Georgia Institute of Technology

INSTITUTIONAL MISSION AND STUDENT BODY PROFILE

The Georgia Institute of Technology (Georgia Tech) is a science and technology-focused learning institute renowned for its 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) and one of the top research universities in the United States, Georgia Tech influences major technological, social, and policy decisions. In its recently released *2017 Best Colleges* undergraduate rankings, the Institute was ranked as #7 among public universities by *U.S. News & World Report*, and its undergraduate College of Engineering was ranked as #4. The undergraduate biomedical engineering degree program moved up from #3 to #1, sharing a first place ranking with Tech's Industrial Engineering program, which has been ranked #1 in the U.S. for over two decades. 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.

In fall 2015, Georgia Tech achieved a first-to-second-year retention rate of 97% for the 2014 cohort and a six-year graduation rate of 85% for the 2009 cohort. Our five-year graduation rate was 80% (2010 cohort). These figures, all historic highs, represent remarkable improvements since 2012, when the Institute submitted its initial CCG plan. As of fall 2015, transfer students had achieved a 95% next-year retention rate and a four-year graduation rate of 81% (also record highs for the Institute). The five-year graduation rate for transfer students remained at 85% for the third year in a row. (See Appendix A for retention and graduation tables.)

In fall 2015, Georgia Tech enrolled 15,142 undergraduates, 81% of whom were enrolled in STEM majors [2] and 60% of whom were Georgia residents. In addition to its undergraduate population, the Institute had a fall 2015 enrollment of 9,892 graduate students for a total enrollment of 25,034. Between 2010 and 2015, the Institute experienced an annual increase in overall undergraduate enrollment with a 10% increase over the six-year period. In AY 2015, 3,419 degrees were earned by Tech undergraduates, a 4% increase from the previous year and a 12% increase in the number of degrees conferred since 2010. Appendix B illustrates enrollment and degree trends.

Georgia Tech values the diversity of its student population. In 2015, Tech experienced a historic high in undergraduate female enrollment of 5,360 students. Current enrollment of women is 25% higher than in 2010, when female enrollment stood at 4,275. The proportion of women has risen from 31% of the student body in 2010 to over 35% in 2015. In 2015, Georgia Tech began offering automatic acceptance and four-year scholarships for all valedictorians and salutatorians from Atlanta Public Schools. The Tech Promise program is available 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.

The typical Georgia Tech undergraduate is of traditional age (≤ 24), enters as a freshman, lives on campus, attends fulltime, and is seeking a first undergraduate degree. Although the majority of students enter the Institute well prepared academically, we have populations of students who may be at a higher risk not to complete their degrees. These populations include students who, once enrolled, experience academic performance issues, as well as populations traditionally considered underserved in postsecondary education. In fall 2015, 733 (5%) of our 15,142 undergraduates were in less than good academic standing with 379 students on academic probation and 354 on academic warning at the beginning of the semester. [3] Of our entering first-time freshman class in fall 2015, 11% of students were Pell recipients; 13% were underrepresented minorities [4], 4% were first generation students [5], 7% were military learners [6], and 2% were students with disabilities.

Georgia Tech offers high-impact curricular and co-curricular opportunities to enhance engagement and academic development. Providing deep learning experiences for our students, Tech offers a first-year seminar, living learning communities, an undergraduate research program, a study abroad program, and experiential learning (three alternating full-time semesters of co-op assignments or individual internships). Participation levels in these optional programs are significant, and the graduation rates for program participants are among the highest at Georgia Tech (Appendix C). We are also promoting student engagement through Student Life via a wide range of services, programs, and over 400 student organizations. In AY 2015, Tech established a Center for Community Health and Well-Being in order to maximize resources and to provide more comprehensive health and wellness programs for students, faculty, and staff.

Georgia Tech students are highly recruited by major corporations, small businesses, non-profit organizations, and government. In 2015-16, over 8,500 interviews were held on campus for full-time, co-op, and internship opportunities. In May 2016, 90% of graduating seniors reported in their exit survey that they had received one or more employment offers by commencement. Moreover, 79% reported having already accepted offers at a median starting salary of \$68,000. Twenty-two percent of graduating seniors reported they had been accepted into graduate school.

