# Tennessee Technological University

# *NSSE 2017 Major Field Report, Part II*

# *Comparisons to Other Institutions*

# Natural-Math Science

*Comparing your students majoring in the fields shown below to those in the same fields at your comparison group institutions*

*The Major Field Report group 'Natural-Math Science' includes the following majors: Astronomy; Atmospheric science (including meteorology); Biochemistry or biophysics; Biology (general); Biomedical science; Botany; Cell and molecular biology; Chemistry; Earth science (including geology); Geography; Marine science; Mathematics; Microbiology or bacteriology; Natural science; Neuroscience; Other biological sciences; Other physical sciences; Physical sciences (general); Physics; Physiology and developmental biology; Statistics; Zoology.*

NSSE national survey of student engagement

*Note:*
*The Major Field Report was formatted for printing. When viewing on screen in Excel, some content may appear truncated or oddly formatted. This is normal. Increasing the zoom level or viewing the report in Print Preview will improve on-screen display.*

IPEDS: 221847

# NSSE 2017 Major Field Report, Part II

## About This Report

## About Your *Major Field Report, Part II*

NSSE data serve to identify institutional strengths and weaknesses in reference to selected comparison institutions, yet institution-level comparisons may not capture important variation in student engagement that can be found within key subpopulations such as major. This report displays selected results for students at your institution and at your selected comparison institutions in the major category: Natural-Math Science.

***NSSE results included in MFR, Part II***

- Engagement Indicators
- High-Impact Practices
- Frequencies and Statistical Comparisons
- Respondent Profile

### Related-Major Groups

Self-reported first and second (if applicable) majors were identified from the survey. Your institution had the option to customize how these majors were grouped, using up to ten related-major groups. Institutions choosing not to customize their major categories receive NSSE's ten default groups. The majors used in this report are listed on the cover page of this

### Sample

This report is based on information from all randomly selected or census-administered students in the indicated group of majors for both your institution and your comparison institutions. Targeted and locally administered oversamples and other non-randomly selected students are not included. Report Sample (if applicable) respondents are also excluded.

### Class

Results are presented separately by institution-reported class level. Keep in mind that majors are student-reported. First-year students may report *intended* majors that have not yet been *declared.* Also, much of the first-year experience may take place outside of the major field. For these reasons, first-year results should be interpreted with caution.

### Technical Requirements

Related-major groups with fewer than 5 respondents in a given class are not reported (columns are blank). Groups containing at least 5 respondents, but fewer than 20, are reported in frequency distributions only. Comparison groups must contain at least 20 respondents in the major category, or they remain blank. Although 20 is a minimum requirement for all other statistics (Engagement Indicators, means, etc.), keep in mind that any statistical result requires a sufficient number of respondents per group to produce a reliable estimate. Due to the disaggregation of results by student-reported major, *Major Field Report* results are unweighted.

### Report Sections (Those marked with an asterisk are included if at least one related-major group includes 20 or more respondents.)

| | |
|---|---|
| Engagement Indicators* | Results on NSSE's ten Engagement Indicators (EIs) organized into four themes. See your *Engagement Indicators* report for more details. |
| High-Impact Practices* | Results on student participation in six High-Impact Practices (HIPs). See your *High-Impact Practices* report for more details. |
| Frequencies and Statistical Comparisons* | Response frequencies and statistical comparisons (including tests of significance and effect sizes) for all survey items except the demographics for your institution and your three core comparison groups. |
| Respondent Profile | Response frequencies for all demographic questions for your institution and your three core comparison groups. |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Overview of Engagement Indicators: Natural-Math Science

## Tennessee Technological University

## Engagement Indicators: Overview

Engagement Indicators are summary measures based on sets of NSSE questions examining key dimensions of student engagement. The ten indicators are organized within four themes: Academic Challenge, Learning with Peers, Experiences with Faculty, and Campus Environment. The tables below compare average scores[a] for your students in this related-major category with students in your comparison groups within the same category.

Use the following key:

- ▲ **Your students' average** was significantly higher ($p<.05$) with an effect size at least .3 in magnitude.
- △ **Your students' average** was significantly higher ($p<.05$) with an effect size less than .3 in magnitude.
- -- No significant difference.
- ▽ **Your students' average** was significantly lower ($p<.05$) with an effect size less than .3 in magnitude.
- ▼ **Your students' average** was significantly lower ($p<.05$) with an effect size at least .3 in magnitude.

| | | First-Year Students in Natural-Math Science | | | Seniors in Natural-Math Science | | |
|---|---|---|---|---|---|---|---|
| | | **Your first-year students** compared with | **Your first-year students** compared with | **Your first-year students** compared with | **Your seniors** compared with | **Your seniors** compared with | **Your seniors** compared with |
| Theme | Engagement Indicator | Carnegie Class | THEC Peer Group | NSSE 2016 & 2017 | Carnegie Class | THEC Peer Group | NSSE 2016 & 2017 |
| Academic Challenge | Higher-Order Learning | -- | -- | -- | -- | -- | -- |
| | Reflective & Integrative Learning | -- | -- | -- | -- | -- | -- |
| | Learning Strategies | -- | ▼ | -- | -- | -- | -- |
| | Quantitative Reasoning | -- | -- | -- | -- | -- | -- |
| Learning with Peers | Collaborative Learning | -- | -- | -- | -- | -- | -- |
| | Discussions with Diverse Others | -- | -- | -- | ▼ | ▼ | -- |
| Experiences with Faculty | Student-Faculty Interaction | -- | -- | -- | ▲ | -- | -- |
| | Effective Teaching Practices | -- | -- | -- | -- | -- | -- |
| Campus Environment | Quality of Interactions | -- | -- | -- | -- | -- | -- |
| | Supportive Environment | -- | -- | -- | -- | -- | -- |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Engagement Indicators: Natural-Math Science

## Tennessee Technological University

## First-year students[a] in Natural-Math Science

| | Mean statistics | | | Percentile[d] scores | | | | | Comparison results | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Mean* | *SD*[b] | *SEM*[c] | *5th* | *25th* | *50th* | *75th* | *95th* | *Deg. of freedom*[e] | *Mean diff.* | *Sig.*[f] | *Effect size*[g] |
| **Academic Challenge** | | | | | | | | | | | | |
| **Higher-Order Learning** | | | | | | | | | | | | |
| Tennessee Tech (N = 31) | 35.5 | 13.7 | 2.47 | 10 | 25 | 35 | 45 | 60 | | | | |
| Carnegie Class | 39.9 | 13.2 | .27 | 20 | 30 | 40 | 50 | 60 | 2,441 | -4.4 | | -.331 |
| THEC Peer Group | 40.5 | 13.6 | .85 | 15 | 33 | 40 | 50 | 60 | 289 | -5.1 | | -.370 |
| NSSE 2016 & 2017 | 39.8 | 12.8 | .08 | 20 | 30 | 40 | 50 | 60 | 28,345 | -4.3 | | -.334 |
| **Reflective & Integrative Learning** | | | | | | | | | | | | |
| Tennessee Tech (N = 31) | 32.3 | 12.7 | 2.28 | 14 | 23 | 31 | 40 | 54 | | | | |
| Carnegie Class | 35.5 | 12.0 | .24 | 17 | 26 | 34 | 43 | 57 | 2,466 | -3.2 | | -.268 |
| THEC Peer Group | 36.1 | 12.5 | .77 | 17 | 26 | 34 | 43 | 60 | 292 | -3.9 | | -.307 |
| NSSE 2016 & 2017 | 35.3 | 11.6 | .07 | 17 | 29 | 34 | 43 | 57 | 28,682 | -3.0 | | -.260 |
| **Learning Strategies** | | | | | | | | | | | | |
| Tennessee Tech (N = 31) | 36.3 | 12.6 | 2.27 | 20 | 27 | 33 | 47 | 60 | | | | |
| Carnegie Class | 40.1 | 13.5 | .27 | 20 | 33 | 40 | 53 | 60 | 2,454 | -3.8 | | -.279 |
| THEC Peer Group | 42.3 | 13.7 | .85 | 20 | 33 | 40 | 53 | 60 | 292 | -6.0 | * | -.438 |
| NSSE 2016 & 2017 | 39.6 | 13.4 | .08 | 20 | 27 | 40 | 53 | 60 | 28,465 | -3.3 | | -.244 |
| **Quantitative Reasoning** | | | | | | | | | | | | |
| Tennessee Tech (N = 31) | 26.7 | 16.1 | 2.88 | 0 | 20 | 27 | 33 | 60 | | | | |
| Carnegie Class | 30.3 | 14.9 | .30 | 7 | 20 | 27 | 40 | 60 | 2,443 | -3.6 | | -.242 |
| THEC Peer Group | 30.2 | 16.5 | 1.03 | 0 | 20 | 27 | 40 | 60 | 288 | -3.5 | | -.214 |
| NSSE 2016 & 2017 | 30.5 | 14.8 | .09 | 7 | 20 | 27 | 40 | 60 | 28,425 | -3.8 | | -.258 |
| **Learning with Peers** | | | | | | | | | | | | |
| **Collaborative Learning** | | | | | | | | | | | | |
| Tennessee Tech (N = 31) | 35.8 | 11.3 | 2.02 | 20 | 25 | 35 | 45 | 60 | | | | |
| Carnegie Class | 35.5 | 14.0 | .28 | 15 | 25 | 35 | 45 | 60 | 2,456 | .3 | | .024 |
| THEC Peer Group | 37.6 | 14.4 | .89 | 15 | 25 | 40 | 50 | 60 | 292 | -1.8 | | -.128 |
| NSSE 2016 & 2017 | 35.8 | 13.8 | .08 | 15 | 25 | 35 | 45 | 60 | 28,477 | .0 | | -.003 |
| **Discussions with Diverse Others** | | | | | | | | | | | | |
| Tennessee Tech (N = 31) | 39.7 | 17.1 | 3.07 | 5 | 30 | 40 | 60 | 60 | | | | |
| Carnegie Class | 41.5 | 15.4 | .31 | 15 | 30 | 40 | 55 | 60 | 2,455 | -1.8 | | -.118 |
| THEC Peer Group | 40.0 | 16.1 | .99 | 15 | 30 | 40 | 55 | 60 | 291 | -.3 | | -.019 |
| NSSE 2016 & 2017 | 41.0 | 14.8 | .09 | 15 | 30 | 40 | 55 | 60 | 28,504 | -1.3 | | -.090 |
| **Experiences with Faculty** | | | | | | | | | | | | |
| **Student-Faculty Interaction** | | | | | | | | | | | | |
| Tennessee Tech (N = 31) | 25.5 | 16.2 | 2.92 | 0 | 15 | 25 | 35 | 60 | | | | |
| Carnegie Class | 22.3 | 14.8 | .30 | 0 | 10 | 20 | 30 | 50 | 2,437 | 3.2 | | .214 |
| THEC Peer Group | 24.9 | 15.1 | .94 | 5 | 15 | 25 | 35 | 55 | 288 | .6 | | .041 |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Engagement Indicators: Natural-Math Science

## Tennessee Technological University

### First-year students[a] in Natural-Math Science

| | Mean statistics | | | Percentile[d] scores | | | | | Comparison results | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Mean* | *SD*[b] | *SEM*[c] | *5th* | *25th* | *50th* | *75th* | *95th* | *Deg. of freedom*[e] | *Mean diff.* | *Sig.*[f] | *Effect size*[g] |
| NSSE 2016 & 2017 | 22.0 | 14.4 | .09 | 0 | 10 | 20 | 30 | 50 | 28,371 | 3.5 | | .244 |
| **Effective Teaching Practices** | | | | | | | | | | | | |
| Tennessee Tech (N = 31) | 35.9 | 13.6 | 2.45 | 16 | 24 | 32 | 44 | 60 | | | | |
| Carnegie Class | 39.3 | 12.9 | .26 | 20 | 32 | 40 | 48 | 60 | 2,471 | -3.4 | | -.265 |
| THEC Peer Group | 39.3 | 13.5 | .83 | 20 | 28 | 40 | 52 | 60 | 291 | -3.5 | | -.256 |
| NSSE 2016 & 2017 | 39.4 | 12.5 | .07 | 20 | 32 | 40 | 48 | 60 | 28,682 | -3.6 | | -.284 |
| **Campus Environment** | | | | | | | | | | | | |
| **Quality of Interactions** | | | | | | | | | | | | |
| Tennessee Tech (N = 30) | 44.2 | 10.6 | 1.94 | 26 | 36 | 43 | 52 | 60 | | | | |
| Carnegie Class | 41.4 | 12.0 | .25 | 20 | 34 | 42 | 50 | 60 | 2,384 | 2.9 | | .240 |
| THEC Peer Group | 41.2 | 11.4 | .71 | 20 | 34 | 42 | 50 | 60 | 287 | 3.0 | | .265 |
| NSSE 2016 & 2017 | 42.2 | 11.7 | .07 | 20 | 36 | 44 | 50 | 60 | 27,671 | 2.1 | | .175 |
| **Supportive Environment** | | | | | | | | | | | | |
| Tennessee Tech (N = 31) | 34.5 | 13.0 | 2.34 | 15 | 25 | 33 | 40 | 60 | | | | |
| Carnegie Class | 37.6 | 13.4 | .27 | 15 | 28 | 38 | 48 | 60 | 2,467 | -3.1 | | -.228 |
| THEC Peer Group | 38.0 | 13.9 | .85 | 15 | 28 | 38 | 48 | 60 | 293 | -3.5 | | -.250 |
| NSSE 2016 & 2017 | 37.8 | 13.0 | .08 | 18 | 30 | 38 | 48 | 60 | 28,601 | -3.3 | | -.251 |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Engagement Indicators: Natural-Math Science

## Tennessee Technological University

### Seniors[a] in Natural-Math Science

| | Mean statistics | | | Percentile[d] scores | | | | | Comparison results | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Mean* | *SD*[b] | *SEM*[c] | *5th* | *25th* | *50th* | *75th* | *95th* | *Deg. of freedom*[e] | *Mean diff.* | *Sig.*[f] | *Effect size*[g] |
| **Academic Challenge** | | | | | | | | | | | | |
| **Higher-Order Learning** | | | | | | | | | | | | |
| Tennessee Tech (N = 49) | 39.2 | 14.4 | 2.06 | 10 | 30 | 40 | 50 | 60 | | | | |
| Carnegie Class | 39.8 | 13.5 | .27 | 20 | 30 | 40 | 50 | 60 | 2,575 | -.7 | | -.049 |
| THEC Peer Group | 40.4 | 14.3 | .92 | 15 | 30 | 40 | 50 | 60 | 287 | -1.2 | | -.082 |
| NSSE 2016 & 2017 | 39.8 | 13.4 | .08 | 20 | 30 | 40 | 50 | 60 | 30,390 | -.6 | | -.042 |
| **Reflective & Integrative Learning** | | | | | | | | | | | | |
| Tennessee Tech (N = 50) | 35.1 | 9.2 | 1.30 | 17 | 31 | 36 | 40 | 49 | | | | |
| Carnegie Class | 35.4 | 12.1 | .24 | 17 | 26 | 34 | 43 | 57 | 52 | -.4 | | -.030 |
| THEC Peer Group | 36.3 | 12.4 | .80 | 17 | 29 | 37 | 46 | 57 | 90 | -1.2 | | -.102 |
| NSSE 2016 & 2017 | 36.3 | 12.0 | .07 | 17 | 29 | 37 | 43 | 57 | 49 | -1.2 | | -.097 |
| **Learning Strategies** | | | | | | | | | | | | |
| Tennessee Tech (N = 50) | 40.3 | 14.0 | 1.98 | 20 | 27 | 40 | 53 | 60 | | | | |
| Carnegie Class | 40.0 | 14.1 | .28 | 20 | 27 | 40 | 53 | 60 | 2,591 | .3 | | .020 |
| THEC Peer Group | 43.3 | 14.2 | .91 | 20 | 33 | 47 | 53 | 60 | 288 | -3.0 | | -.215 |
| NSSE 2016 & 2017 | 39.4 | 14.0 | .08 | 20 | 27 | 40 | 53 | 60 | 30,443 | .9 | | .064 |
| **Quantitative Reasoning** | | | | | | | | | | | | |
| Tennessee Tech (N = 50) | 30.8 | 14.9 | 2.10 | 0 | 20 | 33 | 40 | 53 | | | | |
| Carnegie Class | 34.2 | 15.7 | .31 | 7 | 20 | 33 | 47 | 60 | 2,581 | -3.4 | | -.220 |
| THEC Peer Group | 33.5 | 16.4 | 1.05 | 7 | 20 | 33 | 47 | 60 | 293 | -2.7 | | -.165 |
| NSSE 2016 & 2017 | 35.0 | 15.4 | .09 | 7 | 20 | 33 | 47 | 60 | 30,432 | -4.2 | | -.269 |
| **Learning with Peers** | | | | | | | | | | | | |
| **Collaborative Learning** | | | | | | | | | | | | |
| Tennessee Tech (N = 49) | 37.0 | 15.1 | 2.16 | 10 | 25 | 40 | 50 | 60 | | | | |
| Carnegie Class | 36.3 | 14.0 | .28 | 15 | 25 | 35 | 45 | 60 | 2,577 | .7 | | .053 |
| THEC Peer Group | 37.0 | 14.9 | .96 | 15 | 25 | 35 | 50 | 60 | 291 | .0 | | .002 |
| NSSE 2016 & 2017 | 36.4 | 13.9 | .08 | 15 | 25 | 35 | 45 | 60 | 30,428 | .7 | | .049 |
| **Discussions with Diverse Others** | | | | | | | | | | | | |
| Tennessee Tech (N = 49) | 36.8 | 13.8 | 1.98 | 20 | 25 | 40 | 45 | 60 | | | | |
| Carnegie Class | 41.7 | 15.7 | .31 | 15 | 30 | 40 | 60 | 60 | 2,591 | -4.8 | * | -.307 |
| THEC Peer Group | 43.7 | 16.1 | 1.04 | 20 | 35 | 45 | 60 | 60 | 288 | -6.8 | ** | -.434 |
| NSSE 2016 & 2017 | 40.8 | 15.2 | .09 | 15 | 30 | 40 | 55 | 60 | 30,449 | -4.0 | | -.261 |
| **Experiences with Faculty** | | | | | | | | | | | | |
| **Student-Faculty Interaction** | | | | | | | | | | | | |
| Tennessee Tech (N = 50) | 31.6 | 14.8 | 2.09 | 10 | 20 | 30 | 45 | 55 | | | | |
| Carnegie Class | 26.8 | 15.9 | .32 | 5 | 15 | 25 | 40 | 60 | 2,579 | 4.8 | * | .303 |
| THEC Peer Group | 27.7 | 16.3 | 1.05 | 0 | 15 | 25 | 40 | 60 | 290 | 3.9 | | .241 |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Engagement Indicators: Natural-Math Science

