Results from the 2019 Survey of Incoming Freshmen
Summary Report

Survey Background
A web-based survey was administered in the summer of 2019 to all incoming first-time, first-year students at Virginia Tech. This survey was designed in consultation with a group of faculty members with experience working with undergraduate students and administered by Assessment and Evaluation in the Office of Academic Decision Support. The purpose of the survey was to gather information regarding incoming students' previous learning experiences and perceptions of their future collegiate learning and engagement. This survey assesses four core elements: students' high school experiences; their purpose in coming to Virginia Tech; how they hope to be challenged and grow; and their anticipated university involvement.

The survey was designed to provide information for faculty and staff about Virginia Tech's incoming students. This survey contains institutionally-focused questions rather than the generic items contained on national instruments such as the Cooperative Institutional Research Program Survey and the National Survey of Student Engagement.

Limitations
Since student participation in the survey was voluntary, the results may not be generalizable to the entire population of incoming freshmen. Many responses indicate only what incoming students *intend to do* while they are at Virginia Tech.

Participant Demographics
- Of 7,892 incoming students invited to participate in the survey, 4,008 responded, resulting in a response rate of 51.1%.
- Of those students who completed the survey's demographic questions:
  - 53.3% were male (See Table 1 in Appendix A).
  - 67.1% identified as White (non-Hispanic), 14.4% as Asian/Pacific Islander, 6.3% as Hispanic, and 3.6% as African American (See Table 2 in Appendix A).
- 61.8% of students indicated that they will be transferring at least four credit hours into Virginia Tech. Of those students, 38.2% indicated that they would be transferring more than 16 credit hours (See Table 3 in Appendix A).
- The top ten intended majors for freshmen entering Virginia Tech in August 2019 are:
  1. Mechanical Engineering – 9.2% (317 responses)
  2. Computer Science – 8.7% (300 responses)
  3. Biological Sciences – 7.1% (242 responses)
  4. Aerospace Engineering – 7.1% (242 responses)
  5. Computer Engineering – 4.1% (140 responses)
  6. Business Information Technology – 3.9% (135 responses)
  7. Civil and Environmental Engineering – 3.4% (118 responses)
  8. Human Nutrition, Foods, and Exercise – 3.4% (117 responses)
  9. Animal and Poultry Sciences – 2.8% (97 responses)

10. Electrical Engineering – 2.7% (91 responses)

Results: High School Experiences
- 79.5% of students graduated with a GPA greater than 3.75. Of those students, 64.8% indicated that they graduated with a 4.0 or better (See Table 4 in Appendix B).
- When students were asked about instructional methods used in their high school classes:
  - The most commonly reported method was "teacher lecture."
    - 81.5% indicated that teacher lecture was used more than 50% of the time in their high school classes, with 56.5% indicating that teacher lecture was used more than 75% of the time (See Table 5 in Appendix B).
  - The second most commonly used instructional method was "projects using technology."
    - 61.6% of students reported that this instructional method was used in their high school classes more than 50% of the time, with 40.1% indicating that projects using technology were used more than 75% of the time (See Table 5 in Appendix B).
- When students were asked to report their **level of confidence to successfully complete a challenging task in a high school class** (See Table 6 in Appendix B):
  - 68.1% reported that they felt "confident" or "extremely confident";
  - 28.3% reported that they felt "somewhat confident";
  - 1.9% of students reported that they were "not at all confident"; and
  - 1.7% of students reported that they never had a challenging task in high school.

Results: Reasons for Attending Virginia Tech
- 50.3% of students reported that their **primary reason for pursuing an undergraduate degree** at Virginia Tech was to help them get a job. An additional 35.2% of students indicated that **their primary motivation was to develop a strong foundation for success in graduate, law, or medical school** (See Table 7 in Appendix C).
- 54.4% of students reported that they anticipated their **principal activity upon graduation** to be employment, while 38.2% planned to attend graduate or professional school. The next most frequent response was military service with 5.1% (See Table 8 in Appendix C).
- Of the students responding, 81.0% indicated that they anticipate graduating with their undergraduate degrees in four years. Almost 8% of the respondents (257 students) anticipate taking longer to complete their degree (See Table 9 in Appendix C).
- When incoming freshman were asked **what excited them the most about coming to Virginia Tech,** many students talked about meeting new people, the Hokie spirit and community, independence, and new learning opportunities.
- When incoming freshman were asked **what concerned them most about entering Virginia Tech,** many students talked about time management, establishing a social life, and managing the new workload.