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

INSTITUTIONAL COMPLETION GOALS, STRATEGIES & ACTIVITIES

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.

GOAL: PROVIDE INTENTIONAL ADVISING TO KEEP STUDENTS ON TRACK TO GRADUATE.

Strategy 3: Provide an early alert system for students in 1000- and 2000-level courses and ensure that interventions are provided for students who are off track academically.

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.

GOAL: RESTRUCTURE INSTRUCTIONAL DELIVERY TO SUPPORT EDUCATIONAL EXCELLENCE AND STUDENT SUCCESS.

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

Strategy 6: Implement summer online undergraduate courses 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.

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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, several of which target increases in women, underrepresented minorities, and students with disabilities. 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 summer 2016, nearly 50 individual K-12 STEM programs were held at Georgia Tech. In addition, Georgia Tech offers distance math courses to dual enrolled high school students. In AY 2015, *Distance Math* served students in 29 Georgia high schools with 450 enrollments in fall and another 450 in spring. Appendix D illustrates a number of the Institute's STEM outreach efforts and the targeted population for each program.

In addition to 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 advises students who may have interest in teaching in the future. During AY 2015, 39 students participated in pre-teaching advisement.

Summer bridge programs ease the transition from high school to Georgia Tech. *Challenge* is a five-week summer residential program for underrepresented minority students. In a simulation of the Georgia Tech experience, *Challenge* students take computer science, chemistry, calculus, and a success seminar as a "test run" before starting in fall semester. *TechPrep* is a 12-day residential summer program that provides 35+ hours of calculus review and academic success workshops. Due to the demonstrated success of *Challenge*, additional funding is being allocated to increase the number of students who are able to participate in the program.

Support mechanisms for currently enrolled students span the campus. For example, we offer STEM-facing living learning communities, mentoring programs, scholarships, student organizations, major-based first-year seminar classes, leadership development opportunities, 1:1 tutoring, and supplemental instruction for traditionally challenging STEM courses. Through Georgia Tech's co-op program, 1,472 undergraduates completed 1,757 individual semester-long, major-related work terms in academic year 2015-16. Of this total, 96% of the positions were STEM related. Additionally, in 2015-16, 899 undergraduates completed 981 semester-long internships, 85% 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 upon graduation.

A measure of progress for our STEM recruitment strategy involves the number of students enrolled in STEM majors at Georgia Tech. We have achieved a steady increase in STEM enrollment from 10,389 students in fall 2010 to 12,330 students in fall 2015 (a 19% increase over six years). Currently four out of every five Georgia Tech students is seeking a STEM degree.

Efforts to engage and retain larger numbers of female students are key, as women represent one of our best opportunities for overall increases in STEM. In just six years, the number of women enrolled in STEM majors at Georgia Tech increased from 2,793 (20% of total undergraduate STEM enrollment) to 3,975 (32% of total undergraduate STEM enrollment). Once enrolled, women at Georgia Tech consistently graduate at a higher and faster rate than men. For the 2009 overall cohort, the graduation rate for women was 89% compared to an 82% rate for men; women in STEM majors had an 88% graduation rate compared to an 83% rate for men. See Appendix E for overall STEM graduation rates by gender.

Table 1 illustrates enrollment outcomes from 2010-2015.

	Fall 2010	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015
Total	10,389	10,718	11,459	11,701	11,822	12,330
Women	2,793	2,990	3,301	3,475	3,638	3,975
% Women	27%	28%	29%	30%	31%	32%

Table 1: STEM Enrollment Fall 2010-Fall 2015

The number of STEM degrees earned is a key measure of our success for this strategy. In 2015-6, 2,799 STEM degrees were earned, a 9% increase from the number of STEM degrees earned in the previous year.

