and leadership and collaboration skills, helping to ensure that the course provides students with the skills and resources they need to succeed personally and academically at Tech and beyond. The curriculum redesign is currently being implemented in all GT 1000 classes, and we are in the process of gathering data to analyze the effectiveness of the redesign via a pre- and post-semester survey sent electronically to students, peer leaders, and instructors.

Beginning in fall 2017 the Academic Advising Task Force and its subcommittees met over a period of about four months prior to submitting the Report and Recommendations to the Provost in April 2018. The Task Force recommendations, if fully implemented, will result in more equitable and accessible advising for all students; a closer alignment between academic and career advising; key centralized services and support; advisor training and professional development; the establishment of common advising practices and standards; enhanced advising technology, data, and analytics; and the foundation for advising assessment and evaluation across campus. Georgia Tech is committed to developing a coherent distributed advising model incorporating the following features: 1) promotion of best practices and professional development for professional advisors and faculty advisors, 2) acquisition of a common IT infrastructure to support communications and record keeping with relevance to academic advising, and 3) hiring of key personnel to provide exploratory advising (e.g. change of majors or exploration of interdisciplinary pathways) and analytics support. In pursuit of enhanced IT infrastructure for academic advising, Undergraduate Academic Advising worked with the Office of Information Technology to conduct focus groups and other requirements gathering communications with key stakeholders. An aggressive project plan has been developed with the aim of having implementation and training completed by fall 2020. Additionally, Georgia Tech's first Exploratory Advisor was hired in June 2019. This new position will support students interested in changing majors or exploring interdisciplinary pathways. Continued implementation of the Academic Advising Task Force recommendations is the primary focus of Tech's Momentum Approach plan for fall 2019.

In Year 1 of Georgia Tech's participation in the USG G2C initiative, the Institute transferred institutional data on student performance in high enrollment courses (including the Institute's introductory physics courses) to the John Gardner Institute (JGI) for analysis. During Year 2 of the effort (AY 2019-2020), the School of Physics is working to broaden the Georgia Tech's G2C effort by aligning with the Institute's long term educational goals, as outlined in the recent report: Deliberate Innovation, Lifetime Education (https://provost.gatech.edu/commission-creating-next-education)

INSTITUTIONAL COMPLETION GOALS, *HIGH-IMPACT STRATEGIES, ACTIVITIES AND OUTCOMES*

Goal: Increase the number of undergraduate degrees awarded by USG institutions.

Strategy 1: Provide targeted K-12 outreach to pique interest in STEM and provide programming to retain currently enrolled STEM majors.
Strategy 2: Implement programming to promote the academic success of underrepresented minorities.
Strategy 3: Provide high-impact curricular and co-curricular opportunities to enhance engagement and academic development.

Goal: Provide intentional advising to keep students on track to graduate.

Strategy 4: Provide interventions to promote the success of students who are underperforming academically or who may be at risk for not continuing their education.

3 Based on fall 2019 data as of September 5, 2019

Goal: Restructure instructional delivery to support educational excellence and student success.
Strategy 5: Implement peer-led instruction for students in traditionally challenging gateway courses.
Strategy 6: Implement summer online undergraduate courses and on-campus summer session initiatives to help students stay on track to graduation.

Strategy 1: Provide targeted K-12 outreach to pique interest in STEM and provide programming to retain currently enrolled STEM majors.

Related Goal: Increase the number of undergraduate degrees awarded by USG institutions.

As a science and technology-focused institution, Georgia Tech's STEM activities are central to its mission. The sustained economic impact made possible through a better-prepared STEM workforce is significant, and graduating a larger number of STEM students to meet workforce needs is a high priority for Georgia Tech.

Georgia Tech is involved in an array of outreach activities specifically designed to attract K-12 students. The Center for Education Integrating Science, Mathematics, and Computing (CEISMC) conducts a comprehensive summer program to expose K-12 students to STEM topics and careers. Additional K-12 outreach programs are conducted by the Center for Engineering Education and Diversity (CEED), and Women in Engineering (WIE), both units within the College of Engineering. In 2018-19, more than 75 individual K-12 STEM programs were held at Georgia Tech.