## Tennessee Technological University

### Seniors[a] in Natural-Math Science

| | Mean statistics | | | Percentile[d] scores | | | | | Comparison results | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *Mean* | *SD*[b] | *SEM*[c] | *5th* | *25th* | *50th* | *75th* | *95th* | *Deg. of freedom*[e] | *Mean diff.* | *Sig.*[f] | *Effect size*[g] |
| NSSE 2016 & 2017 | 27.5 | 15.9 | .09 | 5 | 15 | 25 | 40 | 60 | 30,388 | 4.1 | | .257 |
| **Effective Teaching Practices** | | | | | | | | | | | | |
| Tennessee Tech (N = 50) | 42.7 | 13.6 | 1.92 | 16 | 36 | 44 | 52 | 60 | | | | |
| Carnegie Class | 39.6 | 13.2 | .26 | 16 | 32 | 40 | 48 | 60 | 2,601 | 3.1 | | .235 |
| THEC Peer Group | 39.5 | 14.5 | .93 | 16 | 28 | 40 | 52 | 60 | 293 | 3.1 | | .219 |
| NSSE 2016 & 2017 | 40.1 | 12.8 | .07 | 20 | 32 | 40 | 48 | 60 | 30,674 | 2.6 | | .202 |
| **Campus Environment** | | | | | | | | | | | | |
| **Quality of Interactions** | | | | | | | | | | | | |
| Tennessee Tech (N = 48) | 42.1 | 11.4 | 1.65 | 20 | 35 | 44 | 50 | 60 | | | | |
| Carnegie Class | 40.7 | 12.0 | .24 | 18 | 34 | 42 | 50 | 60 | 2,523 | 1.4 | | .117 |
| THEC Peer Group | 40.2 | 12.6 | .81 | 16 | 32 | 42 | 48 | 60 | 287 | 2.0 | | .158 |
| NSSE 2016 & 2017 | 41.6 | 11.4 | .07 | 20 | 35 | 42 | 50 | 60 | 29,760 | .5 | | .044 |
| **Supportive Environment** | | | | | | | | | | | | |
| Tennessee Tech (N = 50) | 30.9 | 13.9 | 1.97 | 10 | 20 | 31 | 43 | 55 | | | | |
| Carnegie Class | 32.3 | 14.3 | .28 | 9 | 20 | 33 | 43 | 60 | 2,600 | -1.4 | | -.100 |
| THEC Peer Group | 33.4 | 15.1 | .97 | 13 | 20 | 35 | 43 | 60 | 290 | -2.5 | | -.169 |
| NSSE 2016 & 2017 | 33.4 | 13.4 | .08 | 13 | 25 | 33 | 43 | 58 | 30,614 | -2.5 | | -.189 |

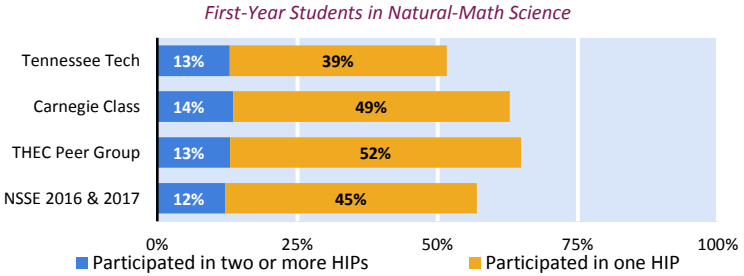
# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

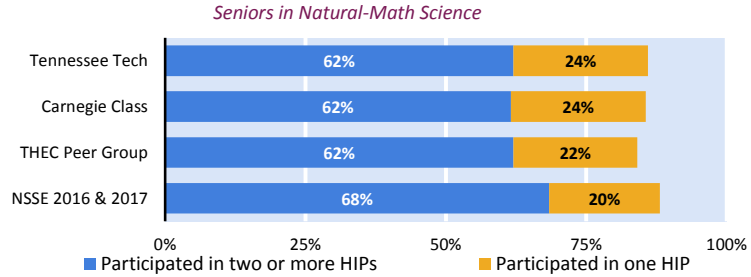
## High-Impact Practices: Natural-Math Science

## Tennessee Technological University

### Overall HIP Participation[a,h]

The figures below display the percentage of students who participated in High-Impact Practices. Both figures include participation in service-learning, a learning community, and research with faculty. The senior figure also includes participation in an internship or field experience, study abroad, and culminating senior experience. The first segment in each bar shows the percentage who participated in at least two HIPs, and the full bar (both colors) represents the percentage who participated in at least one.




### Statistical Comparisons

The table below displays the percentage of your students who participated in a given High-Impact Practice, including the percentage who participated overall (at least one, two or more). It also graphs the difference, in percentage points, between your students and those of your comparison groups. Blue bars indicate how much higher your institution's percentage is compared to the comparison group. Dark red bars indicate how much lower your institution's percentage is compared to the comparison group.

| | | *Your students' participation compared with:* | | | | | |
|---|---|---|---|---|---|---|---|
| | **Tennessee Tech** | **Carnegie Class** | | **THEC Peer Group** | | **NSSE 2016 & 2017** | |
| *First-Year Students in Natural-Math Science* | *%* | *Difference*[i] | *ES*[j] | *Difference*[i] | *ES*[j] | *Difference*[i] | *ES*[j] |
| 12. **Service-Learning** | 45 | -10 | -.20 | -12 | -.25 | -3 | -.06 |
| 11c. **Learning Community** | 10 | -6 | -.19 | -4 | -.13 | -5 | -.15 |
| 11e. **Research with Faculty** | 10 | +2 | .09 | +1 | .04 | +2 | .07 |
| ***Participated in at least one*** | 52 | -11 | -.23 | -13 | -.27 | -5 | -.11 |
| ***Participated in two or more*** | 13 | -1 | -.02 | -0 | .00 | +1 | .02 |
| *Seniors in Natural-Math Science* | | | | | | | |
| 12. **Service-Learning** | 53 | -2 | -.04 | +3 | .06 | +2 | .03 |
| 11c. **Learning Community** | 22 | -3 | -.08 | -3 | -.08 | -3 | -.08 |
| 11e. **Research with Faculty** | 60 | +16 | * .31 | +20 | ** .41 | +10 | .20 |
| 11a. **Internship or Field Exp.** | 42 | -3 | -.07 | -2 | -.04 | -9 | -.19 |
| 11d. **Study Abroad** | 10 | -2 | -.06 | -1 | -.02 | -8 | -.24 |
| 11f. **Culminating Senior Exp.** | 30 | -8 | -.16 | -13 | -.27 | -18 | * -.37 |
| ***Participated in at least one*** | 86 | +0 | .01 | +2 | .05 | -2 | -.06 |
| ***Participated in two or more*** | 62 | +0 | .01 | -0 | .00 | -6 | -.13 |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

## First-Year Students[a] in Natural-Math Science

Frequency Distributions

Statistical Comparisons[k]

*Your first-year students compared with*

| *Item wording or description* | *Variable name*[l] | *Values*[m] | *Response options* | Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Tennessee Tech *Mean* | Carnegie Class *Mean* | Carnegie Class *Effect size*[n] | THEC Peer Group *Mean* | THEC Peer Group *Effect size*[n] | NSSE 2016 & 2017 *Mean* | NSSE 2016 & 2017 *Effect size*[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1. During the current school year, about how often have you done the following?** | | | | | | | | | | | | | | | | | | |
| a. Asked questions or contributed to course discussions in other ways | askquest | 1 | Never | 2 | 7 | 85 | 3 | 8 | 3 | 888 | 3 | | | | | | | |
| | | 2 | Sometimes | 11 | 37 | 845 | 35 | 75 | 29 | 9,970 | 35 | | | | | | | |
| | | 3 | Often | 10 | 33 | 848 | 35 | 94 | 36 | 10,311 | 36 | **2.7** | 2.9 | -.14 | 3.0 | -.28 | 2.9 | -.14 |
| | | 4 | Very often | 7 | 23 | 665 | 27 | 85 | 32 | 7,508 | 26 | | | | | | | |
| | | | Total | 30 | 100 | 2,443 | 100 | 262 | 100 | 28,677 | 100 | | | | | | | |
| b. Prepared two or more drafts of a paper or assignment before turning it in | drafts | 1 | Never | 10 | 32 | 394 | 16 | 43 | 16 | 4,845 | 17 | | | | | | | |
| | | 2 | Sometimes | 12 | 39 | 832 | 34 | 76 | 29 | 10,258 | 36 | | | | | | | |
| | | 3 | Often | 6 | 19 | 741 | 30 | 82 | 31 | 8,351 | 29 | **2.1** | 2.5 ** ▼ | -.47 | 2.6 ** ▼ | -.54 | 2.5 * ▼ | -.43 |
| | | 4 | Very often | 3 | 10 | 466 | 19 | 60 | 23 | 5,120 | 18 | | | | | | | |
| | | | Total | 31 | 100 | 2,433 | 100 | 261 | 100 | 28,574 | 100 | | | | | | | |
| c. Come to class without completing readings or assignments | unpreparedr *(Reverse-coded version of* unprepared *created by NSSE.)* | 1 | Very often | 1 | 3 | 89 | 4 | 12 | 5 | 1,155 | 4 | | | | | | | |
| | | 2 | Often | 2 | 6 | 275 | 11 | 29 | 11 | 3,116 | 11 | | | | | | | |
| | | 3 | Sometimes | 15 | 48 | 1,377 | 56 | 152 | 58 | 16,412 | 57 | **3.3** | 3.1 | .26 | 3.1 | .31 | 3.1 | .28 |
| | | 4 | Never | 13 | 42 | 699 | 29 | 69 | 26 | 7,941 | 28 | | | | | | | |
| | | | Total | 31 | 100 | 2,440 | 100 | 262 | 100 | 28,624 | 100 | | | | | | | |
| d. Attended an art exhibit, play, or other arts performance (dance, music, etc.) | attendart | 1 | Never | 4 | 13 | 931 | 38 | 89 | 34 | 9,889 | 35 | | | | | | | |
| | | 2 | Sometimes | 18 | 58 | 990 | 41 | 102 | 39 | 11,947 | 42 | | | | | | | |
| | | 3 | Often | 7 | 23 | 361 | 15 | 50 | 19 | 4,822 | 17 | **2.2** | 1.9 * ▲ | .37 | 2.0 | .22 | 2.0 | .30 |
| | | 4 | Very often | 2 | 6 | 159 | 7 | 23 | 9 | 1,976 | 7 | | | | | | | |
| | | | Total | 31 | 100 | 2,441 | 100 | 264 | 100 | 28,634 | 100 | | | | | | | |
| e. Asked another student to help you understand course material | CLaskhelp | 1 | Never | 3 | 10 | 153 | 6 | 17 | 6 | 1,650 | 6 | | | | | | | |
| | | 2 | Sometimes | 7 | 23 | 848 | 35 | 73 | 28 | 9,692 | 34 | | | | | | | |
| | | 3 | Often | 16 | 52 | 867 | 36 | 87 | 33 | 10,741 | 37 | **2.7** | 2.8 | -.02 | 2.9 | -.19 | 2.8 | -.04 |
| | | 4 | Very often | 5 | 16 | 574 | 24 | 86 | 33 | 6,564 | 23 | | | | | | | |
| | | | Total | 31 | 100 | 2,442 | 100 | 263 | 100 | 28,647 | 100 | | | | | | | |
| f. Explained course material to one or more students | CLexplain | 1 | Never | 0 | 0 | 83 | 3 | 7 | 3 | 727 | 3 | | | | | | | |
| | | 2 | Sometimes | 13 | 42 | 723 | 30 | 68 | 26 | 8,270 | 29 | | | | | | | |
| | | 3 | Often | 9 | 29 | 1,029 | 42 | 106 | 40 | 12,227 | 43 | **2.9** | 2.9 | -.02 | 3.0 | -.16 | 2.9 | -.06 |
| | | 4 | Very often | 9 | 29 | 605 | 25 | 83 | 31 | 7,438 | 26 | | | | | | | |
| | | | Total | 31 | 100 | 2,440 | 100 | 264 | 100 | 28,662 | 100 | | | | | | | |
| g. Prepared for exams by discussing or working through course material with other | CLstudy | 1 | Never | 2 | 6 | 286 | 12 | 26 | 10 | 2,873 | 10 | | | | | | | |
| | | 2 | Sometimes | 10 | 32 | 752 | 31 | 72 | 27 | 9,129 | 32 | | | | | | | |
| | | 3 | Often | 10 | 32 | 807 | 33 | 88 | 33 | 9,415 | 33 | **2.8** | 2.7 | .14 | 2.8 | .01 | 2.7 | .11 |

## First-Year Students[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your first-year students compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| students | | 4 | Very often | 9 | 29 | 601 | 25 | 78 | 30 | 7,245 | 25 | | | | | | | |
| | | | Total | 31 | 100 | 2,446 | 100 | 264 | 100 | 28,662 | 100 | | | | | | | |
| h. Worked with other students on course projects or assignments | CLproject | 1 | Never | 1 | 3 | 148 | 6 | 15 | 6 | 1,590 | 6 | | | | | | | |
| | | 2 | Sometimes | 14 | 45 | 854 | 35 | 91 | 34 | 10,307 | 36 | | | | | | | |
| | | 3 | Often | 9 | 29 | 911 | 37 | 99 | 38 | 10,725 | 37 | **2.7** | 2.7 | -.04 | 2.8 | -.06 | 2.7 | -.04 |
| | | 4 | Very often | 7 | 23 | 533 | 22 | 59 | 22 | 6,042 | 21 | | | | | | | |
| | | | Total | 31 | 100 | 2,446 | 100 | 264 | 100 | 28,664 | 100 | | | | | | | |
| i. Given a course presentation | present | 1 | Never | 8 | 26 | 460 | 19 | 69 | 26 | 5,721 | 20 | | | | | | | |
| | | 2 | Sometimes | 10 | 32 | 1,130 | 46 | 114 | 43 | 13,759 | 48 | | | | | | | |
| | | 3 | Often | 10 | 32 | 588 | 24 | 41 | 16 | 6,580 | 23 | **2.3** | 2.3 | -.01 | 2.2 | .06 | 2.2 | .05 |
| | | 4 | Very often | 3 | 10 | 264 | 11 | 40 | 15 | 2,599 | 9 | | | | | | | |
| | | | Total | 31 | 100 | 2,442 | 100 | 264 | 100 | 28,659 | 100 | | | | | | | |
| **2. During the current school year, about how often have you done the following?** | | | | | | | | | | | | | | | | | | |
| a. Combined ideas from different courses when completing assignments | RIintegrate | 1 | Never | 5 | 16 | 193 | 8 | 22 | 8 | 2,101 | 7 | | | | | | | |
| | | 2 | Sometimes | 15 | 48 | 996 | 41 | 112 | 43 | 11,652 | 41 | | | | | | | |
| | | 3 | Often | 5 | 16 | 890 | 36 | 75 | 29 | 10,815 | 38 | **2.4** | 2.6 | -.23 | 2.6 | -.24 | 2.6 | -.25 |
| | | 4 | Very often | 6 | 19 | 360 | 15 | 53 | 20 | 4,086 | 14 | | | | | | | |
| | | | Total | 31 | 100 | 2,439 | 100 | 262 | 100 | 28,654 | 100 | | | | | | | |
| b. Connected your learning to societal problems or issues | RIsocietal | 1 | Never | 8 | 26 | 234 | 10 | 33 | 13 | 2,606 | 9 | | | | | | | |
| | | 2 | Sometimes | 11 | 35 | 974 | 40 | 95 | 36 | 11,660 | 41 | | | | | | | |
| | | 3 | Often | 7 | 23 | 857 | 35 | 88 | 33 | 10,272 | 36 | **2.3** | 2.6 | -.31 | 2.6 | -.29 | 2.6 | -.31 |
| | | 4 | Very often | 5 | 16 | 371 | 15 | 47 | 18 | 4,094 | 14 | | | | | | | |
| | | | Total | 31 | 100 | 2,436 | 100 | 263 | 100 | 28,632 | 100 | | | | | | | |
| c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments | RIdiverse | 1 | Never | 7 | 23 | 255 | 10 | 27 | 10 | 2,826 | 10 | | | | | | | |
| | | 2 | Sometimes | 13 | 42 | 926 | 38 | 97 | 37 | 11,463 | 40 | | | | | | | |
| | | 3 | Often | 6 | 19 | 848 | 35 | 83 | 32 | 9,919 | 35 | **2.3** | 2.6 | -.32 | 2.6 | -.37 | 2.6 | -.31 |
| | | 4 | Very often | 5 | 16 | 401 | 17 | 56 | 21 | 4,416 | 15 | | | | | | | |
| | | | Total | 31 | 100 | 2,430 | 100 | 263 | 100 | 28,624 | 100 | | | | | | | |
| d. Examined the strengths and weaknesses of your own views on a topic or issue | RIownview | 1 | Never | 2 | 6 | 118 | 5 | 13 | 5 | 1,330 | 5 | | | | | | | |
| | | 2 | Sometimes | 11 | 35 | 791 | 32 | 92 | 35 | 9,238 | 32 | | | | | | | |
| | | 3 | Often | 11 | 35 | 1,062 | 44 | 103 | 39 | 12,846 | 45 | **2.7** | 2.8 | -.03 | 2.8 | -.02 | 2.8 | -.03 |
| | | 4 | Very often | 7 | 23 | 467 | 19 | 55 | 21 | 5,227 | 18 | | | | | | | |
| | | | Total | 31 | 100 | 2,438 | 100 | 263 | 100 | 28,641 | 100 | | | | | | | |
| e. Tried to better | RIperspect | 1 | Never | 1 | 3 | 80 | 3 | 10 | 4 | 823 | 3 | | | | | | | |