Results: Personal Growth and Openness to Change
- When students were asked **which skills and abilities they need to improve upon** the most to be successful, the five most frequent responses were oral communication skills (12.3%); computer/technology skills (10.5%); critical thinking/analysis skills (9.3%); knowledge of global issues (9.0%); and written communication skills (8.8%) (See Table 10 in Appendix D).
- In contrast, the five least frequent responses were ethical reasoning (2.8%); quantitative reasoning (4.9%); information literacy/library skills (5.2%); scientific reasoning (6.3%); and the ability to communicate with people different from themselves (7.0%).
- As a group, students who participated in the survey believe they will be challenged more intellectually than socially (See Table 11 in Appendix D).
  - A total of 90.3% of respondents indicated that they **expect to be challenged intellectually** "often" or "all of the time" while at Virginia Tech (See Table 11 in Appendix D).
  - In contrast, 53.0% of respondents indicated that they **expect to be challenged socially** "often" or "all of the time" (See Table 12 in Appendix D).
- When asked "**Do you think you will be the same person or a different person by the time you complete your degree?**" 58.5% of students reported that they expect to change while at Virginia Tech (See Table 13 in Appendix D).

Results: Anticipated University Involvement
- When asked about expectations for their future participation at Virginia Tech, students indicated that they were most likely to participate in (1) organizations or clubs designed for people in my primary major; (2) an internship, field experience, co-op, or practicum; and (3) Organization focused on special interest/hobby (See Table 14 in Appendix E).
- In contrast, students indicated that they would be least likely to participate in (1) University learning community (e.g., Galileo, Hypatia, Da Vinci, Residential Leadership); (2) Study abroad - at least a semester; and (3) Student government.

Additional Information
For more information on the 2019 Survey of Incoming Freshmen, please contact Bethany Bodo, Director, Assessment and Evaluation, Office of Academic Decision Support, at bbodo@vt.edu.

Appendix A – Participant Demographics

Table 1. What is your gender?

Gender	Count	Percent
Female	1498	45.9%
Male	1738	53.3%
Other	8	0.3%
Prefer not to respond	20	0.6%
Total	3264	100.0%

Table 2. What is your racial or ethnic background?

Race/Ethnicity	Count	Percent
African American	118	3.6%
Asian/Pacific Islander	470	14.4%
Hispanic/Latino	206	6.3%
Native American	6	0.2%
White (non-Hispanic)	2190	67.1%
Multi-racial	165	5.1%
None of the above categories	44	1.4%
Prefer not to answer	63	1.9%
Total	3262	100.0%

Table 3. How many credits will you be transferring into Virginia Tech?

Response	Count	Percent
0	589	18.8%
1-3	601	19.2%
4-6	490	15.7%
7-10	339	10.8%
11-13	198	6.3%
14-16	170	5.4%
More than 16	739	23.6%
Total	3126	100%

Appendix B – High School Experiences

Table 4. Which of the following best describes your high school G.P.A.?

Grade Point Average	Count	Percent
Less than 2.5	2	0.1%
2.5-2.75	2	0.1%
2.76-3.00	17	0.5%
3.01-3.25	70	2.2%
3.26-3.50	194	6.0%
3.51-3.75	384	11.8%
3.76-4.00	911	28.0%
Greater than 4.00	1676	51.5%
Total	3256	100.0%

Table 5. What percent of the time were the following instructional methods used in your high school classes?

Method	Percentage of Time Used						
	Less than 10%	10 – 25%	26 – 50%	51 – 75%	76 – 90%	More than 90%	More than 50%*
Discussion and debate	17.1%	31.0%	21.9%	16.0%	9.8%	4.2%	30.0%
Student presentations	14.9%	29.0%	22.2%	17.9%	10.5%	5.5%	33.9%
Teacher lecture	1.3%	4.0%	13.3%	25.0%	34.3%	22.2%	81.5%
Role plays	70.7%	17.5%	6.2%	3.2%	1.3%	1.1%	5.6%
Art and drama activities	61.2%	22.5%	9.0%	3.4%	2.1%	1.9%	7.4%
Projects using technology	4.8%	13.7%	19.9%	21.5%	23.2%	16.9%	61.6%
Group projects	3.3%	17.1%	25.8%	26.0%	19.5%	8.4%	53.9%
Research projects	8.4%	22.1%	25.1%	21.8%	15.6%	7.0%	44.4%
Case studies	45.0%	25.3%	14.1%	7.7%	5.0%	2.9%	15.6%

*This column shows the total percentage of students reporting that a particular instructional method was used in their high school classes either 51-75%, 76-90%, or more than 90% of the time.