Through the School of Mathematics and the department of Professional Education, Georgia Tech offers distance mathematics courses to dual enrolled high school students. In 2018-19, Distance Math served students in 61 Georgia high schools with 505 enrolled in fall and 473 enrolled in spring.

In addition to providing K-12 outreach for students, CEISMC has designed and implemented professional learning initiatives for STEM teachers for over 20 years. For details on CEISMC's Teacher Education Partnerships, see https://www.ceismc.gatech.edu/outreach. Although Tech does not offer an education degree, a pre-professional advisor located within the Center for Career Discovery and Development (C2D2) advises students who may have a future interest in K-12 teaching. During 2018-19, 31 students participated in 37 pre-teaching advising sessions.

Summer bridge programs ease the transition from high school to Georgia Tech. Challenge is a five-week summer residential program for underrepresented minority students coordinated by the Office of Minority Education (OMED). While many bridge programs offer remedial pathways as a transitional model, Challenge at Georgia Tech provides advanced pathways through academic, professional, and culturally intense courses and workshops designed to enhance transitional success based on constructivist learning.

Support mechanisms for currently enrolled students span the campus. For example, Georgia Tech offers STEM specific living learning communities, mentoring programs, scholarships, student organizations, first-year seminar classes, leadership development opportunities, one-to-one tutoring, and supplemental instruction for traditionally challenging STEM courses.

Through Georgia Tech's co-op program, 935 undergraduates completed 1,074 individual semester-long, major-related work terms in 2018-19. Of this total, 95% of the positions were STEM related. Additionally, in 2018-19, 1,233 undergraduates completed 1,377 semester-long internships, 87% of which were STEM related. The co-op/internship program provides in-depth access to STEM opportunities, helps students to make better connections between theory and application, strengthens students' motivation to stay on course to graduation, and increases the number of job offers students receive prior to and upon graduation.

One measure of progress for our STEM recruitment strategy involves the number of students enrolled in STEM majors. Tech has achieved an increase in STEM enrollment from 10,389 students in 2010-11 to 12,763 students in 2018-19. As of fall 2018, 80% of Georgia Tech students were seeking a STEM degree.

Efforts to engage and retain more women students represent one of our best opportunities for increasing the number of STEM majors. Since fall 2010, the number of women enrolled in STEM majors at Georgia Tech increased from 2,794 (27% of undergraduate STEM enrollment) to 4,521 (35% of undergraduate STEM enrollment) in fall 2018. Once enrolled, women at Georgia Tech consistently graduate at a higher and faster rate than men. For the 2012 overall cohort, the six-year graduation rate for women was 91% compared to an 85% rate for men. Women in STEM majors also had a 91% six-year graduation rate compared to an 85% rate for men. See Appendix D for overall STEM graduation rates and STEM graduation rates by gender. Table 1 illustrates enrollment of women in STEM from 2010 through 2018.

Table 1: STEM Enrollment Fall 2010-Fall 2018

	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017	Fall 2018
Total	10,389	10,718	11,459	11,701	11,822	12,330	12,611	12,508	12,763
Women	2,794	2,989	3,300	3,474	3,637	3,976	4,225	4,378	4,521
% Women	27%	28%	29%	30%	31%	32%	34%	35%	35%

The number of STEM degrees earned is a key measure of our success for this strategy. In 2018-19, 3,114 STEM degrees were earned, a 44% increase from the number of STEM degrees earned in 2011-12.

Table 2: Number of STEM Degrees Earned

2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
2,157	2,389	2,578	2,577	2,799	3,039	2,968	3,114

Georgia Tech continues to be a U.S. leader in the number of STEM students enrolled and the number of degrees conferred each year.

Strategy 2: Implement programming to promote the academic success of underrepresented minorities.

Related goal: Increase the number of undergraduate degrees awarded by USG institutions.