## First-Year Students[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your first-year students compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| understand someone else's views by imagining how an issue looks from their perspective | | 2 | Sometimes | 12 | 39 | 624 | 26 | 62 | 24 | 7,677 | 27 | | | | | | | |
| | | 3 | Often | 11 | 35 | 1,090 | 45 | 116 | 45 | 13,235 | 46 | **2.8** | 2.9 | -.21 | 3.0 | -.22 | 2.9 | -.18 |
| | | 4 | Very often | 7 | 23 | 639 | 26 | 71 | 27 | 6,875 | 24 | | | | | | | |
| | | | Total | 31 | 100 | 2,433 | 100 | 259 | 100 | 28,610 | 100 | | | | | | | |
| f. Learned something that changed the way you understand an issue or concept | RInewview | 1 | Never | 0 | 0 | 67 | 3 | 8 | 3 | 785 | 3 | | | | | | | |
| | | 2 | Sometimes | 16 | 52 | 684 | 28 | 72 | 27 | 8,186 | 29 | | | | | | | |
| | | 3 | Often | 9 | 29 | 1,098 | 45 | 106 | 40 | 13,231 | 46 | **2.7** | 2.9 | -.29 | 3.0 | -.34 | 2.9 | -.26 |
| | | 4 | Very often | 6 | 19 | 582 | 24 | 77 | 29 | 6,397 | 22 | | | | | | | |
| | | | Total | 31 | 100 | 2,431 | 100 | 263 | 100 | 28,599 | 100 | | | | | | | |
| g. Connected ideas from your courses to your prior experiences and knowledge | RIconnect | 1 | Never | 1 | 3 | 33 | 1 | 3 | 1 | 294 | 1 | | | | | | | |
| | | 2 | Sometimes | 4 | 13 | 476 | 20 | 48 | 18 | 5,345 | 19 | | | | | | | |
| | | 3 | Often | 16 | 52 | 1,174 | 48 | 117 | 44 | 14,544 | 51 | **3.1** | 3.1 | .06 | 3.2 | -.04 | 3.1 | .06 |
| | | 4 | Very often | 10 | 32 | 749 | 31 | 95 | 36 | 8,382 | 29 | | | | | | | |
| | | | Total | 31 | 100 | 2,432 | 100 | 263 | 100 | 28,565 | 100 | | | | | | | |
| **3. During the current school year, about how often have you done the following?** | | | | | | | | | | | | | | | | | | |
| a. Talked about career plans with a faculty member | SFcareer | 1 | Never | 4 | 13 | 392 | 16 | 32 | 12 | 4,987 | 17 | | | | | | | |
| | | 2 | Sometimes | 13 | 42 | 1,051 | 43 | 105 | 40 | 12,930 | 45 | | | | | | | |
| | | 3 | Often | 6 | 19 | 635 | 26 | 74 | 28 | 6,997 | 24 | **2.6** | 2.4 | .20 | 2.6 | .03 | 2.3 | .28 |
| | | 4 | Very often | 8 | 26 | 355 | 15 | 52 | 20 | 3,694 | 13 | | | | | | | |
| | | | Total | 31 | 100 | 2,433 | 100 | 263 | 100 | 28,608 | 100 | | | | | | | |
| b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.) | SFotherwork | 1 | Never | 13 | 42 | 1,138 | 47 | 119 | 45 | 13,068 | 46 | | | | | | | |
| | | 2 | Sometimes | 9 | 29 | 755 | 31 | 74 | 28 | 9,500 | 33 | | | | | | | |
| | | 3 | Often | 5 | 16 | 356 | 15 | 45 | 17 | 4,063 | 14 | **2.0** | 1.8 | .18 | 1.9 | .10 | 1.8 | .19 |
| | | 4 | Very often | 4 | 13 | 188 | 8 | 24 | 9 | 1,969 | 7 | | | | | | | |
| | | | Total | 31 | 100 | 2,437 | 100 | 262 | 100 | 28,600 | 100 | | | | | | | |
| c. Discussed course topics, ideas, or concepts with a faculty member outside of class | SFdiscuss | 1 | Never | 8 | 26 | 699 | 29 | 70 | 27 | 7,792 | 27 | | | | | | | |
| | | 2 | Sometimes | 10 | 32 | 1,056 | 43 | 99 | 38 | 12,644 | 44 | | | | | | | |
| | | 3 | Often | 8 | 26 | 470 | 19 | 62 | 24 | 5,804 | 20 | **2.3** | 2.1 | .27 | 2.2 | .13 | 2.1 | .26 |
| | | 4 | Very often | 5 | 16 | 205 | 8 | 30 | 11 | 2,328 | 8 | | | | | | | |
| | | | Total | 31 | 100 | 2,430 | 100 | 261 | 100 | 28,568 | 100 | | | | | | | |
| d. Discussed your academic performance with a faculty member | SFperform | 1 | Never | 10 | 32 | 561 | 23 | 52 | 20 | 6,700 | 23 | | | | | | | |
| | | 2 | Sometimes | 8 | 26 | 1,092 | 45 | 98 | 38 | 13,297 | 47 | | | | | | | |
| | | 3 | Often | 10 | 32 | 560 | 23 | 76 | 29 | 6,089 | 21 | **2.2** | 2.2 | .02 | 2.4 | -.17 | 2.2 | .05 |
| | | 4 | Very often | 3 | 10 | 217 | 9 | 35 | 13 | 2,466 | 9 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

### First-Year Students[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your first-year students compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | 31 | 100 | 2,430 | 100 | 261 | 100 | 28,552 | 100 | | | | | | | |
| **4. During the current school year, how much has your coursework emphasized the following?** | | | | | | | | | | | | | | | | | | |
| a. Memorizing course material | memorize | 1 | Very little | 0 | 0 | 62 | 3 | 8 | 3 | 793 | 3 | | | | | | | |
| | | 2 | Some | 6 | 19 | 485 | 20 | 55 | 21 | 6,445 | 23 | | | | | | | |
| | | 3 | Quite a bit | 16 | 52 | 1,115 | 46 | 116 | 44 | 13,206 | 46 | **3.1** | 3.1 | .04 | 3.0 | .06 | 3.0 | .12 |
| | | 4 | Very much | 9 | 29 | 775 | 32 | 84 | 32 | 8,161 | 29 | | | | | | | |
| | | | Total | 31 | 100 | 2,437 | 100 | 263 | 100 | 28,605 | 100 | | | | | | | |
| b. Applying facts, theories, or methods to practical problems or new situations | HOapply | 1 | Very little | 2 | 6 | 54 | 2 | 9 | 3 | 580 | 2 | | | | | | | |
| | | 2 | Some | 7 | 23 | 477 | 20 | 52 | 20 | 4,964 | 17 | | | | | | | |
| | | 3 | Quite a bit | 12 | 39 | 1,121 | 46 | 118 | 45 | 13,501 | 47 | **3.0** | 3.1 | -.15 | 3.0 | -.10 | 3.1 | -.20 |
| | | 4 | Very much | 10 | 32 | 786 | 32 | 82 | 31 | 9,552 | 33 | | | | | | | |
| | | | Total | 31 | 100 | 2,438 | 100 | 261 | 100 | 28,597 | 100 | | | | | | | |
| c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts | HOanalyze | 1 | Very little | 3 | 10 | 79 | 3 | 11 | 4 | 763 | 3 | | | | | | | |
| | | 2 | Some | 8 | 26 | 533 | 22 | 52 | 20 | 6,244 | 22 | | | | | | | |
| | | 3 | Quite a bit | 13 | 42 | 1,047 | 43 | 112 | 43 | 12,826 | 45 | **2.8** | 3.0 | -.32 | 3.1 | -.33 | 3.0 | -.33 |
| | | 4 | Very much | 7 | 23 | 775 | 32 | 88 | 33 | 8,733 | 31 | | | | | | | |
| | | | Total | 31 | 100 | 2,434 | 100 | 263 | 100 | 28,566 | 100 | | | | | | | |
| d. Evaluating a point of view, decision, or information source | HOevaluate | 1 | Very little | 4 | 13 | 101 | 4 | 7 | 3 | 1,279 | 4 | | | | | | | |
| | | 2 | Some | 12 | 39 | 619 | 25 | 59 | 23 | 7,700 | 27 | | | | | | | |
| | | 3 | Quite a bit | 10 | 32 | 1,066 | 44 | 110 | 42 | 12,568 | 44 | **2.5** | 2.9 ** ▼ | -.50 | 3.0 *** ▼ | -.65 | 2.9 * ▼ | -.45 |
| | | 4 | Very much | 5 | 16 | 647 | 27 | 86 | 33 | 7,017 | 25 | | | | | | | |
| | | | Total | 31 | 100 | 2,433 | 100 | 262 | 100 | 28,564 | 100 | | | | | | | |
| e. Forming a new idea or understanding from various pieces of information | HOform | 1 | Very little | 1 | 3 | 109 | 4 | 10 | 4 | 1,178 | 4 | | | | | | | |
| | | 2 | Some | 11 | 35 | 583 | 24 | 64 | 24 | 7,339 | 26 | | | | | | | |
| | | 3 | Quite a bit | 11 | 35 | 1,109 | 46 | 110 | 42 | 12,924 | 45 | **2.8** | 2.9 | -.11 | 3.0 | -.17 | 2.9 | -.09 |
| | | 4 | Very much | 8 | 26 | 629 | 26 | 78 | 30 | 7,112 | 25 | | | | | | | |
| | | | Total | 31 | 100 | 2,430 | 100 | 262 | 100 | 28,553 | 100 | | | | | | | |
| **5. During the current school year, to what extent have your instructors done the following?** | | | | | | | | | | | | | | | | | | |
| a. Clearly explained course goals and requirements | ETgoals | 1 | Very little | 1 | 3 | 54 | 2 | 5 | 2 | 470 | 2 | | | | | | | |
| | | 2 | Some | 7 | 23 | 484 | 20 | 57 | 22 | 5,204 | 18 | | | | | | | |
| | | 3 | Quite a bit | 17 | 55 | 1,100 | 45 | 105 | 40 | 13,627 | 48 | **2.9** | 3.1 | -.23 | 3.1 | -.25 | 3.1 | -.28 |
| | | 4 | Very much | 6 | 19 | 803 | 33 | 95 | 36 | 9,332 | 33 | | | | | | | |
| | | | Total | 31 | 100 | 2,441 | 100 | 262 | 100 | 28,633 | 100 | | | | | | | |
| b. Taught course sessions | ETorganize | 1 | Very little | 1 | 3 | 69 | 3 | 15 | 6 | 664 | 2 | | | | | | | |

## First-Year Students[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your first-year students compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| in an organized way | | 2 | Some | 6 | 19 | 473 | 19 | 56 | 21 | 5,377 | 19 | | | | | | | |
| | | 3 | Quite a bit | 17 | 55 | 1,134 | 46 | 115 | 44 | 13,674 | 48 | **3.0** | 3.1 | -.12 | 3.0 | .00 | 3.1 | -.14 |
| | | 4 | Very much | 7 | 23 | 765 | 31 | 77 | 29 | 8,902 | 31 | | | | | | | |
| | | | Total | 31 | 100 | 2,441 | 100 | 263 | 100 | 28,617 | 100 | | | | | | | |
| c. Used examples or illustrations to explain difficult points | ETexample | 1 | Very little | 1 | 3 | 69 | 3 | 12 | 5 | 679 | 2 | | | | | | | |
| | | 2 | Some | 6 | 19 | 471 | 19 | 58 | 22 | 5,233 | 18 | | | | | | | |
| | | 3 | Quite a bit | 14 | 45 | 1,045 | 43 | 102 | 39 | 12,412 | 43 | **3.1** | 3.1 | -.04 | 3.0 | .05 | 3.1 | -.08 |
| | | 4 | Very much | 10 | 32 | 849 | 35 | 87 | 34 | 10,270 | 36 | | | | | | | |
| | | | Total | 31 | 100 | 2,434 | 100 | 259 | 100 | 28,594 | 100 | | | | | | | |
| d. Provided feedback on a draft or work in progress | ETdraftfb | 1 | Very little | 5 | 16 | 176 | 7 | 12 | 5 | 2,249 | 8 | | | | | | | |
| | | 2 | Some | 11 | 35 | 704 | 29 | 69 | 26 | 8,567 | 30 | | | | | | | |
| | | 3 | Quite a bit | 9 | 29 | 915 | 38 | 111 | 42 | 10,645 | 37 | **2.5** | 2.8 | -.35 | 2.9 * ▼ | -.46 | 2.8 | -.31 |
| | | 4 | Very much | 6 | 19 | 643 | 26 | 70 | 27 | 7,143 | 25 | | | | | | | |
| | | | Total | 31 | 100 | 2,438 | 100 | 262 | 100 | 28,604 | 100 | | | | | | | |
| e. Provided prompt and detailed feedback on tests or completed assignments | ETfeedback | 1 | Very little | 6 | 19 | 203 | 8 | 25 | 10 | 2,232 | 8 | | | | | | | |
| | | 2 | Some | 10 | 32 | 760 | 31 | 62 | 24 | 9,007 | 32 | | | | | | | |
| | | 3 | Quite a bit | 8 | 26 | 930 | 38 | 102 | 39 | 11,091 | 39 | **2.5** | 2.7 | -.25 | 2.8 | -.34 | 2.7 | -.26 |
| | | 4 | Very much | 7 | 23 | 539 | 22 | 71 | 27 | 6,213 | 22 | | | | | | | |
| | | | Total | 31 | 100 | 2,432 | 100 | 260 | 100 | 28,543 | 100 | | | | | | | |
| **6. During the current school year, about how often have you done the following?** | | | | | | | | | | | | | | | | | | |
| a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.) | QRconclude | 1 | Never | 4 | 13 | 157 | 6 | 26 | 10 | 1,648 | 6 | | | | | | | |
| | | 2 | Sometimes | 8 | 26 | 734 | 30 | 63 | 24 | 8,696 | 30 | | | | | | | |
| | | 3 | Often | 9 | 29 | 1,037 | 43 | 116 | 45 | 12,065 | 42 | **2.8** | 2.8 | .04 | 2.8 | .04 | 2.8 | .01 |
| | | 4 | Very often | 10 | 32 | 503 | 21 | 55 | 21 | 6,171 | 22 | | | | | | | |
| | | | Total | 31 | 100 | 2,431 | 100 | 260 | 100 | 28,580 | 100 | | | | | | | |
| b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.) | QRproblem | 1 | Never | 10 | 32 | 457 | 19 | 57 | 22 | 5,333 | 19 | | | | | | | |
| | | 2 | Sometimes | 11 | 35 | 943 | 39 | 89 | 34 | 11,535 | 40 | | | | | | | |
| | | 3 | Often | 8 | 26 | 727 | 30 | 70 | 27 | 8,100 | 28 | **2.1** | 2.4 | -.32 | 2.4 | -.33 | 2.3 | -.31 |
| | | 4 | Very often | 2 | 6 | 307 | 13 | 45 | 17 | 3,606 | 13 | | | | | | | |
| | | | Total | 31 | 100 | 2,434 | 100 | 261 | 100 | 28,574 | 100 | | | | | | | |
| c. Evaluated what others have concluded from numerical information | QRevaluate | 1 | Never | 7 | 23 | 359 | 15 | 53 | 20 | 3,998 | 14 | | | | | | | |
| | | 2 | Sometimes | 16 | 52 | 1,001 | 41 | 96 | 37 | 11,830 | 41 | | | | | | | |
| | | 3 | Often | 5 | 16 | 807 | 33 | 76 | 29 | 9,333 | 33 | **2.1** | 2.4 | -.32 | 2.4 | -.25 | 2.4 | -.34 |
| | | 4 | Very often | 3 | 10 | 268 | 11 | 37 | 14 | 3,424 | 12 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

## First-Year Students[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your first-year students compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | 31 | 100 | 2,435 | 100 | 262 | 100 | 28,585 | 100 | | | | | | | |
| **7. During the current school year, about how many papers, reports, or other writing tasks of the following lengths have you been assigned? (Include those not yet completed.)** | | | | | | | | | | | | | | | | | | |
| a. Up to 5 pages | wrshortnum | 0 | None | 9 | 29 | 153 | 6 | 17 | 6 | 1,452 | 5 | | | | | | | |
| | *(Recoded version of* wrshort *created by NSSE. Values are estimated number of papers, reports, etc.)* | 1.5 | 1-2 | 7 | 23 | 502 | 21 | 70 | 27 | 5,529 | 19 | | | | | | | |
| | | 4 | 3-5 | 7 | 23 | 778 | 32 | 87 | 33 | 9,189 | 32 | | | | | | | |
| | | 8 | 6-10 | 4 | 13 | 596 | 24 | 58 | 22 | 6,960 | 24 | **4.6** | 6.3 | -.31 | 5.3 | -.15 | 6.7 * ▼ | -.37 |
| | | 13 | 11-15 | 2 | 6 | 225 | 9 | 18 | 7 | 2,858 | 10 | | | | | | | |
| | | 18 | 16-20 | 0 | 0 | 76 | 3 | 7 | 3 | 1,223 | 4 | | | | | | | |
| | | 23 | More than 20 | 2 | 6 | 106 | 4 | 5 | 2 | 1,329 | 5 | | | | | | | |
| | | | Total | 31 | 100 | 2,436 | 100 | 262 | 100 | 28,540 | 100 | | | | | | | |
| b. Between 6 and 10 pages | wrmednum | 0 | None | 20 | 65 | 895 | 37 | 146 | 57 | 9,346 | 33 | | | | | | | |
| | *(Recoded version of* wrmed *created by NSSE. Values are estimated number of papers, reports, etc.)* | 1.5 | 1-2 | 7 | 23 | 869 | 36 | 58 | 23 | 11,353 | 40 | | | | | | | |
| | | 4 | 3-5 | 3 | 10 | 436 | 18 | 35 | 14 | 5,201 | 18 | | | | | | | |
| | | 8 | 6-10 | 0 | 0 | 139 | 6 | 14 | 5 | 1,667 | 6 | **1.1** | 2.1 | -.32 | 1.6 | -.15 | 2.2 | -.35 |
| | | 13 | 11-15 | 1 | 3 | 37 | 2 | 2 | 1 | 428 | 2 | | | | | | | |
| | | 18 | 16-20 | 0 | 0 | 12 | 1 | 2 | 1 | 153 | 1 | | | | | | | |
| | | 23 | More than 20 | 0 | 0 | 10 | 0 | 0 | 0 | 137 | 0 | | | | | | | |
| | | | Total | 31 | 100 | 2,398 | 100 | 257 | 100 | 28,285 | 100 | | | | | | | |
| c. 11 pages or more | wrlongnum | 0 | None | 28 | 90 | 1,844 | 77 | 222 | 87 | 21,368 | 76 | | | | | | | |
| | *(Recoded version of* wrlong *created by NSSE. Values are estimated number of papers, reports, etc.)* | 1.5 | 1-2 | 2 | 6 | 371 | 16 | 17 | 7 | 4,928 | 18 | | | | | | | |
| | | 4 | 3-5 | 1 | 3 | 87 | 4 | 8 | 3 | 910 | 3 | | | | | | | |
| | | 8 | 6-10 | 0 | 0 | 49 | 2 | 5 | 2 | 491 | 2 | **.2** | .8 ** ▽ | -.23 | .6 | -.17 | .8 *** ▽ | -.23 |
| | | 13 | 11-15 | 0 | 0 | 16 | 1 | 0 | 0 | 220 | 1 | | | | | | | |
| | | 18 | 16-20 | 0 | 0 | 8 | 0 | 3 | 1 | 79 | 0 | | | | | | | |
| | | 23 | More than 20 | 0 | 0 | 6 | 0 | 0 | 0 | 104 | 0 | | | | | | | |
| | | | Total | 31 | 100 | 2,381 | 100 | 255 | 100 | 28,100 | 100 | | | | | | | |
| Estimated number of assigned pages of student writing. | wrpages | | | | | | | | | | | | | | | | | |
| | *(Continuous variable, recoded and summed by NSSE from* wrshort, wrmed, *and* wrlong. *Values are estimated pages of assigned writing.)* | | | | | | | | | | | **26.3** | 46.5 | -.34 | 37.3 | -.19 | 48.7 * ▼ | -.37 |
| **8. During the current school year, about how often have you had discussions with people from the following groups?** | | | | | | | | | | | | | | | | | | |
| a. People of a race or ethnicity other than your own | DDrace | 1 | Never | 3 | 10 | 109 | 4 | 12 | 5 | 1,085 | 4 | | | | | | | |
| | | 2 | Sometimes | 7 | 23 | 523 | 21 | 68 | 26 | 6,721 | 23 | | | | | | | |
| | | 3 | Often | 12 | 39 | 750 | 31 | 74 | 28 | 9,069 | 32 | **2.9** | 3.1 | -.29 | 3.1 | -.21 | 3.1 | -.26 |
| | | 4 | Very often | 9 | 29 | 1,064 | 43 | 109 | 41 | 11,800 | 41 | | | | | | | |

## First-Year Students[a] in Natural-Math Science

Frequency Distributions

Statistical Comparisons[k]