Table 2: Number of STEM Degrees Earned

2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
2,249	2,157	2,389	2,578	2,577	2,799

We are observing the transition of STEM students from Georgia Tech to the workplace or graduate school. In spring 2016, approximately one-fifth of these students had received acceptance into graduate school by commencement. The following table demonstrates job offer rates, acceptance rates, and average starting salaries.

School	Offer Rate	Acceptance Rate	Median Starting Salary
College of Computing	98%	92%	\$93,000
College of Engineering	87%	77%	\$68,000
College of Sciences	78%	58%	\$50,000

Table 3: Career and Salary Survey for Graduating STEM Seniors - Spring 2016*

*Data represents status prior to commencement. Source: Career and Salary Survey, Georgia Tech Office of Assessment

Georgia Tech continues to be a U.S. leader in the number of STEM students enrolled and the number of degrees conferred each year. The six-year graduation rate for STEM students reached a record high of 84% with the 2009 cohort; however, the graduation rates for non-STEM students continue to exceed rates for STEM students. Although we have made significant progress in enrolling more women, two-thirds of our entering STEM students in fall 2015 were male. Women are an important area of focus because they offer opportunities for increases in both STEM enrollment and female STEM representation in the workforce.

STRATEGY 2: IMPLEMENT PROGRAMMING TO PROMOTE THE ACADEMIC SUCCESS OF UNDERREPRESENTED MINORITIES.

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

Primary Contact: Cynthia Moore, Director, OMED: Educational Services, cynthia.moore@omed.gatech.edu

Georgia Tech's strategic plan confirms our aspiration to be an Institute that pursues excellence and embraces diversity in all its forms. A high priority for our CCG plan involves outreach and programming for underrepresented minority students, who have frequently experienced lower retention and graduation rates than their Asian and White counterparts. To encourage academic excellence, the Office of Minority Education: Educational Services (OMED) provides programming specifically targeted to underrepresented minorities.

With a key role in the Institute's Center for Student Diversity and Inclusion (CSDI), OMED provides a range of services designed to promote the success of underserved minorities. *Challenge* is a five-week, intensive residential summer bridge program for incoming freshmen designed to prepare students for the Georgia Tech experience. The *Edge Program* pairs highly engaged students with incoming students and transfer underrepresented minority students in order to assist them both academically and socially throughout their first year at Georgia Tech. OMED also offers workshops, study groups, tutoring, and *Concept Classes*—topic-specific lectures that deal with course material historically found to be the most challenging. The *African-American Male Initiative (AAMI)* helps to address a negative performance trend in the African-American male population. AAMI is the first-ever statewide effort specifically focused on increasing post-secondary education attainment among Black males. *AAMI* students participate in monthly workshops and are paired with faculty, staff, or alumni mentors.

Metrics we are using 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 bridge 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.

In looking at outcomes, results for the past year were mostly positive. For the 265 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 3.13 for URM non-participants. For *Challenge* (70 participants), average GPA's were higher for African-American/Black students and Hispanic students compared to GPA's of non-participating matched peers. Moreover, 13 of 70 *Challenge* participants completed their first semester with a 4.0 GPA and 51 of 70 participants had a 3.0 or higher GPA at the end of their first semester. *AAMI* students had an average first-semester GPA of 3.24 compared to a 2.95 GPA for non-participating African-American males. However, when we look at first-to-second year retention for *AAMI* students, 94% were retained to the second year compared to an overall first-to-second-year campus retention rate of 97% and a 98% rate for non-participating matched peers. See Appendix F for more information about *Challenge* and AAMI outcomes.

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For the fall 2009 cohort, overall URM first-to-second-year retention reached 96% and the six-year URM graduation rate reached 80%--both historic highs for Georgia Tech. URM graduation rates have improved dramatically over the past five years (from 69% for the fall 2005 cohort to 80% for the fall 2009 cohort). As of fall 2015, graduation rates had improved for every demographic. If we look at our two largest URM groups—Black or African-American and Hispanic or Latino—we observe that for these students the six-year graduation rates for the fall 2009 cohort were 78% for Black or African-American students and 85% for Hispanic or Latino students compared to 85% for the overall campus population. While the graduation rate was lower for Black or African-American students, this population demonstrated the strongest rate of improvement over the past five years. Please see Appendix G for URM graduation rates.