Georgia Tech's strategic plan confirms our aspiration to be an Institute that pursues excellence and embraces diversity in all forms. A high priority for our CCG plan involves outreach and programming for underrepresented minority (URM) students, who have frequently experienced lower retention and graduation rates compared to their Asian and White peers. As of fall 2018, 17% of all undergraduates were underrepresented minorities.[4]

To encourage academic excellence, the Office of Minority Educational Development (OMED) provides programming specifically targeted to underrepresented minorities. OMED, a unit within the Center for Student Diversity and Inclusion (CSDI), provides a range of services designed to promote the success of underserved minorities.

- Challenge is a five-week, academic intensive summer residential program for incoming first-year students. During Challenge, students are immersed into the Georgia Tech environment; they live in on-campus housing, take classes taught by Georgia Tech professors, and participate in cultural, professional, and academic workshops and activities. Challenge is designed to help prepare incoming first-year students for a successful college career by equipping them to navigate the 7 C's (computer science, chemistry, calculus, communication, career development, cultural competency, and community service).
- Edge is a year-long peer mentoring program designed to support first-year and transfer students (both academically and socially) through their first academic school year at Georgia Tech. The Edge program mission is to help new Georgia Tech students develop and refine strategies for a successful college transition and experience. The Edge Program pairs highly engaged enrolled students with incoming students and transfer underrepresented minority students to assist them both academically and socially throughout their first year at Georgia Tech.
- *AAMI (African* American Male Initiative) is a nine-time award-winning grant program aimed to cultivate innovative talent through targeted cultural and gender-based initiatives for Black males. AAMI is the first-ever statewide initiative specifically focused on increasing post-secondary education attainment among African American males.
- ILARC (Interactive Learning and Resource Center) hosts drop-in and appointment tutoring services, guided study groups, topic-specific review sessions (concept classes by graduate students), and GPA planning.

[4] For CCG, underrepresented minorities include students who self-identified as Hispanic or Latino, African American or Black, American Indian or Alaskan Native, Native Hawaiian or other Pacific Islander or two or more races where at least one race is URM; includes U.S. citizens and permanent residents.

Metrics used to assess the success of this strategy include:

- Average GPA of Edge Program participants compared to the average GPA of non-participating matched peers at the end of the first year.
- Average GPA of the Challenge summer program participants compared to the average GPA of non-participating matched peers at the end of the first semester.
- First-semester average GPA and first-to-second-year retention rate of AAMI participants compared to non-participating matched peers.
- Retention and graduation rates for underrepresented minorities at Georgia Tech compared with overall campus rates.

A measure of progress is for program participants to academically outperform matched non-participating peers. Our ultimate goal is for our underrepresented students to attain or exceed the retention and graduation rates of the overall student population.

Progression metrics for 2018-19 demonstrate positive program-level outcomes:

- For the 268 URM students participating in the Edge Program (peer mentoring), the average cumulative GPA achieved at the end of the first year was 3.18 compared to 3.14 for URM non-participants.
- For Challenge (110 fall enrolled participants), average GPA's were higher for African American/Black students and Hispanic students compared to GPA's of non-participating matched peers. Moreover, 15 Challenge participants completed their first semester with a 4.0 GPA and 53 participants had a 3.0 or higher GPA at the end of their first semester.
- AAMI students (133 undergraduate participants) had an average first-semester GPA of 3.1 compared to a 2.78 GPA for non-participating African American males. AAMI students (2017 cohort) were retained to the second year at a higher rate (95.2%) compared to a 90.3% first-to-second-year retention rate for non-participating matched peers. AAMI is demonstrating the importance of peer leadership towards raising expectations and cultivating a climate of excellence.

In fall 2018, the overall URM first-to-second-year retention was 95% (compared with a 97% overall rate), while the six-year URM graduation rate for the 2012 cohort was 81% (compared with an 87% overall rate). URM six-year graduation rates have improved from 72% for the 2006 cohort to 81% for the 2012 cohort. For the Institute's two largest URM groups, six-year graduation rates for the fall 2012 cohort were 79% for Black or African American students and 86% for Hispanic or Latino students (compared to 87% for the overall campus population). See Appendix F for URM graduation rates.

Strategy 3: Provide high-impact curricular and co-curricular opportunities to enhance engagement and academic development.

Related Goal: Increase the number of undergraduate degrees awarded by USG institutions.