*Your first-year students compared with*

| Item wording or description | Variable name[l] | Values[m] | Response options | Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Tennessee Tech Mean | Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | 31 | 100 | 2,446 | 100 | 263 | 100 | 28,675 | 100 | | | | | | | |
| b. People from an economic background other than your own | DDeconomic | 1 | Never | 3 | 10 | 114 | 5 | 13 | 5 | 1,051 | 4 | | | | | | | |
| | | 2 | Sometimes | 6 | 19 | 488 | 20 | 62 | 24 | 6,307 | 22 | | | | | | | |
| | | 3 | Often | 12 | 39 | 857 | 35 | 92 | 35 | 10,508 | 37 | 2.9 | 3.1 | -.20 | 3.0 | -.11 | 3.1 | -.17 |
| | | 4 | Very often | 10 | 32 | 982 | 40 | 96 | 37 | 10,774 | 38 | | | | | | | |
| | | | Total | 31 | 100 | 2,441 | 100 | 263 | 100 | 28,640 | 100 | | | | | | | |
| c. People with religious beliefs other than your own | DDreligion | 1 | Never | 4 | 13 | 138 | 6 | 18 | 7 | 1,651 | 6 | | | | | | | |
| | | 2 | Sometimes | 6 | 19 | 586 | 24 | 73 | 28 | 6,940 | 24 | | | | | | | |
| | | 3 | Often | 7 | 23 | 793 | 32 | 81 | 31 | 9,151 | 32 | 3.0 | 3.0 | -.03 | 2.9 | .07 | 3.0 | -.02 |
| | | 4 | Very often | 14 | 45 | 928 | 38 | 92 | 35 | 10,903 | 38 | | | | | | | |
| | | | Total | 31 | 100 | 2,445 | 100 | 264 | 100 | 28,645 | 100 | | | | | | | |
| d. People with political views other than your own | DDpolitical | 1 | Never | 0 | 0 | 134 | 5 | 22 | 8 | 1,500 | 5 | | | | | | | |
| | | 2 | Sometimes | 9 | 29 | 580 | 24 | 59 | 22 | 7,514 | 26 | | | | | | | |
| | | 3 | Often | 9 | 29 | 807 | 33 | 88 | 33 | 9,287 | 32 | 3.1 | 3.0 | .11 | 3.0 | .17 | 3.0 | .15 |
| | | 4 | Very often | 13 | 42 | 922 | 38 | 94 | 36 | 10,331 | 36 | | | | | | | |
| | | | Total | 31 | 100 | 2,443 | 100 | 263 | 100 | 28,632 | 100 | | | | | | | |
| **9. During the current school year, about how often have you done the following?** | | | | | | | | | | | | | | | | | | |
| a. Identified key information from reading assignments | LSreading | 1 | Never | 1 | 3 | 33 | 1 | 6 | 2 | 406 | 1 | | | | | | | |
| | | 2 | Sometimes | 14 | 45 | 468 | 19 | 57 | 22 | 5,431 | 19 | | | | | | | |
| | | 3 | Often | 11 | 35 | 1,176 | 48 | 111 | 42 | 13,851 | 48 | 2.6 | 3.1 *** ▼ | -.61 | 3.1 ** ▼ | -.54 | 3.1 *** ▼ | -.61 |
| | | 4 | Very often | 5 | 16 | 767 | 31 | 90 | 34 | 8,943 | 31 | | | | | | | |
| | | | Total | 31 | 100 | 2,444 | 100 | 264 | 100 | 28,631 | 100 | | | | | | | |
| b. Reviewed your notes after class | LSnotes | 1 | Never | 1 | 3 | 83 | 3 | 5 | 2 | 1,050 | 4 | | | | | | | |
| | | 2 | Sometimes | 7 | 23 | 641 | 26 | 49 | 19 | 7,842 | 27 | | | | | | | |
| | | 3 | Often | 10 | 32 | 837 | 34 | 88 | 33 | 10,081 | 35 | 3.1 | 3.0 | .11 | 3.2 | -.13 | 3.0 | .16 |
| | | 4 | Very often | 13 | 42 | 879 | 36 | 121 | 46 | 9,658 | 34 | | | | | | | |
| | | | Total | 31 | 100 | 2,440 | 100 | 263 | 100 | 28,631 | 100 | | | | | | | |
| c. Summarized what you learned in class or from course materials | LSsummary | 1 | Never | 2 | 6 | 124 | 5 | 9 | 3 | 1,613 | 6 | | | | | | | |
| | | 2 | Sometimes | 12 | 39 | 700 | 29 | 71 | 27 | 8,452 | 30 | | | | | | | |
| | | 3 | Often | 11 | 35 | 927 | 38 | 89 | 34 | 10,952 | 38 | 2.7 | 2.9 | -.25 | 3.0 * ▼ | -.39 | 2.9 | -.20 |
| | | 4 | Very often | 6 | 19 | 686 | 28 | 95 | 36 | 7,560 | 26 | | | | | | | |
| | | | Total | 31 | 100 | 2,437 | 100 | 264 | 100 | 28,577 | 100 | | | | | | | |
| **10. During the current school year, to what extent have your courses challenged you to do your best work?** | | | | | | | | | | | | | | | | | | |
| | challenge | 1 | Not at all | 1 | 3 | 16 | 1 | 4 | 2 | 177 | 1 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

### First-Year Students[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your first-year students compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2 | | 0 | 0 | 27 | 1 | 5 | 2 | 293 | 1 | | | | | | | |
| | | 3 | | 1 | 3 | 113 | 5 | 10 | 4 | 1,024 | 4 | | | | | | | |
| | | 4 | | 1 | 3 | 254 | 10 | 32 | 12 | 2,723 | 10 | **5.6** | 5.5 | .10 | 5.5 | .11 | 5.6 | .06 |
| | | 5 | | 9 | 29 | 743 | 30 | 75 | 29 | 8,896 | 31 | | | | | | | |
| | | 6 | | 11 | 35 | 660 | 27 | 61 | 23 | 8,351 | 29 | | | | | | | |
| | | 7 | Very much | 8 | 26 | 626 | 26 | 76 | 29 | 7,140 | 25 | | | | | | | |
| | | | Total | 31 | 100 | 2,439 | 100 | 263 | 100 | 28,604 | 100 | | | | | | | |
| **11. Which of the following have you done or do you plan to do before you graduate?[o]** | | | | | | | | | | | | | | | | | | |
| a. Participate in an internship, co-op, field experience, student teaching, or clinical placement | intern | | Have not decided | 6 | 19 | 220 | 9 | 21 | 8 | 2,646 | 9 | | | | | | | |
| | *(Means indicate the percentage who responded "Done or in progress.")* | | Do not plan to do | 0 | 0 | 73 | 3 | 13 | 5 | 852 | 3 | | | | | | | |
| | | | Plan to do | 25 | 81 | 1,951 | 80 | 203 | 77 | 22,817 | 80 | **0%** | 8% | -.58 | 10% | -.63 | 8% | -.58 |
| | | | Done or in progress | 0 | 0 | 197 | 8 | 25 | 10 | 2,341 | 8 | | | | | | | |
| | | | Total | 31 | 100 | 2,441 | 100 | 262 | 100 | 28,656 | 100 | | | | | | | |
| b. Hold a formal leadership role in a student organization or group | leader | | Have not decided | 10 | 32 | 603 | 25 | 61 | 23 | 6,991 | 24 | | | | | | | |
| | *(Means indicate the percentage who responded "Done or in progress.")* | | Do not plan to do | 5 | 16 | 510 | 21 | 57 | 22 | 5,434 | 19 | | | | | | | |
| | | | Plan to do | 11 | 35 | 1,069 | 44 | 123 | 47 | 12,674 | 44 | **16%** | 11% | .16 | 8% | .27 | 12% | .11 |
| | | | Done or in progress | 5 | 16 | 258 | 11 | 20 | 8 | 3,539 | 12 | | | | | | | |
| | | | Total | 31 | 100 | 2,440 | 100 | 261 | 100 | 28,638 | 100 | | | | | | | |
| c. Participate in a learning community or some other formal program where groups of students take two or more classes together | learncom | | Have not decided | 18 | 60 | 721 | 30 | 75 | 29 | 8,831 | 31 | | | | | | | |
| | *(Means indicate the percentage who responded "Done or in progress.")* | | Do not plan to do | 5 | 17 | 546 | 22 | 60 | 23 | 7,332 | 26 | | | | | | | |
| | | | Plan to do | 4 | 13 | 768 | 32 | 88 | 34 | 8,134 | 28 | **10%** | 16% | -.19 | 14% | -.13 | 15% | -.15 |
| | | | Done or in progress | 3 | 10 | 399 | 16 | 37 | 14 | 4,294 | 15 | | | | | | | |
| | | | Total | 30 | 100 | 2,434 | 100 | 260 | 100 | 28,591 | 100 | | | | | | | |
| d. Participate in a study abroad program | abroad | | Have not decided | 11 | 35 | 723 | 30 | 86 | 33 | 7,536 | 26 | | | | | | | |
| | *(Means indicate the percentage who responded "Done or in progress.")* | | Do not plan to do | 14 | 45 | 574 | 24 | 69 | 26 | 6,519 | 23 | | | | | | | |
| | | | Plan to do | 5 | 16 | 1,064 | 44 | 101 | 39 | 13,697 | 48 | **3%** | 3% | .01 | 2% | .08 | 3% | .01 |
| | | | Done or in progress | 1 | 3 | 75 | 3 | 5 | 2 | 862 | 3 | | | | | | | |
| | | | Total | 31 | 100 | 2,436 | 100 | 261 | 100 | 28,614 | 100 | | | | | | | |
| e. Work with a faculty member on a research project | research | | Have not decided | 13 | 42 | 672 | 28 | 76 | 29 | 7,433 | 26 | | | | | | | |
| | *(Means indicate the percentage who responded "Done or in progress.")* | | Do not plan to do | 1 | 3 | 269 | 11 | 40 | 15 | 2,867 | 10 | | | | | | | |
| | | | Plan to do | 14 | 45 | 1,317 | 54 | 122 | 47 | 16,079 | 56 | **10%** | 7% | .09 | 8% | .04 | 8% | .07 |
| | | | Done or in progress | 3 | 10 | 176 | 7 | 22 | 8 | 2,211 | 8 | | | | | | | |
| | | | Total | 31 | 100 | 2,434 | 100 | 260 | 100 | 28,590 | 100 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

## First-Year Students[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your first-year students compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| f. Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.) | capstone (*Means indicate the percentage who responded "Done or in progress."*) | | Have not decided | 13 | 42 | 768 | 32 | 79 | 30 | 7,934 | 28 | | | | | | | |
| | | | Do not plan to do | 3 | 10 | 236 | 10 | 28 | 11 | 1,971 | 7 | | | | | | | |
| | | | Plan to do | 14 | 45 | 1,383 | 57 | 151 | 58 | 18,175 | 64 | **3%** | 2% | .08 | 1% | .15 | 2% | .09 |
| | | | Done or in progress | 1 | 3 | 48 | 2 | 3 | 1 | 505 | 2 | | | | | | | |
| | | | Total | 31 | 100 | 2,435 | 100 | 261 | 100 | 28,585 | 100 | | | | | | | |
| **12. About how many of your courses at this institution have included a community-based project (service-learning)?** | | | | | | | | | | | | | | | | | | |
| | servcourse | 1 | None | 17 | 55 | 1,099 | 45 | 111 | 43 | 14,804 | 52 | | | | | | | |
| | | 2 | Some | 13 | 42 | 1,122 | 46 | 130 | 50 | 11,748 | 41 | | | | | | | |
| | | 3 | Most | 1 | 3 | 170 | 7 | 13 | 5 | 1,704 | 6 | **1.5** | 1.7 | -.25 | 1.7 | -.29 | 1.6 | -.12 |
| | | 4 | All | 0 | 0 | 46 | 2 | 7 | 3 | 337 | 1 | | | | | | | |
| | | | Total | 31 | 100 | 2,437 | 100 | 261 | 100 | 28,593 | 100 | | | | | | | |
| **13. Indicate the quality of your interactions with the following people at your institution.** | | | | | | | | | | | | | | | | | | |
| a. Students | QIstudent | 1 | Poor | 0 | 0 | 30 | 1 | 2 | 1 | 404 | 1 | | | | | | | |
| | | 2 | | 0 | 0 | 53 | 2 | 5 | 2 | 536 | 2 | | | | | | | |
| | | 3 | | 3 | 10 | 131 | 5 | 17 | 6 | 1,463 | 5 | | | | | | | |
| | | 4 | | 1 | 3 | 315 | 13 | 38 | 15 | 3,280 | 11 | | | | | | | |
| | | 5 | | 9 | 29 | 672 | 27 | 70 | 27 | 7,693 | 27 | **5.7** | 5.4 | .24 | 5.4 | .30 | 5.5 | .21 |
| | | 6 | | 6 | 19 | 605 | 25 | 71 | 27 | 7,788 | 27 | | | | | | | |
| | | 7 | Excellent | 12 | 39 | 629 | 26 | 58 | 22 | 7,369 | 26 | | | | | | | |
| | | — | Not applicable | 0 | 0 | 9 | 0 | 1 | 0 | 148 | 1 | | | | | | | |
| | | | Total | 31 | 100 | 2,444 | 100 | 262 | 100 | 28,681 | 100 | | | | | | | |
| b. Academic advisors | QIadvisor | 1 | Poor | 1 | 3 | 82 | 3 | 6 | 2 | 914 | 3 | | | | | | | |
| | | 2 | | 0 | 0 | 119 | 5 | 13 | 5 | 1,336 | 5 | | | | | | | |
| | | 3 | | 3 | 10 | 204 | 8 | 23 | 9 | 2,220 | 8 | | | | | | | |
| | | 4 | | 6 | 19 | 359 | 15 | 45 | 17 | 4,012 | 14 | | | | | | | |
| | | 5 | | 8 | 26 | 489 | 20 | 46 | 18 | 5,997 | 21 | **5.1** | 5.1 | .00 | 5.2 | -.02 | 5.2 | -.03 |
| | | 6 | | 6 | 19 | 512 | 21 | 59 | 23 | 6,051 | 21 | | | | | | | |
| | | 7 | Excellent | 7 | 23 | 629 | 26 | 69 | 26 | 7,652 | 27 | | | | | | | |
| | | — | Not applicable | 0 | 0 | 48 | 2 | 1 | 0 | 486 | 2 | | | | | | | |
| | | | Total | 31 | 100 | 2,442 | 100 | 262 | 100 | 28,668 | 100 | | | | | | | |
| c. Faculty | QIfaculty | 1 | Poor | 1 | 3 | 59 | 2 | 4 | 2 | 455 | 2 | | | | | | | |
| | | 2 | | 0 | 0 | 71 | 3 | 6 | 2 | 745 | 3 | | | | | | | |
| | | 3 | | 2 | 6 | 149 | 6 | 18 | 7 | 1,582 | 6 | | | | | | | |
| | | 4 | | 4 | 13 | 348 | 14 | 38 | 15 | 3,749 | 13 | | | | | | | |
| | | 5 | | 7 | 23 | 658 | 27 | 72 | 28 | 7,414 | 26 | **5.5** | 5.2 | .21 | 5.2 | .21 | 5.3 | .12 |

## First-Year Students[a] in Natural-Math Science

| | Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your first-year students compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 6 | | 6 | 19 | 627 | 26 | 72 | 28 | 8,056 | 28 | | | | | | | |
| | | | 7 | Excellent | 11 | 35 | 494 | 20 | 47 | 18 | 6,365 | 22 | | | | | | | |
| | | | — | Not applicable | 0 | 0 | 24 | 1 | 4 | 2 | 225 | 1 | | | | | | | |
| | | | | Total | 31 | 100 | 2,430 | 100 | 261 | 100 | 28,591 | 100 | | | | | | | |
| d. | Student services staff (career services, student activities, housing, etc.) | QIstaff | 1 | Poor | 0 | 0 | 105 | 4 | 9 | 3 | 952 | 3 | | | | | | | |
| | | | 2 | | 0 | 0 | 104 | 4 | 10 | 4 | 1,123 | 4 | | | | | | | |
| | | | 3 | | 2 | 6 | 187 | 8 | 20 | 8 | 2,047 | 7 | | | | | | | |
| | | | 4 | | 5 | 16 | 345 | 14 | 39 | 15 | 3,938 | 14 | | | | | | | |
| | | | 5 | | 8 | 26 | 524 | 21 | 54 | 21 | 6,419 | 22 | **5.4** | 5.0 | .29 | 5.1 | .24 | 5.1 | .23 |
| | | | 6 | | 6 | 19 | 516 | 21 | 61 | 23 | 6,257 | 22 | | | | | | | |
| | | | 7 | Excellent | 8 | 26 | 446 | 18 | 51 | 19 | 5,595 | 20 | | | | | | | |
| | | | — | Not applicable | 2 | 6 | 211 | 9 | 18 | 7 | 2,255 | 8 | | | | | | | |
| | | | | Total | 31 | 100 | 2,438 | 100 | 262 | 100 | 28,586 | 100 | | | | | | | |
| e. | Other administrative staff and offices (registrar, financial aid, etc.) | QIadmin | 1 | Poor | 1 | 3 | 117 | 5 | 20 | 8 | 1,067 | 4 | | | | | | | |
| | | | 2 | | 2 | 6 | 122 | 5 | 14 | 5 | 1,320 | 5 | | | | | | | |
| | | | 3 | | 0 | 0 | 214 | 9 | 24 | 9 | 2,172 | 8 | | | | | | | |
| | | | 4 | | 6 | 19 | 354 | 14 | 34 | 13 | 4,252 | 15 | | | | | | | |
| | | | 5 | | 7 | 23 | 555 | 23 | 58 | 22 | 6,543 | 23 | **5.2** | 4.9 | .16 | 4.8 | .20 | 5.0 | .11 |
| | | | 6 | | 5 | 16 | 494 | 20 | 60 | 23 | 6,068 | 21 | | | | | | | |
| | | | 7 | Excellent | 8 | 26 | 443 | 18 | 48 | 18 | 5,240 | 18 | | | | | | | |
| | | | — | Not applicable | 2 | 6 | 143 | 6 | 4 | 2 | 1,977 | 7 | | | | | | | |
| | | | | Total | 31 | 100 | 2,442 | 100 | 262 | 100 | 28,639 | 100 | | | | | | | |
| **14.** | **How much does your institution emphasize the following?** | | | | | | | | | | | | | | | | | | |
| a. | Spending significant amounts of time studying and on academic work | empstudy | 1 | Very little | 0 | 0 | 36 | 1 | 4 | 2 | 316 | 1 | | | | | | | |
| | | | 2 | Some | 4 | 13 | 328 | 13 | 37 | 14 | 3,764 | 13 | | | | | | | |
| | | | 3 | Quite a bit | 16 | 52 | 1,101 | 45 | 120 | 45 | 12,772 | 45 | **3.2** | 3.2 | -.01 | 3.2 | .01 | 3.3 | -.04 |
| | | | 4 | Very much | 11 | 35 | 975 | 40 | 103 | 39 | 11,766 | 41 | | | | | | | |
| | | | | Total | 31 | 100 | 2,440 | 100 | 264 | 100 | 28,618 | 100 | | | | | | | |
| b. | Providing support to help students succeed academically | SEacademic | 1 | Very little | 1 | 3 | 84 | 3 | 8 | 3 | 706 | 2 | | | | | | | |
| | | | 2 | Some | 5 | 16 | 398 | 16 | 37 | 14 | 4,801 | 17 | | | | | | | |
| | | | 3 | Quite a bit | 14 | 45 | 1,076 | 44 | 117 | 45 | 12,299 | 43 | **3.1** | 3.1 | .00 | 3.2 | -.06 | 3.2 | -.04 |
| | | | 4 | Very much | 11 | 35 | 877 | 36 | 100 | 38 | 10,702 | 38 | | | | | | | |
| | | | | Total | 31 | 100 | 2,435 | 100 | 262 | 100 | 28,508 | 100 | | | | | | | |
| c. | Using learning support services (tutoring services, writing center, etc.) | SElearnsup | 1 | Very little | 0 | 0 | 116 | 5 | 12 | 5 | 1,154 | 4 | | | | | | | |
| | | | 2 | Some | 5 | 16 | 345 | 14 | 31 | 12 | 4,293 | 15 | | | | | | | |
| | | | 3 | Quite a bit | 14 | 45 | 923 | 38 | 88 | 33 | 10,801 | 38 | **3.2** | 3.2 | .03 | 3.3 | -.08 | 3.2 | .03 |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