STRATEGY 3: PROVIDE AN EARLY ALERT SYSTEM FOR STUDENTS IN 1000- AND 2000-LEVEL COURSES AND ENSURE THAT INTERVENTIONS ARE PROVIDED FOR STUDENTS WHO ARE OFF TRACK ACADEMICALLY.

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

Primary Contacts: Debbie Pearson, Retention and Graduation Manager, debbie.pearson@gatech.edu

Georgia Tech's early alert system provides useful feedback for students adjusting to its academically rigorous environment. We identify students (primarily first- and second-year) who are off track in a given semester with Midterm Progress Reports (MPR's) in 1000- and 2000-level courses. Submitted after 40 percent of the term, MPR's allow faculty in these courses to assess student performance with an "S" (Satisfactory) or "U" (Unsatisfactory). The grades are intended to alert students to concerns about their academic performance while there is still time to recover; these grades do not affect GPA's or become a permanent part of the transcript. An "S" indicates satisfactory work, usually understood to be performance at a C level or higher. A "U" indicates unsatisfactory work, usually understood to be performance at a C level or higher. A "U" indicates unsatisfactory work, usually understood to be performance at a C level or higher. A "U" indicates unsatisfactory work, usually understood to be performance at a C level or higher. A "U" indicates unsatisfactory work, usually understood to be performance at a C level or higher. A "U" indicates unsatisfactory work, usually understood to be performance at a C level or higher. A ditionally, we currently *require* that all first-year students with faculty and with their academic advisor or a CAS staff member, and we use registration holds to enforce the mandatory advisement. During advisement, students receive advice, encouragement, and referrals to campus resources where necessary.

Our MPR strategy touches a large number of students. During fall 2015, 36,962 midterm grades were provided for 1000- and 2000-level courses, and 3,689 U's were assigned to 2,768 students. During spring 2016, 29,673 midterm grades were entered for 1000- and 2000-level courses, and 2,993 U's were assigned to 2,310 students.

To measure MPR outcomes, we are tracking (1) the percentage of first-year students with two or more midterm U's who participate in academic advisement, (2) the percentage of students with at least one midterm U who participate in a CAS success program after receiving midterm grades, and (3) U-to-final-grade convergence.

Table 1. Millerin i Pogress Report Method			
Midterm Progress Report Outcomes	Fall 2015	Spring 2016	
Students with 2 or more U's participating in academic advisement	93%	95.5%	
Students with at least one U who began using a CAS program after being invited to do so at midterm	21%*	19%*	
U-to-A/B/C/S convergence	55%	53%	

Table 4: Midterm Progress Report Metrics

*Outreach excludes joint enrolled high school students and special undergraduates. The most commonly used CAS program was PLUS (supplemental instruction), followed by 1:1 tutoring and academic coaching

The advising component of this CCG strategy is a high priority for Georgia Tech, which has a decentralized advising structure. We are seeing outstanding advisement rates for students in this population. Last year, we achieved an average advisement rate of 93%. This year 93% were advised during fall 2015, and 96% were advised during spring 2016. However, advisement is a required intervention that is enforced with a registration hold. When students with at least one U were invited at midterm by CAS or encouraged by their advisor to voluntarily participate in CAS academic success programs, approximately one-fifth of the population responded by using one or more services. Though we would like to see a stronger student response, the numbers served by CAS through this outreach effort were still significant—591 students in fall 2015 (with 127 using more than one CAS service) and 435 students in spring 2016 (with 97 using more than one CAS service).

In addition to improving our underperforming students' participation in success programs, we would like to see improvement in our U-to-final A/B/C/S rate, a metric associated with higher retention rates according to a longitudinal study at Georgia Tech. [7]

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.