Table 6. When you were working at a challenging task in a high school class, how confident were you that you would succeed?

Response	Count	Percent
I never had a challenging task in high school	59	1.7%
Not at all confident	66	1.9%
Somewhat Confident	993	28.3%
Confident	1901	54.2%
Extremely Confident	487	13.9%
Total	3506	100.0%

Table 7. What do you see as your primary reason for pursuing an undergraduate degree at Virginia Tech?

Primary Reason	Count	Percent
To help me get a job	2014	50.3%
To help me develop a strong foundation for success in graduate school	1409	35.2%
To broaden my knowledge base and strengthen skills such as writing and critical thinking	485	12.1%
To take classes to transfer to another institution	26	0.7%
My parents made me attend	6	0.2%
At this point, I am not really sure	68	1.7%
Total	4008	100.0%

Table 8. Which of the following is most likely to be your principal activity upon graduation?

Principal Activity	Count	Percent
Employment	1780	54.4%
Graduate or professional school	1251	38.2%
Military service	168	5.1%
Volunteer activity (e.g., Peace Corps)	24	0.7%
Starting or raising a family	10	0.3%
Other	39	1.2%
Total	3272	100.0%

Table 9. When do you think you will graduate with your undergraduate degree?

Response	Count	Percent
In 3 years	131	4.0%
In 3.5 years	232	7.1%
In 4 years	2643	81.0%
In 4.5 years	122	3.7%
In 5 years	132	4.1%
More than 5 years	3	0.1%
Total	3263	100.0%

Table 10. Which of the following skills and abilities do you feel you need to improve upon the most to be successful? (Students could select up to three)

Skill/Ability	Count	Percent
Oral communication	1638	12.3%
Computer/technology	1394	10.5%
Critical thinking/analysis	1235	9.3%
Knowledge of global issues	1191	9.0%
Written communication	1167	8.8%
Leadership	1130	8.5%
Interpersonal (social)	1090	8.2%
Organizational ability	980	7.4%
Ability to communicate with people different from myself	928	7.0%
Scientific reasoning	836	6.3%
Information literacy/library skills	685	5.2%
Quantitative reasoning	645	4.9%
Ethical reasoning	378	2.8%
Total	13297	100%

Table 11. During your time at Virginia Tech, how often do you think you will be challenged intellectually?

Response	Count	Percent
Not at all	3	0.1%
Rarely	16	0.4%
Occasionally	367	9.2%
Often	2699	67.9%
All the time	888	22.4%
Total	3973	100%

Table 12. How often do you think you will be challenged socially?

Response	Count	Percent
Not at all	35	0.9%
Rarely	319	8.0%
Occasionally	1514	38.2%
Often	1578	39.8%
All the time	523	13.2%
Total	3969	100%

Table 13. Do you think you will be the same person or a different person by the time you complete your degree?

Response	Count	Percent
The same	29	0.7%
Mostly the same	396	9.9%
More the same than different	1237	30.9%
More different than the same	1533	38.3%
Mostly different	470	11.7%
Different	339	8.5%
Total	4004	100.0%

Appendix E – Anticipated University Involvement

Table 14. In which of the following do you think you will participate while at VT?

Type of Activity	Not Likely	Probably	Yes
University learning community (e.g., Galileo, Hypatia, Da Vinci, Residential Leadership)	29.1%	4.8%	10.3%
Study abroad - at least a semester	23.4%	9.8%	7.8%
Student government	17.8%	6.0%	2.2%
Organization related to cultural or ethnic heritage	16.5%	6.6%	4.9%
Intercollegiate sports	15.6%	7.4%	5.7%
Study abroad - break week or short-term	15.7%	13.0%	9.5%
Arts organization (music, theatre, dance)	15.3%	6.6%	8.1%
Social fraternity or sorority	14.0%	8.9%	7.5%
Research project with a faculty member	10.0%	16.3%	9.1%
Give a talk or exhibit work at a professional, scholarly, cultural, or artistic conference or meeting	10.2%	14.6%	6.8%
Community service/volunteer work outside of course requirements	8.3%	13.9%	13.8%
Intramural sports	7.2%	12.4%	20.0%
Attend a professional or scholarly meeting or conference	7.1%	16.6%	11.2%
Community service/volunteer work as part of a course	4.6%	14.7%	15.6%
Organization focused on special interest/hobby	1.9%	18.7%	22.1%
Internship, field experience, co-op, or practicum	1.8%	10.8%	22.8%
Organizations or clubs designed for people in my primary major	1.4%	18.8%	23.2%