## First-Year Students[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your first-year students compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4 | Very much | 12 | 39 | 1,058 | 43 | 133 | 50 | 12,337 | 43 | | | | | | | |
| | | | Total | 31 | 100 | 2,442 | 100 | 264 | 100 | 28,585 | 100 | | | | | | | |
| d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.) | SEdiverse | 1 | Very little | 5 | 16 | 241 | 10 | 31 | 12 | 2,746 | 10 | | | | | | | |
| | | 2 | Some | 11 | 35 | 622 | 26 | 73 | 28 | 7,774 | 27 | | | | | | | |
| | | 3 | Quite a bit | 6 | 19 | 871 | 36 | 78 | 30 | 10,162 | 36 | **2.6** | 2.8 | -.23 | 2.8 | -.17 | 2.8 | -.21 |
| | | 4 | Very much | 9 | 29 | 704 | 29 | 78 | 30 | 7,887 | 28 | | | | | | | |
| | | | Total | 31 | 100 | 2,438 | 100 | 260 | 100 | 28,569 | 100 | | | | | | | |
| e. Providing opportunities to be involved socially | SEsocial | 1 | Very little | 1 | 3 | 130 | 5 | 14 | 5 | 1,350 | 5 | | | | | | | |
| | | 2 | Some | 6 | 19 | 527 | 22 | 61 | 23 | 5,999 | 21 | | | | | | | |
| | | 3 | Quite a bit | 15 | 48 | 964 | 40 | 96 | 37 | 11,858 | 42 | **3.0** | 3.0 | .03 | 3.0 | .03 | 3.0 | .01 |
| | | 4 | Very much | 9 | 29 | 812 | 33 | 90 | 34 | 9,356 | 33 | | | | | | | |
| | | | Total | 31 | 100 | 2,433 | 100 | 261 | 100 | 28,563 | 100 | | | | | | | |
| f. Providing support for your overall well-being (recreation, health care, counseling, etc.) | SEwellness | 1 | Very little | 2 | 6 | 131 | 5 | 18 | 7 | 1,469 | 5 | | | | | | | |
| | | 2 | Some | 7 | 23 | 538 | 22 | 62 | 24 | 6,042 | 21 | | | | | | | |
| | | 3 | Quite a bit | 15 | 48 | 984 | 40 | 94 | 36 | 11,676 | 41 | **2.9** | 3.0 | -.14 | 3.0 | -.10 | 3.0 | -.16 |
| | | 4 | Very much | 7 | 23 | 779 | 32 | 88 | 34 | 9,349 | 33 | | | | | | | |
| | | | Total | 31 | 100 | 2,432 | 100 | 262 | 100 | 28,536 | 100 | | | | | | | |
| g. Helping you manage your non-academic responsibilities (work, family, etc.) | SEnonacad | 1 | Very little | 9 | 29 | 519 | 21 | 62 | 24 | 5,744 | 20 | | | | | | | |
| | | 2 | Some | 15 | 48 | 840 | 34 | 84 | 32 | 10,568 | 37 | | | | | | | |
| | | 3 | Quite a bit | 4 | 13 | 688 | 28 | 64 | 24 | 8,031 | 28 | **2.0** | 2.4 * ▼ | -.36 | 2.4 * ▼ | -.36 | 2.4 * ▼ | -.36 |
| | | 4 | Very much | 3 | 10 | 388 | 16 | 52 | 20 | 4,214 | 15 | | | | | | | |
| | | | Total | 31 | 100 | 2,435 | 100 | 262 | 100 | 28,557 | 100 | | | | | | | |
| h. Attending campus activities and events (performing arts, athletic events, etc.) | SEactivities | 1 | Very little | 3 | 10 | 182 | 7 | 15 | 6 | 1,907 | 7 | | | | | | | |
| | | 2 | Some | 10 | 32 | 614 | 25 | 64 | 24 | 7,161 | 25 | | | | | | | |
| | | 3 | Quite a bit | 11 | 35 | 964 | 40 | 100 | 38 | 11,515 | 40 | **2.7** | 2.9 | -.18 | 3.0 | -.28 | 2.9 | -.21 |
| | | 4 | Very much | 7 | 23 | 672 | 28 | 84 | 32 | 7,966 | 28 | | | | | | | |
| | | | Total | 31 | 100 | 2,432 | 100 | 263 | 100 | 28,549 | 100 | | | | | | | |
| i. Attending events that address important social, economic, or political issues | SEevents | 1 | Very little | 8 | 26 | 332 | 14 | 43 | 16 | 3,295 | 12 | | | | | | | |
| | | 2 | Some | 13 | 42 | 797 | 33 | 82 | 31 | 9,448 | 33 | | | | | | | |
| | | 3 | Quite a bit | 6 | 19 | 807 | 33 | 76 | 29 | 10,104 | 35 | **2.2** | 2.6 * ▼ | -.42 | 2.6 * ▼ | -.39 | 2.6 ** ▼ | -.48 |
| | | 4 | Very much | 4 | 13 | 492 | 20 | 61 | 23 | 5,680 | 20 | | | | | | | |
| | | | Total | 31 | 100 | 2,428 | 100 | 262 | 100 | 28,527 | 100 | | | | | | | |
| **15. About how many hours do you spend in a typical 7-day week doing the following?** | | | | | | | | | | | | | | | | | | |
| a. Preparing for class (studying, reading, | tmprephrs (Recoded version | 0 | 0 hrs | 0 | 0 | 3 | 0 | 0 | 0 | 69 | 0 | | | | | | | |
| | | 3 | 1-5 hrs | 2 | 6 | 240 | 10 | 33 | 13 | 2,314 | 8 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

### First-Year Students[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your first-year students compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities) | *of* tmprep *created by NSSE. Values are estimated number of hours per week.)* | 8 | 6-10 hrs | 8 | 26 | 501 | 21 | 49 | 19 | 5,058 | 18 | | | | | | | |
| | | 13 | 11-15 hrs | 7 | 23 | 547 | 22 | 69 | 26 | 5,916 | 21 | | | | | | | |
| | | 18 | 16-20 hrs | 7 | 23 | 494 | 20 | 57 | 22 | 6,102 | 21 | **15.4** | 15.7 | -.03 | 14.9 | .07 | 16.9 | -.17 |
| | | 23 | 21-25 hrs | 3 | 10 | 333 | 14 | 25 | 10 | 4,249 | 15 | | | | | | | |
| | | 28 | 26-30 hrs | 2 | 6 | 156 | 6 | 10 | 4 | 2,382 | 8 | | | | | | | |
| | | 33 | More than 30 hrs | 2 | 6 | 166 | 7 | 19 | 7 | 2,542 | 9 | | | | | | | |
| | | | Total | 31 | 100 | 2,440 | 100 | 262 | 100 | 28,632 | 100 | | | | | | | |
| b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.) | tmcocurrhrs | 0 | 0 hrs | 10 | 32 | 770 | 32 | 100 | 38 | 7,216 | 25 | | | | | | | |
| | *(Recoded version of* tmcocurr *created by NSSE. Values are estimated number of hours per week.)* | 3 | 1-5 hrs | 10 | 32 | 852 | 35 | 73 | 28 | 10,451 | 37 | | | | | | | |
| | | 8 | 6-10 hrs | 6 | 19 | 382 | 16 | 50 | 19 | 5,065 | 18 | | | | | | | |
| | | 13 | 11-15 hrs | 2 | 6 | 209 | 9 | 18 | 7 | 2,774 | 10 | | | | | | | |
| | | 18 | 16-20 hrs | 1 | 3 | 124 | 5 | 11 | 4 | 1,643 | 6 | **5.7** | 5.4 | .05 | 5.1 | .09 | 6.1 | -.05 |
| | | 23 | 21-25 hrs | 1 | 3 | 50 | 2 | 1 | 0 | 756 | 3 | | | | | | | |
| | | 28 | 26-30 hrs | 0 | 0 | 18 | 1 | 2 | 1 | 281 | 1 | | | | | | | |
| | | 33 | More than 30 hrs | 1 | 3 | 29 | 1 | 6 | 2 | 334 | 1 | | | | | | | |
| | | | Total | 31 | 100 | 2,434 | 100 | 261 | 100 | 28,520 | 100 | | | | | | | |
| c. Working for pay **on campus** | tmworkonhrs | 0 | 0 hrs | 22 | 71 | 1,942 | 80 | 207 | 80 | 21,805 | 76 | | | | | | | |
| | *(Recoded version of* tmworkon *created by NSSE. Values are estimated number of hours per week.)* | 3 | 1-5 hrs | 4 | 13 | 101 | 4 | 9 | 3 | 1,524 | 5 | | | | | | | |
| | | 8 | 6-10 hrs | 3 | 10 | 155 | 6 | 18 | 7 | 2,549 | 9 | | | | | | | |
| | | 13 | 11-15 hrs | 2 | 6 | 107 | 4 | 9 | 3 | 1,430 | 5 | | | | | | | |
| | | 18 | 16-20 hrs | 0 | 0 | 93 | 4 | 16 | 6 | 827 | 3 | **2.0** | 2.3 | -.05 | 2.3 | -.06 | 2.5 | -.08 |
| | | 23 | 21-25 hrs | 0 | 0 | 22 | 1 | 1 | 0 | 252 | 1 | | | | | | | |
| | | 28 | 26-30 hrs | 0 | 0 | 6 | 0 | 0 | 0 | 77 | 0 | | | | | | | |
| | | 33 | More than 30 hrs | 0 | 0 | 9 | 0 | 0 | 0 | 116 | 0 | | | | | | | |
| | | | Total | 31 | 100 | 2,435 | 100 | 260 | 100 | 28,580 | 100 | | | | | | | |
| d. Working for pay **off campus** | tmworkoffhrs | 0 | 0 hrs | 24 | 77 | 1,742 | 72 | 182 | 69 | 21,568 | 76 | | | | | | | |
| | *(Recoded version of* tmworkoff *created by NSSE. Values are estimated number of hours per week.)* | 3 | 1-5 hrs | 1 | 3 | 90 | 4 | 8 | 3 | 1,227 | 4 | | | | | | | |
| | | 8 | 6-10 hrs | 0 | 0 | 113 | 5 | 12 | 5 | 1,377 | 5 | | | | | | | |
| | | 13 | 11-15 hrs | 1 | 3 | 142 | 6 | 15 | 6 | 1,230 | 4 | | | | | | | |
| | | 18 | 16-20 hrs | 1 | 3 | 117 | 5 | 15 | 6 | 1,306 | 5 | **4.1** | 4.7 | -.07 | 5.6 | -.16 | 3.6 | .05 |
| | | 23 | 21-25 hrs | 4 | 13 | 93 | 4 | 11 | 4 | 849 | 3 | | | | | | | |
| | | 28 | 26-30 hrs | 0 | 0 | 55 | 2 | 6 | 2 | 471 | 2 | | | | | | | |
| | | 33 | More than 30 hrs | 0 | 0 | 79 | 3 | 14 | 5 | 524 | 2 | | | | | | | |
| | | | Total | 31 | 100 | 2,431 | 100 | 263 | 100 | 28,552 | 100 | | | | | | | |
| Estimated number of hours working for pay | tmworkhrs | | | | | | | | | | | | | | | | | |
| | *(Continuous variable created* | | | | | | | | | | | **6.1** | 6.9 | -.08 | 7.8 | -.16 | 6.1 | .00 |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

### First-Year Students[a] in Natural-Math Science

| Item wording or description | Variable name[l] (created by NSSE) | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your first-year students compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| e. Doing community service or volunteer work | tmservicehrs (Recoded version of tmservice created by NSSE. Values are estimated number of hours per week.) | 0 | 0 hrs | 15 | 48 | 1,274 | 52 | 144 | 55 | 15,433 | 54 | 3.2 | 2.9 | .06 | 3.1 | .02 | 2.4 | .17 |
| | | 3 | 1-5 hrs | 10 | 32 | 779 | 32 | 68 | 26 | 9,721 | 34 | | | | | | | |
| | | 8 | 6-10 hrs | 3 | 10 | 205 | 8 | 28 | 11 | 1,932 | 7 | | | | | | | |
| | | 13 | 11-15 hrs | 2 | 6 | 96 | 4 | 12 | 5 | 741 | 3 | | | | | | | |
| | | 18 | 16-20 hrs | 1 | 3 | 50 | 2 | 9 | 3 | 407 | 1 | | | | | | | |
| | | 23 | 21-25 hrs | 0 | 0 | 17 | 1 | 0 | 0 | 173 | 1 | | | | | | | |
| | | 28 | 26-30 hrs | 0 | 0 | 5 | 0 | 1 | 0 | 54 | 0 | | | | | | | |
| | | 33 | More than 30 hrs | 0 | 0 | 10 | 0 | 1 | 0 | 83 | 0 | | | | | | | |
| | | | Total | 31 | 100 | 2,436 | 100 | 263 | 100 | 28,544 | 100 | | | | | | | |
| f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.) | tmrelaxhrs (Recoded version of tmrelax created by NSSE. Values are estimated number of hours per week.) | 0 | 0 hrs | 1 | 3 | 54 | 2 | 7 | 3 | 491 | 2 | 11.9 | 11.2 | .09 | 11.2 | .08 | 11.6 | .04 |
| | | 3 | 1-5 hrs | 6 | 19 | 651 | 27 | 80 | 31 | 6,510 | 23 | | | | | | | |
| | | 8 | 6-10 hrs | 10 | 32 | 682 | 28 | 65 | 25 | 8,209 | 29 | | | | | | | |
| | | 13 | 11-15 hrs | 7 | 23 | 431 | 18 | 40 | 15 | 5,968 | 21 | | | | | | | |
| | | 18 | 16-20 hrs | 2 | 6 | 308 | 13 | 29 | 11 | 3,663 | 13 | | | | | | | |
| | | 23 | 21-25 hrs | 2 | 6 | 124 | 5 | 12 | 5 | 1,567 | 5 | | | | | | | |
| | | 28 | 26-30 hrs | 0 | 0 | 58 | 2 | 11 | 4 | 736 | 3 | | | | | | | |
| | | 33 | More than 30 hrs | 3 | 10 | 124 | 5 | 16 | 6 | 1,419 | 5 | | | | | | | |
| | | | Total | 31 | 100 | 2,432 | 100 | 260 | 100 | 28,563 | 100 | | | | | | | |
| g. Providing care for dependents (children, parents, etc.) | tmcarehrs (Recoded version of tmcare created by NSSE. Values are estimated number of hours per week.) | 0 | 0 hrs | 25 | 81 | 1,843 | 76 | 201 | 77 | 23,454 | 82 | 1.5 | 2.4 | -.14 | 2.7 | -.17 | 1.6 | -.02 |
| | | 3 | 1-5 hrs | 2 | 6 | 260 | 11 | 26 | 10 | 2,519 | 9 | | | | | | | |
| | | 8 | 6-10 hrs | 3 | 10 | 116 | 5 | 9 | 3 | 1,022 | 4 | | | | | | | |
| | | 13 | 11-15 hrs | 0 | 0 | 91 | 4 | 8 | 3 | 636 | 2 | | | | | | | |
| | | 18 | 16-20 hrs | 1 | 3 | 44 | 2 | 4 | 2 | 349 | 1 | | | | | | | |
| | | 23 | 21-25 hrs | 0 | 0 | 17 | 1 | 1 | 0 | 195 | 1 | | | | | | | |
| | | 28 | 26-30 hrs | 0 | 0 | 10 | 0 | 2 | 1 | 61 | 0 | | | | | | | |
| | | 33 | More than 30 hrs | 0 | 0 | 42 | 2 | 9 | 3 | 310 | 1 | | | | | | | |
| | | | Total | 31 | 100 | 2,423 | 100 | 260 | 100 | 28,546 | 100 | | | | | | | |
| h. Commuting to campus (driving, walking, etc.) | tmcommutehrs (Recoded version of tmcommute created by NSSE. Values are estimated number of hours per week.) | 0 | 0 hrs | 13 | 42 | 962 | 39 | 101 | 38 | 13,607 | 48 | 3.4 | 4.2 | -.14 | 4.1 | -.13 | 3.3 | .00 |
| | | 3 | 1-5 hrs | 13 | 42 | 866 | 36 | 102 | 39 | 9,642 | 34 | | | | | | | |
| | | 8 | 6-10 hrs | 4 | 13 | 340 | 14 | 31 | 12 | 3,010 | 11 | | | | | | | |
| | | 13 | 11-15 hrs | 0 | 0 | 127 | 5 | 16 | 6 | 1,168 | 4 | | | | | | | |
| | | 18 | 16-20 hrs | 0 | 0 | 68 | 3 | 4 | 2 | 548 | 2 | | | | | | | |
| | | 23 | 21-25 hrs | 0 | 0 | 30 | 1 | 3 | 1 | 253 | 1 | | | | | | | |
| | | 28 | 26-30 hrs | 0 | 0 | 14 | 1 | 3 | 1 | 108 | 0 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

### First-Year Students[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your first-year students compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 33 | More than 30 hrs | 1 | 3 | 31 | 1 | 3 | 1 | 262 | 1 | | | | | | | |
| | | | Total | 31 | 100 | 2,438 | 100 | 263 | 100 | 28,598 | 100 | | | | | | | |
| **16. Of the time you spend preparing for class in a typical 7-day week, about how much is on *assigned reading?*** | | | | | | | | | | | | | | | | | | |
| | reading | 1 | Very little | 8 | 26 | 345 | 14 | 33 | 13 | 3,628 | 13 | | | | | | | |
| | | 2 | Some | 14 | 45 | 910 | 37 | 104 | 40 | 10,505 | 37 | | | | | | | |
| | | 3 | About half | 5 | 16 | 686 | 28 | 78 | 30 | 8,165 | 29 | **2.2** | 2.6 | -.35 | 2.6 | -.34 | 2.7 * ▼ | -.40 |
| | | 4 | Most | 2 | 6 | 370 | 15 | 32 | 12 | 4,747 | 17 | | | | | | | |
| | | 5 | Almost all | 2 | 6 | 128 | 5 | 14 | 5 | 1,568 | 5 | | | | | | | |
| | | | Total | 31 | 100 | 2,439 | 100 | 261 | 100 | 28,613 | 100 | | | | | | | |
| | tmreadinghrs *(Continuous variable created by NSSE. Calculated as a proportion of* tmprephrs *based on* reading*, where Very little=.10; Some=.25; About half=.50; Most=.75; Almost all=.90)* | | | | | | | | | | | **5.0** | 6.6 | -.28 | 6.3 | -.24 | 7.3 * ▼ | -.38 |
| | tmreadinghrscol *(Collapsed version of* tmreadinghrs *created by NSSE.)* | 1 | 0 hrs | 0 | 0 | 3 | 0 | 0 | 0 | 67 | 0 | | | | | | | |
| | | 2 | More than zero, up to 5 hrs | 22 | 71 | 1,257 | 52 | 142 | 55 | 13,225 | 46 | | | | | | | |
| | | 3 | More than 5, up to 10 hrs | 4 | 13 | 707 | 29 | 71 | 27 | 8,624 | 30 | | | | | | | |
| | | 4 | More than 10, up to 15 hrs | 3 | 10 | 229 | 9 | 25 | 10 | 3,234 | 11 | | | | | | | |
| | | 5 | More than 15, up to 20 hrs | 2 | 6 | 121 | 5 | 13 | 5 | 1,737 | 6 | | | | | | | |
| | | 6 | More than 20, up to 25 hrs | 0 | 0 | 91 | 4 | 9 | 3 | 1,213 | 4 | | | | | | | |
| | | 7 | More than 25 hrs | 0 | 0 | 23 | 1 | 0 | 0 | 426 | 1 | | | | | | | |
| | | | Total | 31 | 100 | 2,431 | 100 | 260 | 100 | 28,526 | 100 | | | | | | | |
| **17. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?** | | | | | | | | | | | | | | | | | | |
| a. Writing clearly and effectively | pgwrite | 1 | Very little | 6 | 19 | 183 | 8 | 24 | 9 | 2,363 | 8 | | | | | | | |
| | | 2 | Some | 10 | 32 | 661 | 27 | 63 | 24 | 8,343 | 29 | | | | | | | |
| | | 3 | Quite a bit | 12 | 39 | 1,055 | 43 | 112 | 43 | 11,966 | 42 | **2.4** | 2.8 ** ▼ | -.47 | 2.8 * ▼ | -.47 | 2.7 * ▼ | -.41 |
| | | 4 | Very much | 3 | 10 | 535 | 22 | 63 | 24 | 5,911 | 21 | | | | | | | |
| | | | Total | 31 | 100 | 2,434 | 100 | 262 | 100 | 28,583 | 100 | | | | | | | |
| b. Speaking clearly and effectively | pgspeak | 1 | Very little | 6 | 19 | 266 | 11 | 31 | 12 | 3,785 | 13 | | | | | | | |
| | | 2 | Some | 10 | 32 | 766 | 31 | 84 | 32 | 9,661 | 34 | | | | | | | |