Georgia Tech offers high-impact curricular and co-curricular opportunities to enhance engagement and academic development. According to the Association of American Colleges and Universities, these teaching and learning practices have been widely tested and found to have a positive impact on student retention and engagement.5 Among these options are a first-year seminar (GT 1000), living learning communities, an undergraduate research program, a study abroad program, and experiential learning (internships, co-op, and service learning). Participation levels in these optional programs are significant, and the graduation rates for program participants are among the highest at Georgia Tech. For example, in summer 2018 the six-year graduation rate for students who enrolled at Tech in 2012 and who participated in the co-op program was 96%, while the six-year graduation rate for students in the 2012 cohort who participated in the internship program was 97%. Students who participated in undergraduate research had a 95% graduation rate. See Appendix C for graduation rates of participants in select high-impact academic enrichment programs.

Innovation is inspired through options such as Create-X, InVenture, and VIP (the Vertically Integrated Projects Program). Georgia Tech is also promoting student engagement through Student Life via a wide range of services, programs, and more than 600 student organizations. Georgia Tech Health & Well-Being promotes, nurtures, and enriches a culture of health well-being, and caring for Georgia Tech students. The Center for Assessment, Referral & Education (CARE), which opened in August 2019, provides a single point of entry for access to all mental health resources and services on campus. CARE is staffed by licensed therapists who specialize in college mental health and assessment. CARE visits are free for all students at Georgia Tech and are confidential.

[5] George D. Kuh, *High-Impact Educational Practices: What They Are, Who Has Access to Them, and Why They Matter* (Association of American Colleges and Universities, 2008).

During 2018-19, Georgia Tech devoted additional resources toward growing its living learning communities (LLCs), serving 812 first-year students and more than 400 upper-level students in eight communities. In summer 2019, iGniTe, our First-Year Summer Launch Program, drew an additional 505 first-year participants, an increase of 49% in comparison with summer 2018. By 2021, 60% of the incoming first-year class will live in an LLC. For the first-year LLCs participants in 2018, retention rates of LLC participants equaled or exceeded the retention rate of the overall 2018 cohort.

Table 3: Retention rates for 2018 participants in first-year LLCs

Living Learning Community	N (participants)	% retained to Fall 2019*
Global Leadership	118	100%
Grand Challenges	200	99%
Honors Program	209	97%
iGniTe	338	98%
SHaRP	106	99%
SMaRT	179	98%

*As of end of Phase II registration for fall 2019 but prior to October 2019 census date.

In 2018-19, 2,102 (67%) of incoming first-time students participated in the first-year seminar, GT 1000, and 97% of these students were retained to fall 2019.

GT 1000 instructors are partnering with the Registrar's Office to offer the DegreeWorks planning tool to all first-year students. Instructors are encouraged to use this tool as the basis of the course's degree map component, which will allow students to gain a clearer, more defined sense of the requirements for their degree program and encourage them to better understand their path to timely graduation.

Strategy 4: Provide interventions to promote the success of students who are underperforming academically or who may be at risk for not continuing their education.

Related Goal: Provide intentional advising to keep students on track to graduate.

Although the majority of students enter Georgia Tech well prepared academically, after enrollment some students do not perform as anticipated and may be at risk for not completing their degrees. They include: (1) students with midterm unsatisfactory grades; (2) students who return to the Institute after academic dismissal; (3) students on probation or warning; (4) students who end their first year in academic distress; (5) returning students not registered for fall semester by the end of Phase I; and (6) students who "stop out." While outreach to these students comes from multiple points on campus, with departments and units reaching out to their own constituents, key allies in the support of "at risk" students include Undergraduate Academic Advising, the Center for Academic Success, and the Retention and Graduation Manager.

Academic advising at Georgia Tech, while decentralized, benefits from the leadership of the Director of Undergraduate Advising. The Retention and Graduation Manager (reclassified for 2019-20 as Director of Retention and Graduation Initiatives/Assistant Registrar), a position that reports jointly to the Associate Vice Provost for Undergraduate Education and the Associate Vice Provost for Enrollment Services/Registrar, helps to operationalize Georgia Tech's retention-progression-graduation (RPG) initiatives.