Primary Contacts: Don Pearl, Director, Center for Academic Success, dpearl3@gatech.edu; Debbie Pearson, Retention

and Graduation Manager, debbie.pearson@gatech.edu

As established in the student body profile, most students enter Georgia Tech well prepared academically but may experience academic performance issues once enrolled. A high-priority strategy related to intentional advising involves interventions for students who are underperforming academically or who may be at risk for not continuing. Programming and outreach are provided through the Retention and Graduation Manager and the Center for Academic Success.

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 are referred 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. An annual survey of "non-returning" students (defined by students who are in good academic standing but have not been enrolled for three consecutive semesters) has also been institutionalized. The "non-returning" survey helps to identify students who may need assistance to return to Georgia Tech and to identify primary reasons students in good academic standing leave the Institute. As result of these surveys in 2015-16, 287 students communicated with us and received outreach as needed.

Georgia Tech has populations of students who, once enrolled, experience issues with academic progress. A highpriority strategy for Georgia Tech is to assist students who are underperforming academically—specifically students on academic warning, academic probation, and students returning on contract from academic dismissal. We also have students who are technically in good academic standing but who have lower GPA's and students who are not meeting their own academic expectations.

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 resources for students who need additional academic support. These support services include:

1-to-1 Tutoring - free, appointment-based peer tutoring sessions for students in more than 70 courses, especially 1000and 2000-level STEM courses. (In addition to CAS tutoring, students can receive tutoring through Clough Commons, Housing, OMED, the Athletic Association, and within individual schools.)

Supplemental Instruction (SI) - known as Peer-Led Undergraduate Study or PLUS at Georgia Tech (discussed more fully in Strategy 5 below).

Reboot - a six-week series of academic recovery workshops and coaching sessions for students on academic warning and probation and for students who are not meeting their own academic expectations.

Success Summit - a half-day series of workshops and panels for students on academic probation and warning and for students who are not meeting their own academic expectations.

Academic Coaching - allows students to work with professionals in CAS to establish goals, find motivation, and troubleshoot behaviors that prevent student success.

Success Workshops - variety of success topics offered in person and online.

GT 2100, Seminar on Academic Success - a required course for students returning from academic dismissal. A separate section of the course is optional for students on academic probation.

In 2015-16, CAS served 6,967 unique students in 19,343 visits for a total of 23,461 contact hours.

Significant areas of progress for 2015-16 include a major increase in academic coaching and *Reboot* participation, as well as promising outcome metrics for GT 2100, a credit-bearing, one-hour *Seminar on Academic Success* that is mandatory for students returning from academic dismissal.

Reboot provides seminar-style assistance for students who are on academic warning or probation and for students not meeting their own academic goals. One hundred thirty-two students attended one of the two six-week sessions offered in the fall and spring semesters. The number of participants represents a 78% increase over *Reboot* participation for the previous year. Students are encouraged to attend all six sessions in order to reap maximum benefits.

In 2015-16, 459 students participated in academic coaching for 1,940 contact hours. These numbers represent significant increases from the previous year, when 240 students received coaching for a total of 698 contact hours. Some new initiatives help explain the dramatic increase. First, we hired an additional staff member who helped us to expand the number of possible coaching sessions. Second, we successfully experimented with 30-minute (as opposed to one-hour) follow-up coaching sessions. Third, we piloted group coaching for targeted populations. The average number of coaching sessions attended for each participant was three. The most commonly discussed topics in coaching this year were time management, organizational skills, study strategies/habits, and school/life balance.

GT 2100, *Seminar on Academic Success*, was approved in 2013 specifically in relation to Tech's CCG goal to provide increasing support for students who are permitted to return on contract after academic dismissal. The seminar 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 its beginning in 2014 through spring 2016, GT 2100 served 281 students. Of these students, 29 have graduated from Georgia Tech, and 122 are still pursuing their degrees. Thus, approximately 54% of the students returning from academic dismissal have graduated or are continuing. Progress for this demographic has significantly improved from the pre-initiative baseline graduation rate of 14%.

Based on the promising results for GT 2100 for students returning from academic dismissal, in fall 2015 we piloted a section of GT 2100 for students on academic probation (participation is voluntary), and the course was offered again during spring 2016. Of the 29 probation students who took this course during 2015-16, 22 (76%) have remained enrolled. These early outcomes are encouraging and attest to the impact of the intervention.