## First-Year Students[a] in Natural-Math Science

Frequency Distributions

Statistical Comparisons[k]

*Your first-year students compared with*

| Item wording or description | Variable name[l] | Values[m] | Response options | Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Tennessee Tech Mean | Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3 | Quite a bit | 14 | 45 | 957 | 39 | 100 | 38 | 10,113 | 35 | **2.3** | 2.7 * ▼ | -.37 | 2.6 | -.34 | 2.6 | -.27 |
| | | 4 | Very much | 1 | 3 | 451 | 18 | 48 | 18 | 5,041 | 18 | | | | | | | |
| | | | Total | 31 | 100 | 2,440 | 100 | 263 | 100 | 28,600 | 100 | | | | | | | |
| c. Thinking critically and analytically | pgthink | 1 | Very little | 3 | 10 | 74 | 3 | 9 | 3 | 867 | 3 | | | | | | | |
| | | 2 | Some | 5 | 16 | 413 | 17 | 43 | 16 | 4,954 | 17 | | | | | | | |
| | | 3 | Quite a bit | 14 | 45 | 1,102 | 45 | 122 | 47 | 12,621 | 44 | **2.9** | 3.1 | -.23 | 3.1 | -.21 | 3.1 | -.23 |
| | | 4 | Very much | 9 | 29 | 847 | 35 | 88 | 34 | 10,163 | 36 | | | | | | | |
| | | | Total | 31 | 100 | 2,436 | 100 | 262 | 100 | 28,605 | 100 | | | | | | | |
| d. Analyzing numerical and statistical information | pganalyze | 1 | Very little | 3 | 10 | 151 | 6 | 16 | 6 | 1,828 | 6 | | | | | | | |
| | | 2 | Some | 8 | 26 | 605 | 25 | 65 | 25 | 7,240 | 25 | | | | | | | |
| | | 3 | Quite a bit | 14 | 45 | 1,026 | 42 | 106 | 40 | 11,551 | 40 | **2.7** | 2.9 | -.18 | 2.9 | -.20 | 2.9 | -.18 |
| | | 4 | Very much | 6 | 19 | 651 | 27 | 75 | 29 | 8,007 | 28 | | | | | | | |
| | | | Total | 31 | 100 | 2,433 | 100 | 262 | 100 | 28,626 | 100 | | | | | | | |
| e. Acquiring job- or work-related knowledge and skills | pgwork | 1 | Very little | 8 | 26 | 402 | 16 | 47 | 18 | 4,424 | 15 | | | | | | | |
| | | 2 | Some | 7 | 23 | 813 | 33 | 83 | 32 | 10,074 | 35 | | | | | | | |
| | | 3 | Quite a bit | 10 | 32 | 806 | 33 | 80 | 30 | 9,087 | 32 | **2.5** | 2.5 | -.06 | 2.5 | -.08 | 2.5 | -.07 |
| | | 4 | Very much | 6 | 19 | 418 | 17 | 53 | 20 | 5,038 | 18 | | | | | | | |
| | | | Total | 31 | 100 | 2,439 | 100 | 263 | 100 | 28,623 | 100 | | | | | | | |
| f. Working effectively with others | pgothers | 1 | Very little | 4 | 13 | 161 | 7 | 17 | 6 | 1,968 | 7 | | | | | | | |
| | | 2 | Some | 13 | 42 | 623 | 26 | 81 | 31 | 8,220 | 29 | | | | | | | |
| | | 3 | Quite a bit | 12 | 39 | 1,039 | 43 | 98 | 37 | 11,632 | 41 | **2.4** | 2.9 ** ▼ | -.55 | 2.8 * ▼ | -.49 | 2.8 ** ▼ | -.49 |
| | | 4 | Very much | 2 | 6 | 613 | 25 | 67 | 25 | 6,812 | 24 | | | | | | | |
| | | | Total | 31 | 100 | 2,436 | 100 | 263 | 100 | 28,632 | 100 | | | | | | | |
| g. Developing or clarifying a personal code of values and ethics | pgvalues | 1 | Very little | 8 | 26 | 284 | 12 | 37 | 14 | 3,529 | 12 | | | | | | | |
| | | 2 | Some | 10 | 32 | 674 | 28 | 66 | 25 | 8,400 | 29 | | | | | | | |
| | | 3 | Quite a bit | 10 | 32 | 915 | 38 | 92 | 35 | 10,449 | 37 | **2.3** | 2.7 ** ▼ | -.49 | 2.7 * ▼ | -.46 | 2.7 * ▼ | -.44 |
| | | 4 | Very much | 3 | 10 | 564 | 23 | 66 | 25 | 6,247 | 22 | | | | | | | |
| | | | Total | 31 | 100 | 2,437 | 100 | 261 | 100 | 28,625 | 100 | | | | | | | |
| h. Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.) | pgdiverse | 1 | Very little | 8 | 27 | 258 | 11 | 32 | 12 | 2,890 | 10 | | | | | | | |
| | | 2 | Some | 9 | 30 | 642 | 26 | 65 | 25 | 8,211 | 29 | | | | | | | |
| | | 3 | Quite a bit | 10 | 33 | 889 | 36 | 88 | 34 | 10,402 | 36 | **2.3** | 2.8 ** ▼ | -.55 | 2.8 ** ▼ | -.54 | 2.8 ** ▼ | -.53 |
| | | 4 | Very much | 3 | 10 | 650 | 27 | 77 | 29 | 7,123 | 25 | | | | | | | |
| | | | Total | 30 | 100 | 2,439 | 100 | 262 | 100 | 28,626 | 100 | | | | | | | |
| i. Solving complex real-world problems | pgprobsolve | 1 | Very little | 8 | 26 | 290 | 12 | 34 | 13 | 3,293 | 12 | | | | | | | |
| | | 2 | Some | 15 | 48 | 764 | 31 | 68 | 26 | 9,695 | 34 | | | | | | | |

## First-Year Students[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your first-year students compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3 | Quite a bit | 6 | 19 | 880 | 36 | 98 | 37 | 10,124 | 35 | 2.1 | 2.7 *** | -.63 | 2.7 *** | -.68 | 2.6 ** | -.61 |
| | | 4 | Very much | 2 | 6 | 503 | 21 | 62 | 24 | 5,506 | 19 | | ▼ | | ▼ | | ▼ | |
| | | | Total | 31 | 100 | 2,437 | 100 | 262 | 100 | 28,618 | 100 | | | | | | | |
| j. Being an informed and active citizen | pgcitizen | 1 | Very little | 8 | 26 | 294 | 12 | 32 | 12 | 3,417 | 12 | | | | | | | |
| | | 2 | Some | 15 | 48 | 751 | 31 | 82 | 31 | 9,118 | 32 | | | | | | | |
| | | 3 | Quite a bit | 7 | 23 | 879 | 36 | 87 | 33 | 10,252 | 36 | 2.0 | 2.7 *** | -.67 | 2.7 *** | -.69 | 2.6 *** | -.66 |
| | | 4 | Very much | 1 | 3 | 510 | 21 | 63 | 24 | 5,793 | 20 | | ▼ | | ▼ | | ▼ | |
| | | | Total | 31 | 100 | 2,434 | 100 | 264 | 100 | 28,580 | 100 | | | | | | | |
| **18. How would you evaluate your entire educational experience at this institution?** | | | | | | | | | | | | | | | | | | |
| | evalexp | 1 | Poor | 1 | 3 | 44 | 2 | 5 | 2 | 505 | 2 | | | | | | | |
| | | 2 | Fair | 5 | 16 | 326 | 13 | 43 | 16 | 3,397 | 12 | | | | | | | |
| | | 3 | Good | 12 | 39 | 1,254 | 51 | 141 | 53 | 13,730 | 48 | 3.2 | 3.2 | .04 | 3.1 | .15 | 3.2 | -.05 |
| | | 4 | Excellent | 13 | 42 | 819 | 34 | 75 | 28 | 11,022 | 38 | | | | | | | |
| | | | Total | 31 | 100 | 2,443 | 100 | 264 | 100 | 28,654 | 100 | | | | | | | |
| **19. If you could start over again, would you go to the *same institution* you are now attending?** | | | | | | | | | | | | | | | | | | |
| | sameinst | 1 | Definitely no | 0 | 0 | 91 | 4 | 13 | 5 | 1,055 | 4 | | | | | | | |
| | | 2 | Probably no | 1 | 3 | 375 | 15 | 39 | 15 | 3,551 | 12 | | | | | | | |
| | | 3 | Probably yes | 17 | 55 | 1,091 | 45 | 119 | 46 | 12,403 | 43 | 3.4 | 3.1 | .32 | 3.1 | .37 | 3.2 | .22 |
| | | 4 | Definitely yes | 13 | 42 | 880 | 36 | 89 | 34 | 11,672 | 41 | | | | | | | |
| | | | Total | 31 | 100 | 2,437 | 100 | 260 | 100 | 28,681 | 100 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

**Seniors[a] in Natural-Math Science**

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1. During the current school year, about how often have you done the following?** | | | | | | | | | | | | | | | | | | |
| a. Asked questions or contributed to course discussions in other ways | askquest | 1 | Never | 2 | 4 | 72 | 3 | 5 | 2 | 826 | 3 | **2.8** | 3.0 | -.19 | 3.0 | -.24 | 3.0 | -.25 |
| | | 2 | Sometimes | 16 | 32 | 783 | 31 | 76 | 31 | 8,621 | 28 | | | | | | | |
| | | 3 | Often | 21 | 42 | 803 | 31 | 70 | 29 | 9,717 | 32 | | | | | | | |
| | | 4 | Very often | 11 | 22 | 903 | 35 | 93 | 38 | 11,468 | 37 | | | | | | | |
| | | | Total | 50 | 100 | 2,561 | 100 | 244 | 100 | 30,632 | 100 | | | | | | | |
| b. Prepared two or more drafts of a paper or assignment before turning it in | drafts | 1 | Never | 13 | 27 | 567 | 22 | 52 | 21 | 6,853 | 22 | **2.2** | 2.4 | -.14 | 2.5 | -.25 | 2.3 | -.12 |
| | | 2 | Sometimes | 19 | 39 | 919 | 36 | 78 | 32 | 11,128 | 36 | | | | | | | |
| | | 3 | Often | 10 | 20 | 642 | 25 | 57 | 23 | 7,795 | 26 | | | | | | | |
| | | 4 | Very often | 7 | 14 | 426 | 17 | 57 | 23 | 4,790 | 16 | | | | | | | |
| | | | Total | 49 | 100 | 2,554 | 100 | 244 | 100 | 30,566 | 100 | | | | | | | |
| c. Come to class without completing readings or assignments | unpreparedr *(Reverse-coded version of* unprepared *created by NSSE.)* | 1 | Very often | 1 | 2 | 155 | 6 | 10 | 4 | 1,759 | 6 | **3.0** | 3.0 | .06 | 3.0 | -.05 | 3.0 | .06 |
| | | 2 | Often | 9 | 18 | 395 | 15 | 39 | 16 | 4,616 | 15 | | | | | | | |
| | | 3 | Sometimes | 29 | 58 | 1,420 | 56 | 126 | 52 | 17,442 | 57 | | | | | | | |
| | | 4 | Never | 11 | 22 | 588 | 23 | 69 | 28 | 6,779 | 22 | | | | | | | |
| | | | Total | 50 | 100 | 2,558 | 100 | 244 | 100 | 30,596 | 100 | | | | | | | |
| d. Attended an art exhibit, play, or other arts performance (dance, music, etc.) | attendart | 1 | Never | 14 | 28 | 1,208 | 47 | 118 | 48 | 11,866 | 39 | **1.9** | 1.7 | .26 | 1.7 | .26 | 1.9 | .08 |
| | | 2 | Sometimes | 28 | 56 | 954 | 37 | 86 | 35 | 12,750 | 42 | | | | | | | |
| | | 3 | Often | 5 | 10 | 276 | 11 | 31 | 13 | 4,178 | 14 | | | | | | | |
| | | 4 | Very often | 3 | 6 | 118 | 5 | 10 | 4 | 1,827 | 6 | | | | | | | |
| | | | Total | 50 | 100 | 2,556 | 100 | 245 | 100 | 30,621 | 100 | | | | | | | |
| e. Asked another student to help you understand course material | CLaskhelp | 1 | Never | 6 | 12 | 187 | 7 | 24 | 10 | 2,298 | 8 | **2.7** | 2.7 | .02 | 2.6 | .06 | 2.7 | .01 |
| | | 2 | Sometimes | 13 | 26 | 999 | 39 | 99 | 40 | 11,548 | 38 | | | | | | | |
| | | 3 | Often | 22 | 44 | 854 | 33 | 67 | 27 | 10,570 | 35 | | | | | | | |
| | | 4 | Very often | 9 | 18 | 519 | 20 | 55 | 22 | 6,192 | 20 | | | | | | | |
| | | | Total | 50 | 100 | 2,559 | 100 | 245 | 100 | 30,608 | 100 | | | | | | | |
| f. Explained course material to one or more students | CLexplain | 1 | Never | 3 | 6 | 57 | 2 | 5 | 2 | 547 | 2 | **3.1** | 3.0 | .11 | 3.1 | -.02 | 3.0 | .08 |
| | | 2 | Sometimes | 8 | 16 | 672 | 26 | 53 | 22 | 7,914 | 26 | | | | | | | |
| | | 3 | Often | 21 | 42 | 1,064 | 42 | 101 | 41 | 12,619 | 41 | | | | | | | |
| | | 4 | Very often | 18 | 36 | 765 | 30 | 87 | 35 | 9,535 | 31 | | | | | | | |
| | | | Total | 50 | 100 | 2,558 | 100 | 246 | 100 | 30,615 | 100 | | | | | | | |
| g. Prepared for exams by discussing or working through course material with other | CLstudy | 1 | Never | 8 | 16 | 289 | 11 | 33 | 13 | 3,256 | 11 | **2.8** | 2.7 | .05 | 2.8 | .01 | 2.7 | .06 |
| | | 2 | Sometimes | 8 | 16 | 799 | 31 | 67 | 27 | 10,066 | 33 | | | | | | | |
| | | 3 | Often | 20 | 41 | 784 | 31 | 70 | 28 | 9,423 | 31 | | | | | | | |

**Seniors[a] in Natural-Math Science**

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| students | | 4 | Very often | 13 | 27 | 686 | 27 | 76 | 31 | 7,889 | 26 | | | | | | | |
| | | | Total | 49 | 100 | 2,558 | 100 | 246 | 100 | 30,634 | 100 | | | | | | | |
| h. Worked with other students on course projects or assignments | CLproject | 1 | Never | 1 | 2 | 105 | 4 | 10 | 4 | 1,310 | 4 | | | | | | | |
| | | 2 | Sometimes | 16 | 32 | 801 | 31 | 75 | 31 | 9,562 | 31 | | | | | | | |
| | | 3 | Often | 22 | 44 | 955 | 37 | 86 | 35 | 11,708 | 38 | **2.9** | 2.9 | -.02 | 2.9 | -.06 | 2.9 | -.01 |
| | | 4 | Very often | 11 | 22 | 693 | 27 | 74 | 30 | 8,042 | 26 | | | | | | | |
| | | | Total | 50 | 100 | 2,554 | 100 | 245 | 100 | 30,622 | 100 | | | | | | | |
| i. Given a course presentation | present | 1 | Never | 4 | 8 | 269 | 11 | 29 | 12 | 3,170 | 10 | | | | | | | |
| | | 2 | Sometimes | 24 | 48 | 954 | 37 | 88 | 36 | 11,438 | 37 | | | | | | | |
| | | 3 | Often | 14 | 28 | 822 | 32 | 79 | 32 | 9,995 | 33 | **2.5** | 2.6 | -.11 | 2.6 | -.08 | 2.6 | -.11 |
| | | 4 | Very often | 8 | 16 | 516 | 20 | 48 | 20 | 6,050 | 20 | | | | | | | |
| | | | Total | 50 | 100 | 2,561 | 100 | 244 | 100 | 30,653 | 100 | | | | | | | |
| **2. During the current school year, about how often have you done the following?** | | | | | | | | | | | | | | | | | | |
| a. Combined ideas from different courses when completing assignments | RIintegrate | 1 | Never | 1 | 2 | 94 | 4 | 9 | 4 | 902 | 3 | | | | | | | |
| | | 2 | Sometimes | 10 | 20 | 734 | 29 | 60 | 25 | 8,623 | 28 | | | | | | | |
| | | 3 | Often | 22 | 44 | 1,030 | 40 | 104 | 43 | 12,767 | 42 | **3.1** | 2.9 | .22 | 3.0 | .16 | 2.9 | .21 |
| | | 4 | Very often | 17 | 34 | 703 | 27 | 70 | 29 | 8,324 | 27 | | | | | | | |
| | | | Total | 50 | 100 | 2,561 | 100 | 243 | 100 | 30,616 | 100 | | | | | | | |
| b. Connected your learning to societal problems or issues | RIsocietal | 1 | Never | 7 | 14 | 263 | 10 | 21 | 9 | 2,767 | 9 | | | | | | | |
| | | 2 | Sometimes | 17 | 34 | 978 | 38 | 94 | 39 | 11,641 | 38 | | | | | | | |
| | | 3 | Often | 22 | 44 | 878 | 34 | 85 | 35 | 10,557 | 34 | **2.5** | 2.6 | -.14 | 2.6 | -.18 | 2.6 | -.18 |
| | | 4 | Very often | 4 | 8 | 436 | 17 | 43 | 18 | 5,641 | 18 | | | | | | | |
| | | | Total | 50 | 100 | 2,555 | 100 | 243 | 100 | 30,606 | 100 | | | | | | | |
| c. Included diverse perspectives (political, religious, racial/ethnic, gender, etc.) in course discussions or assignments | RIdiverse | 1 | Never | 14 | 28 | 501 | 20 | 47 | 19 | 5,224 | 17 | | | | | | | |
| | | 2 | Sometimes | 23 | 46 | 1,080 | 42 | 94 | 39 | 12,739 | 42 | | | | | | | |
| | | 3 | Often | 10 | 20 | 638 | 25 | 69 | 28 | 8,424 | 28 | **2.0** | 2.3 * ▽ | -.30 | 2.4 * ▼ | -.35 | 2.4 ** ▼ | -.37 |
| | | 4 | Very often | 3 | 6 | 334 | 13 | 33 | 14 | 4,213 | 14 | | | | | | | |
| | | | Total | 50 | 100 | 2,553 | 100 | 243 | 100 | 30,600 | 100 | | | | | | | |
| d. Examined the strengths and weaknesses of your own views on a topic or issue | RIownview | 1 | Never | 1 | 2 | 177 | 7 | 12 | 5 | 1,785 | 6 | | | | | | | |
| | | 2 | Sometimes | 16 | 32 | 846 | 33 | 84 | 35 | 9,865 | 32 | | | | | | | |
| | | 3 | Often | 24 | 48 | 1,070 | 42 | 91 | 38 | 13,086 | 43 | **2.8** | 2.7 | .13 | 2.8 | .05 | 2.8 | .08 |
| | | 4 | Very often | 9 | 18 | 463 | 18 | 54 | 22 | 5,847 | 19 | | | | | | | |
| | | | Total | 50 | 100 | 2,556 | 100 | 241 | 100 | 30,583 | 100 | | | | | | | |
| e. Tried to better | RIperspect | 1 | Never | 4 | 8 | 104 | 4 | 9 | 4 | 1,182 | 4 | | | | | | | |