The Center for Academic Success (CAS) was established, in part, to assist Georgia Tech with its retention and completion goals. CAS provides a range of services for students who need additional academic support (see www.success.gatech.edu). In 2018-19, CAS served 5,300 Georgia Tech students in 41,576 visits.

Midterm Progress Reports

Georgia Tech's early alert system provides useful feedback for students adjusting to its academically rigorous environment. We identify students who are off track in a given semester with Midterm Progress Reports (MPR's) for 1000- and 2000-level courses. Submitted 40 percent into the term, MPR's allow faculty in these courses to assess student performance with an "S" (Satisfactory) or "U" (Unsatisfactory). All students with U's are contacted by the Center for Academic Success (CAS), offered tutoring and success resources, and encouraged to meet with faculty and with their academic advisor. Additionally, we require that all first-year students with two or more midterm U's meet with their academic advisor or a CAS staff member, and registration holds are typically used to enforce the mandatory advisement. During advisement, students receive advice, encouragement, and referrals to campus resources where necessary.

Our MPR strategy impacts a large number of students. During fall 2018, 38,909 midterm grades were collected for 1000- and 2000-level courses, and 3,098 U's were assigned to 2,366 students. During spring 2019, 31,449 midterm grades were entered for 1000- and 2000-level courses, and 2,608 U's were assigned to 2,007 students. With support from the Registrar's Office, we achieved a faculty midterm grade response rate of 98% for fall 2018 and 99% for spring 2019.

For 2018-19, CAS reported 37% of students with U's began using success services at midterm; in spring 2018, 33% began accessing services.

In fall 2018, 53% of U grades converted to A/B/C/S grades by the end of the semester; in spring 2019, 51% of U grades converted to A/B/C/S.

Students Returning from Academic Dismissal
GT 2100, *Seminar on Academic Success*, was approved in 2013 specifically in relation to Georgia Tech's CCG goal to provide increasing support for students who are permitted to return on contract after academic dismissal. The seminar, taught by CAS staff, offers opportunities for reflection, skill development, and one-on-one academic coaching. The inaugural class, taught in spring 2014, was optional, and the course became mandatory in fall 2014. From the course's beginning in 2014 through spring 2019, 240 of 453 GT 2100 students (53%) have either graduated or remained enrolled. An additional 24 students who took GT 2100 remain eligible but did not take classes during spring 2019. Intervention outcomes represent a significant improvement over our pre-initiative baseline graduation rate of 14%.

Students on Academic Probation or Academic Warning
In fall 2018, 3% of our 16,047 undergraduates were on academic probation or warning with 232 students on probation and 310 on warning at the beginning of the term.[6] Based on the promising results for GT 2100 for students returning from academic dismissal, in fall 2015 we piloted a section of GT 2100 B for students in academic difficulty (participation is voluntary), and the course has been offered most semesters since its inception. Of the probation students who have taken GT 2100 B, 73% have remained enrolled or have graduated. In summer 2019 CAS created GT 2801: Study Strategies Seminar, a new course specifically targeting students on probation. GT 2801 provides a solution-based opportunity to learn skills, strategies, and ways of thinking that will assist in restoring scholastic standing. The course will be offered in fall 2019.

Even with the positive outcomes associated with GT 2100, we are concerned that the majority of students on academic probation and academic warning do not voluntarily seek assistance. For example, only one-fourth of these "at-risk" students participated in CAS programming or Clough Commons tutoring during 2018-19.

*Table 4: Percentage of students on probation or warning using CAS services or Clough Commons tutoring**

	Fall 2018	Spring 2019
Academic Probation	23%	18%
Academic Warning	24%	24%

*Excludes GT 2100 students

With no required institutional intervention for these students, other than for those returning from academic dismissal, we have learned that students most in need of support are often the least likely to ask for help. While certain colleges/schools at Georgia Tech require academic advising for their own students on academic warning or probation, advisor focus groups conducted in summer 2019 revealed that there is a need to develop common advising practices for serving students identified as at risk. The Academic Advising Council, which serves to advise the Director of Undergraduate Academic Advising and the Office of Undergraduate Education on policies, communications, assessment, and strategies related to campus advising, plans to draft recommendations for an at-risk advising model by spring 2020.