Even with these positive outcomes, we have concerns that we are not reaching the majority of students who are on academic probation and academic warning. When we look at non-GT 2100 participants, only a minority of these "atrisk" students participated in CAS during 2015-16.

Table 5: Percentage	e of students on	probation or	warning using	J CAS services*
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	Fall 2015	Spring 2016
Academic Probation	34%	17%
Academic Warning	13%	17%
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*Excludes GT 2100 students

The most frequently used CAS service for probation students was academic coaching; for warning students, it was PLUS. We are currently exploring ways to improve the number of probation and warning students who participate in CAS. We are also considering the best ways to identify and reach out to students who are in good academic standing but who are not performing optimally.

STRATEGY 5: IMPLEMENT PEER-LED INSTRUCTION FOR STUDENTS IN TRADITIONALLY CHALLENGING COURSES.

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

Primary Contact: Don Pearl, Director, Center for Academic Success, dpearl3@gatech.edu

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 or PLUS) to students in traditionally challenging courses—primarily math and physics courses. The program is administered through the Center for Academic Success. Enrollment and the number of contact hours represent markers of success for PLUS. During fall 2015, 1,640 students participated in PLUS for total of 6,039 visits. During spring 2016, 1,204 students participated for a total of 4,155 visits. Also useful for gauging the impact of this strategy is the percentage of participated in the program; in spring 2016, 44% of registered students participated.

To measure whether or not PLUS is successful, we are comparing students' final grades in courses for PLUS regulars vs. non-PLUS participants. Our goal is for regular participants in PLUS (>5 visits) to consistently outperform their peers who do not participate. In both fall 2015 and spring 2016, this goal was achieved. In the fall 2015, 92% of PLUS regular participants (>5 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 2015, 94% of PLUS regular participants earned a grade of A/B/C/S compared to 86% of their peers who did not participate. See Appendix H for PLUS grades comparisons.

PLUS is a high-impact strategy that has consistently demonstrated positive outcomes. PLUS has an added advantage of providing leadership opportunities for high-achieving undergraduates who provide instruction during the sessions. PLUS experienced two challenges of note during the 2015-16 academic year. First, due to funding, the number of allotted PLUS offerings was reduced compared to the previous year. Second, changes in the math curriculum at Georgia Tech impacted the hiring of peer leaders for the "new" courses. Regarding the new math curriculum, data collected during 2015-16 will inform the allocation of PLUS resources for 2016-17.

STRATEGY 6: IMPLEMENT SUMMER ONLINE COURSES TO HELP STUDENTS STAY ON TRACK TO GRADUATION.

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

Primary Contact: Leo Mark, Associate Dean, Academic Programs and Student Affairs, leo.mark@pe.gatech.edu

As established earlier, participation in academic enrichment programs may delay time to graduation. The Summer Online Undergraduate Program (SOUP) is a high-priority strategy that offers opportunities for students to take online classes during summer semester, thus engaging students who may not otherwise study during summers. We are measuring the success of SOUP based on increases in the number of courses offered, the number of online enrollments, and the percentage of completed courses with a grade of A/B/C/S. From a baseline of 12 courses offered in summer 2013, we have expanded to 21 courses in summer 2016. The number of course enrollments increased from 112 in 2013 to 563 in 2016. From a 73% baseline of course completions with a grade of A/B/C/S in summer 2013, A/B/C/S rates were 87% in summer 2016. We are beginning to track the retention and graduation rates for SOUP participants. Using this metric, an average of 98% of SOUP participants graduated or were retained for the fall semester following the SOUP semester. See Appendix I for a table of SOUP outcomes by year. We have not yet studied how SOUP is impacting time to graduation. This is an outcome metric we would like to track in the future.

OBSERVATIONS

By fall 2015, Georgia Tech had achieved historic high retention and graduation rates. Our first-to-second-year retention rate was 97%; six-year graduation rate, 85%; and five-year graduation rate, 80%. Given that we have already achieved the retention and graduation goals that were set in our initial CCG plan submitted in 2012, our immediate graduation and retention goals are to maintain our first-to-second-year retention rate in the 95%-97% range and to improve our six-year graduation rate from 85% to 86% in the near term.