## Seniors[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| understand someone else's views by imagining how an issue looks from their perspective | | 2 | Sometimes | 17 | 34 | 756 | 30 | 70 | 29 | 8,535 | 28 | | | | | | | |
| | | 3 | Often | 19 | 38 | 1,099 | 43 | 98 | 40 | 13,359 | 44 | 2.7 | 2.9 | -.19 | 2.9 | -.25 | 2.9 | -.23 |
| | | 4 | Very often | 10 | 20 | 596 | 23 | 67 | 27 | 7,512 | 25 | | | | | | | |
| | | | Total | 50 | 100 | 2,555 | 100 | 244 | 100 | 30,588 | 100 | | | | | | | |
| f. Learned something that changed the way you understand an issue or concept | RInewview | 1 | Never | 0 | 0 | 71 | 3 | 14 | 6 | 691 | 2 | | | | | | | |
| | | 2 | Sometimes | 18 | 36 | 760 | 30 | 72 | 30 | 8,366 | 27 | | | | | | | |
| | | 3 | Often | 19 | 38 | 1,095 | 43 | 86 | 35 | 13,713 | 45 | 2.9 | 2.9 | .01 | 2.9 | .02 | 2.9 | -.05 |
| | | 4 | Very often | 13 | 26 | 625 | 25 | 71 | 29 | 7,797 | 26 | | | | | | | |
| | | | Total | 50 | 100 | 2,551 | 100 | 243 | 100 | 30,567 | 100 | | | | | | | |
| g. Connected ideas from your courses to your prior experiences and knowledge | RIconnect | 1 | Never | 0 | 0 | 31 | 1 | 2 | 1 | 279 | 1 | | | | | | | |
| | | 2 | Sometimes | 4 | 8 | 489 | 19 | 45 | 19 | 4,926 | 16 | | | | | | | |
| | | 3 | Often | 29 | 58 | 1,146 | 45 | 106 | 44 | 14,445 | 47 | 3.3 | 3.1 | .17 | 3.2 | .13 | 3.2 | .11 |
| | | 4 | Very often | 17 | 34 | 883 | 35 | 90 | 37 | 10,888 | 36 | | | | | | | |
| | | | Total | 50 | 100 | 2,549 | 100 | 243 | 100 | 30,538 | 100 | | | | | | | |
| **3. During the current school year, about how often have you done the following?** | | | | | | | | | | | | | | | | | | |
| a. Talked about career plans with a faculty member | SFcareer | 1 | Never | 5 | 10 | 332 | 13 | 33 | 14 | 3,666 | 12 | | | | | | | |
| | | 2 | Sometimes | 18 | 36 | 1,018 | 40 | 90 | 37 | 11,725 | 38 | | | | | | | |
| | | 3 | Often | 11 | 22 | 701 | 28 | 65 | 27 | 8,500 | 28 | 2.8 | 2.5 | .24 | 2.6 | .18 | 2.6 | .17 |
| | | 4 | Very often | 16 | 32 | 497 | 20 | 55 | 23 | 6,689 | 22 | | | | | | | |
| | | | Total | 50 | 100 | 2,548 | 100 | 243 | 100 | 30,580 | 100 | | | | | | | |
| b. Worked with a faculty member on activities other than coursework (committees, student groups, etc.) | SFotherwork | 1 | Never | 8 | 16 | 831 | 33 | 75 | 31 | 9,517 | 31 | | | | | | | |
| | | 2 | Sometimes | 18 | 36 | 834 | 33 | 81 | 33 | 9,909 | 32 | | | | | | | |
| | | 3 | Often | 13 | 26 | 492 | 19 | 48 | 20 | 6,191 | 20 | 2.5 | 2.2 * ▲ | .35 | 2.2 * ▲ | .31 | 2.2 * ▲ | .31 |
| | | 4 | Very often | 11 | 22 | 394 | 15 | 40 | 16 | 4,945 | 16 | | | | | | | |
| | | | Total | 50 | 100 | 2,551 | 100 | 244 | 100 | 30,562 | 100 | | | | | | | |
| c. Discussed course topics, ideas, or concepts with a faculty member outside of class | SFdiscuss | 1 | Never | 7 | 14 | 472 | 18 | 44 | 18 | 5,152 | 17 | | | | | | | |
| | | 2 | Sometimes | 17 | 34 | 1,068 | 42 | 98 | 40 | 12,549 | 41 | | | | | | | |
| | | 3 | Often | 18 | 36 | 635 | 25 | 57 | 23 | 8,131 | 27 | 2.5 | 2.4 | .19 | 2.4 | .11 | 2.4 | .14 |
| | | 4 | Very often | 8 | 16 | 377 | 15 | 46 | 19 | 4,703 | 15 | | | | | | | |
| | | | Total | 50 | 100 | 2,552 | 100 | 245 | 100 | 30,535 | 100 | | | | | | | |
| d. Discussed your academic performance with a faculty member | SFperform | 1 | Never | 5 | 10 | 475 | 19 | 47 | 19 | 6,010 | 20 | | | | | | | |
| | | 2 | Sometimes | 24 | 48 | 1,161 | 46 | 107 | 44 | 13,499 | 44 | | | | | | | |
| | | 3 | Often | 13 | 26 | 597 | 23 | 53 | 22 | 7,208 | 24 | 2.5 | 2.3 | .20 | 2.3 | .15 | 2.3 | .21 |
| | | 4 | Very often | 8 | 16 | 315 | 12 | 38 | 16 | 3,824 | 13 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

### Seniors[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | 50 | 100 | 2,548 | 100 | 245 | 100 | 30,541 | 100 | | | | | | | |
| **4. During the current school year, how much has your coursework emphasized the following?** | | | | | | | | | | | | | | | | | | |
| a. Memorizing course material | memorize | 1 | Very little | 4 | 8 | 107 | 4 | 11 | 4 | 1,383 | 5 | | | | | | | |
| | | 2 | Some | 5 | 10 | 573 | 22 | 53 | 22 | 7,212 | 24 | | | | | | | |
| | | 3 | Quite a bit | 16 | 33 | 1,017 | 40 | 97 | 40 | 12,573 | 41 | 3.2 | 3.0 | .23 | 3.0 | .21 | 3.0 * △ | .28 |
| | | 4 | Very much | 24 | 49 | 861 | 34 | 84 | 34 | 9,442 | 31 | | | | | | | |
| | | | Total | 49 | 100 | 2,558 | 100 | 245 | 100 | 30,610 | 100 | | | | | | | |
| b. Applying facts, theories, or methods to practical problems or new situations | HOapply | 1 | Very little | 1 | 2 | 52 | 2 | 5 | 2 | 628 | 2 | | | | | | | |
| | | 2 | Some | 6 | 12 | 414 | 16 | 51 | 21 | 4,638 | 15 | | | | | | | |
| | | 3 | Quite a bit | 24 | 49 | 1,096 | 43 | 90 | 37 | 13,546 | 44 | 3.2 | 3.2 | .02 | 3.2 | .07 | 3.2 | .02 |
| | | 4 | Very much | 18 | 37 | 993 | 39 | 98 | 40 | 11,780 | 39 | | | | | | | |
| | | | Total | 49 | 100 | 2,555 | 100 | 244 | 100 | 30,592 | 100 | | | | | | | |
| c. Analyzing an idea, experience, or line of reasoning in depth by examining its parts | HOanalyze | 1 | Very little | 4 | 8 | 70 | 3 | 6 | 2 | 1,047 | 3 | | | | | | | |
| | | 2 | Some | 9 | 18 | 564 | 22 | 60 | 24 | 6,182 | 20 | | | | | | | |
| | | 3 | Quite a bit | 18 | 37 | 1,027 | 40 | 75 | 31 | 12,687 | 41 | 3.0 | 3.1 | -.07 | 3.1 | -.13 | 3.1 | -.07 |
| | | 4 | Very much | 18 | 37 | 897 | 35 | 104 | 42 | 10,656 | 35 | | | | | | | |
| | | | Total | 49 | 100 | 2,558 | 100 | 245 | 100 | 30,572 | 100 | | | | | | | |
| d. Evaluating a point of view, decision, or information source | HOevaluate | 1 | Very little | 7 | 14 | 198 | 8 | 21 | 9 | 2,612 | 9 | | | | | | | |
| | | 2 | Some | 12 | 24 | 735 | 29 | 70 | 29 | 8,923 | 29 | | | | | | | |
| | | 3 | Quite a bit | 18 | 37 | 998 | 39 | 88 | 36 | 11,860 | 39 | 2.7 | 2.8 | -.09 | 2.8 | -.10 | 2.8 | -.06 |
| | | 4 | Very much | 12 | 24 | 616 | 24 | 65 | 27 | 7,169 | 23 | | | | | | | |
| | | | Total | 49 | 100 | 2,547 | 100 | 244 | 100 | 30,564 | 100 | | | | | | | |
| e. Forming a new idea or understanding from various pieces of information | HOform | 1 | Very little | 3 | 6 | 125 | 5 | 7 | 3 | 1,562 | 5 | | | | | | | |
| | | 2 | Some | 13 | 26 | 665 | 26 | 65 | 27 | 7,868 | 26 | | | | | | | |
| | | 3 | Quite a bit | 21 | 42 | 1,067 | 42 | 94 | 39 | 12,919 | 42 | 2.9 | 2.9 | -.04 | 3.0 | -.13 | 2.9 | -.03 |
| | | 4 | Very much | 13 | 26 | 693 | 27 | 76 | 31 | 8,202 | 27 | | | | | | | |
| | | | Total | 50 | 100 | 2,550 | 100 | 242 | 100 | 30,551 | 100 | | | | | | | |
| **5. During the current school year, to what extent have your instructors done the following?** | | | | | | | | | | | | | | | | | | |
| a. Clearly explained course goals and requirements | ETgoals | 1 | Very little | 0 | 0 | 49 | 2 | 4 | 2 | 473 | 2 | | | | | | | |
| | | 2 | Some | 8 | 16 | 440 | 17 | 42 | 17 | 4,775 | 16 | | | | | | | |
| | | 3 | Quite a bit | 19 | 39 | 1,149 | 45 | 94 | 38 | 14,153 | 46 | 3.3 | 3.1 | .18 | 3.2 | .08 | 3.2 | .14 |
| | | 4 | Very much | 22 | 45 | 919 | 36 | 105 | 43 | 11,221 | 37 | | | | | | | |
| | | | Total | 49 | 100 | 2,557 | 100 | 245 | 100 | 30,622 | 100 | | | | | | | |
| b. Taught course sessions | ETorganize | 1 | Very little | 2 | 4 | 64 | 3 | 9 | 4 | 680 | 2 | | | | | | | |

**Seniors[a] in Natural-Math Science**

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| in an organized way | | 2 | Some | 5 | 10 | 504 | 20 | 53 | 22 | 5,272 | 17 | | | | | | | |
| | | 3 | Quite a bit | 19 | 38 | 1,156 | 45 | 96 | 39 | 14,497 | 47 | **3.3** | 3.1 * △ | .28 | 3.1 | .28 | 3.1 | .24 |
| | | 4 | Very much | 24 | 48 | 833 | 33 | 87 | 36 | 10,162 | 33 | | | | | | | |
| | | | Total | 50 | 100 | 2,557 | 100 | 245 | 100 | 30,611 | 100 | | | | | | | |
| c. Used examples or illustrations to explain difficult points | ETexample | 1 | Very little | 1 | 2 | 59 | 2 | 7 | 3 | 573 | 2 | | | | | | | |
| | | 2 | Some | 6 | 12 | 437 | 17 | 55 | 23 | 4,515 | 15 | | | | | | | |
| | | 3 | Quite a bit | 18 | 36 | 1,056 | 41 | 78 | 32 | 12,876 | 42 | **3.3** | 3.2 | .21 | 3.1 | .23 | 3.2 | .15 |
| | | 4 | Very much | 25 | 50 | 997 | 39 | 104 | 43 | 12,620 | 41 | | | | | | | |
| | | | Total | 50 | 100 | 2,549 | 100 | 244 | 100 | 30,584 | 100 | | | | | | | |
| d. Provided feedback on a draft or work in progress | ETdraftfb | 1 | Very little | 4 | 8 | 284 | 11 | 32 | 13 | 3,450 | 11 | | | | | | | |
| | | 2 | Some | 15 | 30 | 793 | 31 | 76 | 31 | 9,623 | 31 | | | | | | | |
| | | 3 | Quite a bit | 16 | 32 | 898 | 35 | 78 | 32 | 10,531 | 34 | **2.8** | 2.7 | .16 | 2.7 | .18 | 2.7 | .16 |
| | | 4 | Very much | 15 | 30 | 576 | 23 | 58 | 24 | 6,965 | 23 | | | | | | | |
| | | | Total | 50 | 100 | 2,551 | 100 | 244 | 100 | 30,569 | 100 | | | | | | | |
| e. Provided prompt and detailed feedback on tests or completed assignments | ETfeedback | 1 | Very little | 3 | 6 | 198 | 8 | 24 | 10 | 2,102 | 7 | | | | | | | |
| | | 2 | Some | 12 | 24 | 727 | 29 | 68 | 28 | 8,642 | 28 | | | | | | | |
| | | 3 | Quite a bit | 20 | 40 | 1,015 | 40 | 89 | 36 | 12,515 | 41 | **2.9** | 2.8 | .16 | 2.8 | .17 | 2.8 | .14 |
| | | 4 | Very much | 15 | 30 | 607 | 24 | 63 | 26 | 7,245 | 24 | | | | | | | |
| | | | Total | 50 | 100 | 2,547 | 100 | 244 | 100 | 30,504 | 100 | | | | | | | |
| **6. During the current school year, about how often have you done the following?** | | | | | | | | | | | | | | | | | | |
| a. Reached conclusions based on your own analysis of numerical information (numbers, graphs, statistics, etc.) | QRconclude | 1 | Never | 4 | 8 | 120 | 5 | 20 | 8 | 1,201 | 4 | | | | | | | |
| | | 2 | Sometimes | 14 | 28 | 650 | 26 | 62 | 25 | 7,386 | 24 | | | | | | | |
| | | 3 | Often | 19 | 38 | 982 | 39 | 80 | 33 | 12,181 | 40 | **2.8** | 3.0 | -.16 | 2.9 | -.11 | 3.0 | -.21 |
| | | 4 | Very often | 13 | 26 | 796 | 31 | 83 | 34 | 9,788 | 32 | | | | | | | |
| | | | Total | 50 | 100 | 2,548 | 100 | 245 | 100 | 30,556 | 100 | | | | | | | |
| b. Used numerical information to examine a real-world problem or issue (unemployment, climate change, public health, etc.) | QRproblem | 1 | Never | 7 | 14 | 385 | 15 | 40 | 16 | 4,670 | 15 | | | | | | | |
| | | 2 | Sometimes | 25 | 50 | 937 | 37 | 89 | 36 | 10,631 | 35 | | | | | | | |
| | | 3 | Often | 12 | 24 | 712 | 28 | 64 | 26 | 9,043 | 30 | **2.3** | 2.5 | -.20 | 2.5 | -.19 | 2.5 | -.21 |
| | | 4 | Very often | 6 | 12 | 519 | 20 | 52 | 21 | 6,206 | 20 | | | | | | | |
| | | | Total | 50 | 100 | 2,553 | 100 | 245 | 100 | 30,550 | 100 | | | | | | | |
| c. Evaluated what others have concluded from numerical information | QRevaluate | 1 | Never | 6 | 12 | 258 | 10 | 31 | 13 | 2,869 | 9 | | | | | | | |
| | | 2 | Sometimes | 19 | 38 | 919 | 36 | 91 | 37 | 10,251 | 34 | | | | | | | |
| | | 3 | Often | 21 | 42 | 859 | 34 | 74 | 30 | 10,905 | 36 | **2.5** | 2.6 | -.20 | 2.6 | -.12 | 2.7 | -.25 |
| | | 4 | Very often | 4 | 8 | 516 | 20 | 49 | 20 | 6,565 | 21 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