Students Ending Their First Year in Academic Distress
In summer 2018, 79 students who ended their first year in academic distress (as defined by ending the year on academic probation or warning or in good academic standing with a GPA of 2.00 or below) received a letter from the Vice Provost for Undergraduate Education encouraging them to take proactive steps to improve their academic progress by meeting with their advisor and utilizing campus resources—several of which were delineated in the letter. The goal was to inform students that the Institute is monitoring their

[6] See http://www.catalog.gatech.edu/rules/6 for academic standing rules at Georgia Tech.

academic progress and to connect them with resources early, while they still have time to change their trajectory. A majority of students contacted during the 2018 intervention (61%) achieved good academic standing, improving their GPA's during their second year. By summer 2019, 51% of these students participated in some type of service offered by the Center for Academic Success. The Institute's first-year intervention is being repeated for the third year in summer 2019.

Students Not Registered for Fall Semester by the End of Phase I
An annual survey of students who did not register for fall semester during Phase I was institutionalized in 2014. Historically, it has been observed that not registering for classes during Phase I may be a red flag for students who may not be returning or who may be experiencing a barrier to returning. Students who need assistance to register are referred as needed by the Retention and Graduation Manager to academic advisors, the Center for Academic Success, the Center for Career Discovery and Development, the Dean of Students, the Office of Scholarships and Financial Aid, the Counseling Center, and the Registrar's Office. In summer 2018, a summary report was prepared to capture demographics, trends, and issues related to non-registration. See Appendix G for the population description, the number of students surveyed and response rates.

Non-Continuing Student Survey
An annual survey of "non-continuing" students (defined by students who are in good academic standing but have not been enrolled for three or more consecutive semesters) has also been institutionalized. The non-continuing survey, conducted by the Retention and Graduation Manager, helps to identify primary reasons students in good academic standing leave the Institute and to identify those who may need assistance to return to Georgia Tech. Students who would like to be readmitted are assisted individually. A report is prepared to analyze demographics and issues related to non-continuing students; however, the survey's primary value is that it offers Georgia Tech an opportunity to communicate with students who have left the Institute but who are eligible to return.

In 2018 this process was amended to include students with three-to-five semesters of absence from Tech and to include only those students from whom we had no information (based on academic advising notes) or students who were in good academic standing but whose transcripts indicated lack of academic progress (e.g., all "W's"). Students who had already transferred to another institution (based on the National Student Clearinghouse) were also excluded. See Appendix H for numbers of students surveyed and response rates.

Strategy 5: Implement peer-led instruction for students in traditionally challenging gateway courses.

Related Goal: Restructure instructional delivery to support educational excellence and student success.

Innovation in teaching and learning is a key component of Georgia Tech's mission. In alignment with this mission, Georgia Tech provides supplemental instruction, called Peer-Led Undergraduate Study (PLUS), through the Center for Academic Success. These services support student success in traditionally challenging courses, which are primarily calculus, linear algebra, and physics. Departmental support also allows PLUS to provide students with assistance in introductory chemistry, organic chemistry, and biomechanics.

The number of contact hours represent markers of success for PLUS. During fall 2018, 2,719 students participated in PLUS for total of 10,792 visits. During spring 2019, 2,074 students participated for a total of 8,058 visits. Also useful for gauging the impact of this strategy is the percentage of participation for courses in which PLUS was offered. In fall 2018, 39% of students enrolled in the courses for which PLUS was offered participated in the program; in spring 2019, 38% of enrolled students participated.

To determine if PLUS is successful, we compare students' final grades in courses for PLUS regulars vs. non-regular participants. In both fall 2018 and spring 2019 regular participants in PLUS (6 or more visits) consistently outperformed their peers who did not participate.

In fall 2018, 93% of PLUS regular participants (5 or more visits) earned a grade of A/B/C/S compared to 85% of their peers in the same classes who did not participate in PLUS.

In spring 2019, 94% of PLUS regular participants earned a grade of A/B/C/S compared to 85% of their peers who did not participate in PLUS.