While it is not possible within the scope of this report to fully address the campus-wide efforts that are positively impacting retention and graduation rates, we have described high-impact strategies that involve large numbers of students and high-priority targeted interventions designed to address specific needs. Concerning populations of students traditionally underserved, we have highlighted our strategy and progress with underrepresented minorities. While URM graduation rates have been increasing, our eventual goal is for URM's to meet or exceed the graduation rate of their non-minority peers. In the past year, a recommendation from the Black Student Experience Task Force was that Georgia Tech increase *Challenge* enrollment from 75 to 175 underrepresented minority and women students over the next three years. We will be tracking the GPA's, retention, and graduation rates for *Challenge* students over the next several years to further gauge the impact of this program on student success.

In addition to targeted services for URM's, Georgia Tech's Veterans Resource Center, Office of Disability Services, Office of Scholarships and Financial Aid, and first generation faculty/staff committee help to address the needs of specific populations. We are routinely tracking the progress of our underserved populations to inform future strategies and the allocation of resources.

In the coming year, we will be increasing our focus on services for low-income students. In July 2016, a faculty member, who also serves as Georgia Tech's Undergraduate Coordinator and Homeless Student Liaison, joined the Office of Scholarships and Financial Aid (OSFA) at 25% time to serve as the OSFA liaison to the Students' Temporary Assistance and Resources (STAR) student group on campus. Through this collaboration, additional time and resources will be devoted to low-income students and students experiencing temporary financial distress. In addition, key constituents on campus will focus on developing and implementing financial literacy initiatives for Georgia Tech students.

Since its inception as a CCG priority, GT 2100 for students returning from academic dismissal has experienced positive outcomes. With early indications of success of GT 2100 for students returning academic dismissal, we piloted a section of GT 2100 for students on academic probation in fall 2015 and offered the class again in spring 2015. To date, results have been encouraging. We will continue to track the progress of the students from GT 2100 and will, over time, gain a clearer view of the impact of this course.

An area for needed improvement is for us to engage a larger number of students who are on academic warning and probation, not only through the Center for Academic Success but across campus. Students often do not understand the meaning or implication of academic standing. Unfortunately, students on probation or warning are also frequently the least likely to seek assistance. In the coming year, the Retention and Graduation Manager, Director of the Center for Academic Success, Registrar, and the Undergraduate Academic Advising Manager will consider how we can help students to gain a better understanding about academic warning and probation and re-focus our intentional advising strategy for these students. We will also consider the best ways to identify and reach out to students who are in good academic standing but who are not performing optimally. The goal is to reach students with academic needs even earlier—before they reach warning or probation.

In October 2016, Georgia Tech filled the newly-created position of Undergraduate Academic Advising Manager. This position reports directly to the Associate Vice Provost for Undergraduate Education and serves as a central resource to provide leadership for academic advising initiatives and training. The advising manager collaborates closely with the Retention and Graduation Manager to ensure alignment of academic advising with Georgia Tech's CCG strategies.

A *Complete College Georgia-GT Steering Committee*, comprised of representatives in leadership roles across campus, meets on a regular basis to monitor the progress of our strategies and to provide direction for new initiatives. The committee is co-chaired by the Associate Vice Provost for Undergraduate Education and the Executive Director for Institutional Research and Planning/Decision Support Services. See Appendix J for a list of members who will be serving during 2016-17.

NOTES

[1] This status report covers the 2015-16 academic year. Enrollment figures and retention and graduation rates are based on fall 2015 data.

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

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

[4] American Indian or Alaskan Native, Black or African American, Hispanic or Latino, Native Hawaiian or other Pacific Islander

[5] Neither parent had postsecondary education

[6] Active duty, dependents/spouses, reservists, and Veterans

[7] *Midterm Progress Report Study*, Georgia Tech Institutional Research and Planning, April 2015.