See Appendix I for outcomes by course.

Strategy ***6: Implement summer online courses and on-campus summer session initiatives to help students stay on track to graduation.***

Related Goal: Restructure instructional delivery to support educational excellence and student success.

The Summer Online Undergraduate Program (SOUP) is a high-priority strategy that offers opportunities for students to take online classes during summer semester. SOUP allows us to engage with students who may not otherwise study during summers. From a baseline of 12 courses offered in summer 2013 (SOUP's initial year), Tech expanded to 70 online undergraduate courses by summer 2019. The number of total course registrations increased from 112 in 2013 to 2369 in 2019. Data indicate that mean time to graduation is shorter for SOUP participants than for non-participants completing summer coursework.

Summer Session Initiatives (SSI) increased student, non-duplicative headcount by 7% from 3,522 in 2018 to 4,148 in 2019. This growth can be attributed to several new programs and initiatives introduced in summer 2018 to make summer sessions more attractive and accessible for students. One initiative, the iGniTe Summer Launch Program, enables first-year students an opportunity to begin their college career during the late summer term. For Georgia residents, enrollment increased by 70% from 245 students in 2018 to 415 in 2019. All iGniTe participants enroll in Georgia Tech's freshman seminar, GT 1000, along with two other courses that meet a core or major requirement. In summer 2019, there were over 200 students enrolled in STEM courses, including over 50 in Calculus (Math 1550) and over 60 enrolled in Linear Algebra (Math 1553), a key momentum year course. Enrollment in ENGL 1102, which is also a momentum year course, grew by 13% in 2019. The Summer Minor and Certificate Program added Women, Science, and Technology and Social Justice to the existing minor and certificate options in Computing & Intelligence, Economics, History, Industrial Design, and Spanish. There were more than twenty-five courses in summer 2019 that met a minor certificate requirement. Additionally, the summer per credit hour tuition model adopted in 2018 can also account for the continued enrollment growth by making courses more affordable and allowing students greater flexibility with course planning. The per credit hour model offers students more options when selecting course combinations and the ability to concurrently enroll in online and face to face courses. In summer 2019, online enrollment for Physics I increased by 75% and Physics II by 53%. Both physics courses are critical pathway courses for many academic programs at Georgia Tech.

OBSERVATIONS AND NEXT STEPS

Georgia Tech continues to implement best practices that are shown to increase student engagement, retention, and degree completion and has adopted CCG strategies appropriate for supporting the success of our students. Since the inception of CCG, Georgia Tech has increased its retention rate to 97% and maintained that rate for the past five years.[7] Additionally, our six-year graduation rate has increased from 79% for the 2006 entering cohort to a record high 90% for the 2013 entering cohort.

This report describes many of the broad initiatives and targeted, high-impact strategies positively impacting student retention and graduation rates at Georgia Tech. Here are two more examples:

A recent revision to our grade substitution policy allows all undergraduate students, not only freshman, the opportunity to strengthen their institutional GPA by substituting their grades for a maximum of two repeated courses.

During summer semester students may now register for both on-campus and online (SOUP) courses, which allows students greater flexibility to tailor a summer schedule to their specific program progression needs.

Identifying opportunities for increased focus has been, and will continue to be, a key component of our CCG work. In alignment with Momentum Approach activities, the Institute continues to implement the Advising Task Force *Report and Recommendations* from April 2018. Undergraduate Academic Advising (UAA) is developing strategies to ensure consistency in the onboarding, training, and professional development of our advisors. While current technology does not allow academic advisors to easily monitor student progress in their academic programs, we are moving closer to obtaining new advising technology which will enhance the ability of advisors to access information and document student progression. Looking ahead to 2019-20, since academic advising is the primary focus of our Momentum Approach plan, we are developing advising practices related to student RPG and communicating the expectations to advising stakeholders, along with related training and resources. For the second year, UAA will participate in all the 2019-20 NACADA advisor webinars, which include topics such as applying advising theory to practice; supporting academic recovery; incorporating academic coaching conversations into advising practice; promoting social justice through advising practice; and advising and trans equity. In addition to hosting a common session for advisors participating in the webinars, we are facilitating an

7 Based on fall 2019 data from September 5, 2019

hour-long discussion of the topic, focusing on how we can apply what we've learned to Tech's campus. Training on effectively advising new transfer students will be offered in fall 2019 and conversations promoting the benefits of first-year student advising to College advising units not requiring students to engage in that practice are ongoing.

Our data provide evidence that first-generation and financially under-resourced students at Georgia Tech may benefit from additional assistance and support. The Director of Research and Assessment for Student Life, through surveys and focus groups conducted with first-generation and financially under-resourced students, identified several key needs for these populations which are not addressed sufficiently through ongoing RPG initiatives. Additional outreach to these students will be an area of focus for 2019-20. The Office of Undergraduate Education, Enrollment Services and Student Life are working together to establish a leadership team to promote success and design support structures for these underserved populations. The Director of Retention and Graduation Initiatives/Assistant Registrar will investigate RPG best practices and work with the leadership team to adapt the practices for implementation at Georgia Tech. Funding is in place to hire a first-generation Program Manager to identify and implement strategies that enhance the Institute experience for first-generation students.

Throughout 2019-20, we will continue to emphasize successful CCG strategies and build on our current achievements with high-impact educational practices, including living learning communities, summer session initiatives and first-year experience programming. Aligning Georgia Tech's retention-progression-graduation goals and strategies with those of CCG has encouraged continual self-study, measurement of outcomes, and sharing of data and best practices across the campus community and within the University System of Georgia. While we believe our current strategies are demonstrating success, we continue to seek out opportunities for improvement, such as our current year emphasis on academic advising enhancements and development of support structures for first-generation and financially under-resourced students. Georgia Tech looks forward to our continued collaboration with the CCG initiative, promoting student success both within the Institute and within the USG.

STUDENT SUCCESS AND COMPLETION TEAM

Created in 2011, the CCG-GT Steering Committee continues to provide leadership for our RPG initiatives and engender greater awareness about retention and completion issues across campus. Co-chaired by Ms. Sandi Bramblett, Assistant Vice President, Institutional Research and Enterprise Data Management and Dr. Steven P. Girardot, Associate Vice Provost for Undergraduate Education, CCG-GT connects faculty, staff and leadership stakeholders throughout the Institute to guide, refine and assess RPG efforts. Committee membership for 2019-20 is as follows:

Ms. Sandi Bramblett, Assistant Vice President, Institutional Research and Enterprise Data Management

Dr. Steven P. Girardot, Associate Vice Provost for Undergraduate Education

Dr. Sybrina Atwaters, Director, OMED

Dr. Rebecca Burnett, Director of Writing and Communication & Professor, LMC, Ivan Allen College of Liberal Arts

Mr. Elijah Cameron, Director, Office of Assessment and Quantitative Services, College of Computing

Ms. Lynn Durham, Vice President, Institute Relations

Dr. Al Ferri, Professor and Associate Chair for Undergraduate Studies, School of Mechanical Engineering

Mr. Brent Griffin, Director of Retention and Graduation Initiatives/Assistant Registrar, Office of the Registrar/Office of Undergraduate Education

Ms. Sandra Kinney, Senior Director, Institutional Research and Planning

Dr. Paul Kohn, Vice Provost for Enrollment Services

Dr. Donald Pearl, Senior Academic Professional, Office of Undergraduate Education

Dr. Michelle Rinehart, Associate Dean, College of Design

Ms. Beatriz Rodriguez, Assistant Director- Academic Coaching and Success Programs, Center for Academic Success

Dr. Beth Spencer, Director, Undergraduate Academic Advising/Interim Director, Center for Academic Success

Dr. Cam Tyson, Assistant Dean for Academic Programs, College of Sciences

Dr. De Morris Walker, Director of Summer Session Initiatives

Dr. Joyce Weinsheimer, Director, Center for Teaching and Learning

Mr. Craig Womack, Associate Dean/Director of Undergraduate Programs, Scheller College of Business

Dr. Brenda (B) Woods, Director of Research and Assessment, Student Life

See Appendix J for the membership list of the Institute's 2018-19 Complete College Georgia Steering Committee.