**Seniors[a] in Natural-Math Science**

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | 50 | 100 | 2,552 | 100 | 245 | 100 | 30,590 | 100 | | | | | | | |
| **7. During the current school year, about how many papers, reports, or other writing tasks of the following lengths have you been assigned? (Include those not yet completed.)** | | | | | | | | | | | | | | | | | | |
| a. Up to 5 pages | wrshortnum | 0 | None | 5 | 10 | 233 | 9 | 27 | 11 | 2,338 | 8 | | | | | | | |
| | *(Recoded version of* wrshort *created by NSSE. Values are estimated number of papers, reports, etc.)* | 1.5 | 1-2 | 12 | 24 | 545 | 22 | 51 | 21 | 6,340 | 21 | | | | | | | |
| | | 4 | 3-5 | 17 | 34 | 723 | 29 | 66 | 28 | 8,765 | 29 | | | | | | | |
| | | 8 | 6-10 | 10 | 20 | 499 | 20 | 50 | 21 | 6,283 | 21 | **5.8** | 6.7 | -.15 | 6.3 | -.08 | 6.9 | -.18 |
| | | 13 | 11-15 | 1 | 2 | 241 | 10 | 25 | 10 | 3,012 | 10 | | | | | | | |
| | | 18 | 16-20 | 1 | 2 | 112 | 4 | 8 | 3 | 1,554 | 5 | | | | | | | |
| | | 23 | More than 20 | 4 | 8 | 181 | 7 | 13 | 5 | 2,105 | 7 | | | | | | | |
| | | | Total | 50 | 100 | 2,534 | 100 | 240 | 100 | 30,397 | 100 | | | | | | | |
| b. Between 6 and 10 pages | wrmednum | 0 | None | 24 | 49 | 727 | 29 | 72 | 30 | 7,935 | 26 | | | | | | | |
| | *(Recoded version of* wrmed *created by NSSE. Values are estimated number of papers, reports, etc.)* | 1.5 | 1-2 | 19 | 39 | 885 | 35 | 86 | 36 | 11,252 | 37 | | | | | | | |
| | | 4 | 3-5 | 5 | 10 | 530 | 21 | 51 | 21 | 6,760 | 22 | | | | | | | |
| | | 8 | 6-10 | 1 | 2 | 225 | 9 | 17 | 7 | 2,676 | 9 | **1.2** | 3.1 *** ▼ | -.46 | 2.7 *** ▼ | -.46 | 3.0 *** ▼ | -.47 |
| | | 13 | 11-15 | 0 | 0 | 83 | 3 | 10 | 4 | 907 | 3 | | | | | | | |
| | | 18 | 16-20 | 0 | 0 | 23 | 1 | 0 | 0 | 342 | 1 | | | | | | | |
| | | 23 | More than 20 | 0 | 0 | 43 | 2 | 2 | 1 | 346 | 1 | | | | | | | |
| | | | Total | 49 | 100 | 2,516 | 100 | 238 | 100 | 30,218 | 100 | | | | | | | |
| c. 11 pages or more | wrlongnum | 0 | None | 37 | 77 | 1,310 | 52 | 127 | 54 | 14,993 | 50 | | | | | | | |
| | *(Recoded version of* wrlong *created by NSSE. Values are estimated number of papers, reports, etc.)* | 1.5 | 1-2 | 10 | 21 | 831 | 33 | 82 | 35 | 10,869 | 36 | | | | | | | |
| | | 4 | 3-5 | 0 | 0 | 198 | 8 | 16 | 7 | 2,616 | 9 | | | | | | | |
| | | 8 | 6-10 | 1 | 2 | 74 | 3 | 8 | 3 | 882 | 3 | **.5** | 1.7 *** ▼ | -.34 | 1.2 ** ▼ | -.34 | 1.6 *** ▼ | -.35 |
| | | 13 | 11-15 | 0 | 0 | 48 | 2 | 1 | 0 | 394 | 1 | | | | | | | |
| | | 18 | 16-20 | 0 | 0 | 14 | 1 | 0 | 0 | 176 | 1 | | | | | | | |
| | | 23 | More than 20 | 0 | 0 | 32 | 1 | 1 | 0 | 224 | 1 | | | | | | | |
| | | | Total | 48 | 100 | 2,507 | 100 | 235 | 100 | 30,154 | 100 | | | | | | | |
| Estimated number of assigned pages of student writing. | wrpages | | *(Continuous variable, recoded and summed by NSSE from* wrshort, wrmed, *and* wrlong. *Values are estimated pages of assigned writing.)* | | | | | | | | | **33.7** | 69.0 *** ▼ | -.39 | 57.4 *** ▼ | -.39 | 67.8 *** ▼ | -.42 |
| **8. During the current school year, about how often have you had discussions with people from the following groups?** | | | | | | | | | | | | | | | | | | |
| a. People of a race or ethnicity other than your own | DDrace | 1 | Never | 2 | 4 | 122 | 5 | 12 | 5 | 1,458 | 5 | | | | | | | |
| | | 2 | Sometimes | 22 | 44 | 552 | 22 | 44 | 18 | 7,469 | 24 | | | | | | | |
| | | 3 | Often | 14 | 28 | 738 | 29 | 68 | 28 | 8,999 | 29 | **2.7** | 3.1 ** ▼ | -.46 | 3.2 *** ▼ | -.55 | 3.1 ** ▼ | -.39 |
| | | 4 | Very often | 12 | 24 | 1,149 | 45 | 120 | 49 | 12,703 | 41 | | | | | | | |

## Seniors[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Total | 50 | 100 | 2,561 | 100 | 244 | 100 | 30,629 | 100 | | | | | | | |
| b. People from an economic background other than your own | DDeconomic | 1 | Never | 2 | 4 | 108 | 4 | 10 | 4 | 1,183 | 4 | | | | | | | |
| | | 2 | Sometimes | 14 | 28 | 548 | 21 | 49 | 20 | 6,842 | 22 | | | | | | | |
| | | 3 | Often | 21 | 42 | 835 | 33 | 70 | 29 | 10,727 | 35 | **2.9** | 3.1 | -.25 | 3.2 * ▼ | -.32 | 3.1 | -.21 |
| | | 4 | Very often | 13 | 26 | 1,065 | 42 | 113 | 47 | 11,818 | 39 | | | | | | | |
| | | | Total | 50 | 100 | 2,556 | 100 | 242 | 100 | 30,570 | 100 | | | | | | | |
| c. People with religious beliefs other than your own | DDreligion | 1 | Never | 2 | 4 | 133 | 5 | 10 | 4 | 1,720 | 6 | | | | | | | |
| | | 2 | Sometimes | 16 | 33 | 615 | 24 | 53 | 22 | 7,433 | 24 | | | | | | | |
| | | 3 | Often | 20 | 41 | 765 | 30 | 67 | 27 | 9,553 | 31 | **2.8** | 3.1 | -.27 | 3.2 * ▼ | -.39 | 3.0 | -.23 |
| | | 4 | Very often | 11 | 22 | 1,048 | 41 | 114 | 47 | 11,884 | 39 | | | | | | | |
| | | | Total | 49 | 100 | 2,561 | 100 | 244 | 100 | 30,590 | 100 | | | | | | | |
| d. People with political views other than your own | DDpolitical | 1 | Never | 3 | 6 | 135 | 5 | 12 | 5 | 1,675 | 5 | | | | | | | |
| | | 2 | Sometimes | 12 | 24 | 681 | 27 | 46 | 19 | 8,590 | 28 | | | | | | | |
| | | 3 | Often | 17 | 34 | 776 | 30 | 76 | 31 | 9,422 | 31 | **3.0** | 3.0 | -.01 | 3.2 | -.18 | 3.0 | .04 |
| | | 4 | Very often | 18 | 36 | 965 | 38 | 109 | 45 | 10,884 | 36 | | | | | | | |
| | | | Total | 50 | 100 | 2,557 | 100 | 243 | 100 | 30,571 | 100 | | | | | | | |
| **9. During the current school year, about how often have you done the following?** | | | | | | | | | | | | | | | | | | |
| a. Identified key information from reading assignments | LSreading | 1 | Never | 1 | 2 | 44 | 2 | 7 | 3 | 643 | 2 | | | | | | | |
| | | 2 | Sometimes | 14 | 28 | 465 | 18 | 38 | 16 | 5,311 | 17 | | | | | | | |
| | | 3 | Often | 21 | 42 | 1,060 | 41 | 81 | 33 | 13,338 | 44 | **3.0** | 3.2 | -.27 | 3.3 * ▼ | -.37 | 3.2 | -.25 |
| | | 4 | Very often | 14 | 28 | 991 | 39 | 117 | 48 | 11,313 | 37 | | | | | | | |
| | | | Total | 50 | 100 | 2,560 | 100 | 243 | 100 | 30,605 | 100 | | | | | | | |
| b. Reviewed your notes after class | LSnotes | 1 | Never | 1 | 2 | 128 | 5 | 4 | 2 | 1,957 | 6 | | | | | | | |
| | | 2 | Sometimes | 14 | 28 | 720 | 28 | 55 | 23 | 9,119 | 30 | | | | | | | |
| | | 3 | Often | 15 | 30 | 833 | 33 | 79 | 33 | 9,790 | 32 | **3.1** | 3.0 | .13 | 3.2 | -.11 | 2.9 | .20 |
| | | 4 | Very often | 20 | 40 | 881 | 34 | 105 | 43 | 9,731 | 32 | | | | | | | |
| | | | Total | 50 | 100 | 2,562 | 100 | 243 | 100 | 30,597 | 100 | | | | | | | |
| c. Summarized what you learned in class or from course materials | LSsummary | 1 | Never | 2 | 4 | 161 | 6 | 12 | 5 | 2,031 | 7 | | | | | | | |
| | | 2 | Sometimes | 14 | 28 | 755 | 30 | 56 | 23 | 8,843 | 29 | | | | | | | |
| | | 3 | Often | 16 | 32 | 902 | 35 | 79 | 33 | 11,059 | 36 | **3.0** | 2.9 | .15 | 3.1 | -.07 | 2.9 | .16 |
| | | 4 | Very often | 18 | 36 | 736 | 29 | 95 | 39 | 8,594 | 28 | | | | | | | |
| | | | Total | 50 | 100 | 2,554 | 100 | 242 | 100 | 30,527 | 100 | | | | | | | |
| **10. During the current school year, to what extent have your courses challenged you to do your best work?** | | | | | | | | | | | | | | | | | | |
| | challenge | 1 | Not at all | 2 | 4 | 21 | 1 | 3 | 1 | 241 | 1 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

### Seniors[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2 | | 1 | 2 | 31 | 1 | 1 | 0 | 377 | 1 | | | | | | | |
| | | 3 | | 1 | 2 | 99 | 4 | 8 | 3 | 1,065 | 3 | | | | | | | |
| | | 4 | | 3 | 6 | 232 | 9 | 14 | 6 | 2,724 | 9 | **5.6** | 5.7 | -.07 | 5.9 | -.22 | 5.6 | -.03 |
| | | 5 | | 16 | 32 | 657 | 26 | 49 | 20 | 8,629 | 28 | | | | | | | |
| | | 6 | | 9 | 18 | 722 | 28 | 82 | 34 | 9,074 | 30 | | | | | | | |
| | | 7 | Very much | 18 | 36 | 795 | 31 | 86 | 35 | 8,450 | 28 | | | | | | | |
| | | | Total | 50 | 100 | 2,557 | 100 | 243 | 100 | 30,560 | 100 | | | | | | | |
| **11. Which of the following have you done or do you plan to do before you graduate?[o]** | | | | | | | | | | | | | | | | | | |
| a. Participate in an internship, co-op, field experience, student teaching, or clinical placement | intern | | Have not decided | 8 | 16 | 266 | 10 | 26 | 11 | 2,566 | 8 | | | | | | | |
| | *(Means indicate the percentage who responded "Done or in progress.")* | | Do not plan to do | 10 | 20 | 392 | 15 | 39 | 16 | 4,771 | 16 | | | | | | | |
| | | | Plan to do | 11 | 22 | 740 | 29 | 72 | 29 | 7,516 | 25 | **42%** | 45% | -.07 | 44% | -.04 | 51% | -.19 |
| | | | Done or in progress | 21 | 42 | 1,161 | 45 | 108 | 44 | 15,768 | 51 | | | | | | | |
| | | | Total | 50 | 100 | 2,559 | 100 | 245 | 100 | 30,621 | 100 | | | | | | | |
| b. Hold a formal leadership role in a student organization or group | leader | | Have not decided | 4 | 8 | 295 | 12 | 30 | 12 | 2,502 | 8 | | | | | | | |
| | *(Means indicate the percentage who responded "Done or in progress.")* | | Do not plan to do | 16 | 32 | 1,053 | 41 | 105 | 43 | 11,327 | 37 | | | | | | | |
| | | | Plan to do | 2 | 4 | 213 | 8 | 19 | 8 | 2,179 | 7 | **56%** | 39% * ▲ | .34 | 37% * ▲ | .38 | 48% | .17 |
| | | | Done or in progress | 28 | 56 | 1,001 | 39 | 91 | 37 | 14,591 | 48 | | | | | | | |
| | | | Total | 50 | 100 | 2,562 | 100 | 245 | 100 | 30,599 | 100 | | | | | | | |
| c. Participate in a learning community or some other formal program where groups of students take two or more classes together | learncom | | Have not decided | 10 | 20 | 355 | 14 | 34 | 14 | 3,546 | 12 | | | | | | | |
| | *(Means indicate the percentage who responded "Done or in progress.")* | | Do not plan to do | 24 | 48 | 1,299 | 51 | 128 | 52 | 16,832 | 55 | | | | | | | |
| | | | Plan to do | 5 | 10 | 252 | 10 | 20 | 8 | 2,458 | 8 | **22%** | 25% | -.08 | 25% | -.08 | 25% | -.08 |
| | | | Done or in progress | 11 | 22 | 648 | 25 | 62 | 25 | 7,729 | 25 | | | | | | | |
| | | | Total | 50 | 100 | 2,554 | 100 | 244 | 100 | 30,565 | 100 | | | | | | | |
| d. Participate in a study abroad program | abroad | | Have not decided | 7 | 14 | 345 | 13 | 25 | 10 | 3,076 | 10 | | | | | | | |
| | *(Means indicate the percentage who responded "Done or in progress.")* | | Do not plan to do | 37 | 74 | 1,691 | 66 | 163 | 67 | 19,766 | 65 | | | | | | | |
| | | | Plan to do | 1 | 2 | 219 | 9 | 29 | 12 | 2,143 | 7 | **10%** | 12% | -.06 | 11% | -.02 | 18% | -.24 |
| | | | Done or in progress | 5 | 10 | 304 | 12 | 26 | 11 | 5,609 | 18 | | | | | | | |
| | | | Total | 50 | 100 | 2,559 | 100 | 243 | 100 | 30,594 | 100 | | | | | | | |
| e. Work with a faculty member on a research project | research | | Have not decided | 6 | 12 | 314 | 12 | 29 | 12 | 2,975 | 10 | | | | | | | |
| | *(Means indicate the percentage who responded "Done or in progress.")* | | Do not plan to do | 8 | 16 | 683 | 27 | 79 | 32 | 7,990 | 26 | | | | | | | |
| | | | Plan to do | 6 | 12 | 425 | 17 | 39 | 16 | 4,267 | 14 | **60%** | 44% * ▲ | .31 | 40% ** ▲ | .41 | 50% | .20 |
| | | | Done or in progress | 30 | 60 | 1,137 | 44 | 97 | 40 | 15,348 | 50 | | | | | | | |
| | | | Total | 50 | 100 | 2,559 | 100 | 244 | 100 | 30,580 | 100 | | | | | | | |

## Seniors[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| f. Complete a culminating senior experience (capstone course, senior project or thesis, comprehensive exam, portfolio, etc.) | capstone (*Means indicate the percentage who responded "Done or in progress."*) | | Have not decided | 10 | 20 | 303 | 12 | 26 | 11 | 2,531 | 8 | | | | | | | |
| | | | Do not plan to do | 19 | 38 | 716 | 28 | 51 | 21 | 7,283 | 24 | | | | | | | |
| | | | Plan to do | 6 | 12 | 578 | 23 | 63 | 26 | 6,066 | 20 | **30%** | 38% | -.16 | 43% | -.27 | 48% * ▼ | -.37 |
| | | | Done or in progress | 15 | 30 | 965 | 38 | 105 | 43 | 14,720 | 48 | | | | | | | |
| | | | Total | 50 | 100 | 2,562 | 100 | 245 | 100 | 30,600 | 100 | | | | | | | |
| **12. About how many of your courses at this institution have included a community-based project (service-learning)?** | | | | | | | | | | | | | | | | | | |
| | servcourse | 1 | None | 23 | 47 | 1,149 | 45 | 122 | 50 | 14,814 | 48 | | | | | | | |
| | | 2 | Some | 20 | 41 | 1,233 | 48 | 103 | 42 | 14,085 | 46 | | | | | | | |
| | | 3 | Most | 5 | 10 | 137 | 5 | 16 | 7 | 1,361 | 4 | **1.7** | 1.6 | .06 | 1.6 | .11 | 1.6 | .15 |
| | | 4 | All | 1 | 2 | 37 | 1 | 4 | 2 | 309 | 1 | | | | | | | |
| | | | Total | 49 | 100 | 2,556 | 100 | 245 | 100 | 30,569 | 100 | | | | | | | |
| **13. Indicate the quality of your interactions with the following people at your institution.** | | | | | | | | | | | | | | | | | | |
| a. Students | QIstudent | 1 | Poor | 1 | 2 | 34 | 1 | 4 | 2 | 373 | 1 | | | | | | | |
| | | 2 | | 1 | 2 | 41 | 2 | 1 | 0 | 493 | 2 | | | | | | | |
| | | 3 | | 2 | 4 | 127 | 5 | 16 | 7 | 1,254 | 4 | | | | | | | |
| | | 4 | | 4 | 8 | 254 | 10 | 21 | 9 | 3,185 | 10 | | | | | | | |
| | | 5 | | 8 | 16 | 637 | 25 | 53 | 22 | 7,904 | 26 | **5.8** | 5.6 | .15 | 5.6 | .12 | 5.6 | .15 |
| | | 6 | | 14 | 28 | 730 | 28 | 81 | 33 | 8,898 | 29 | | | | | | | |
| | | 7 | Excellent | 19 | 38 | 733 | 29 | 68 | 28 | 8,440 | 28 | | | | | | | |
| | | — | Not applicable | 1 | 2 | 9 | 0 | 0 | 0 | 103 | 0 | | | | | | | |
| | | | Total | 50 | 100 | 2,565 | 100 | 244 | 100 | 30,650 | 100 | | | | | | | |
| b. Academic advisors | QIadvisor | 1 | Poor | 2 | 4 | 147 | 6 | 13 | 5 | 1,571 | 5 | | | | | | | |
| | | 2 | | 4 | 8 | 139 | 5 | 11 | 4 | 1,639 | 5 | | | | | | | |
| | | 3 | | 2 | 4 | 239 | 9 | 20 | 8 | 2,421 | 8 | | | | | | | |
| | | 4 | | 7 | 14 | 343 | 13 | 32 | 13 | 3,856 | 13 | | | | | | | |
| | | 5 | | 4 | 8 | 485 | 19 | 53 | 22 | 5,821 | 19 | **5.3** | 5.0 | .19 | 5.1 | .13 | 5.1 | .12 |
| | | 6 | | 14 | 28 | 509 | 20 | 47 | 19 | 6,006 | 20 | | | | | | | |
| | | 7 | Excellent | 17 | 34 | 666 | 26 | 68 | 28 | 8,991 | 29 | | | | | | | |
| | | — | Not applicable | 0 | 0 | 33 | 1 | 1 | 0 | 316 | 1 | | | | | | | |
| | | | Total | 50 | 100 | 2,561 | 100 | 245 | 100 | 30,621 | 100 | | | | | | | |
| c. Faculty | QIfaculty | 1 | Poor | 0 | 0 | 49 | 2 | 6 | 2 | 436 | 1 | | | | | | | |
| | | 2 | | 3 | 6 | 69 | 3 | 10 | 4 | 623 | 2 | | | | | | | |
| | | 3 | | 3 | 6 | 139 | 5 | 19 | 8 | 1,364 | 4 | | | | | | | |
| | | 4 | | 3 | 6 | 316 | 12 | 31 | 13 | 3,384 | 11 | | | | | | | |
| | | 5 | | 12 | 24 | 572 | 22 | 51 | 21 | 7,248 | 24 | **5.5** | 5.4 | .07 | 5.2 | .18 | 5.5 | .00 |

**Seniors[a] in Natural-Math Science**

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 6 | | 14 | 28 | 737 | 29 | 69 | 28 | 9,299 | 30 | | | | | | | |
| | | 7 | Excellent | 15 | 30 | 668 | 26 | 57 | 23 | 8,088 | 26 | | | | | | | |
| | | — | Not applicable | 0 | 0 | 8 | 0 | 0 | 0 | 101 | 0 | | | | | | | |
| | | | Total | 50 | 100 | 2,558 | 100 | 243 | 100 | 30,543 | 100 | | | | | | | |
| d. Student services staff (career services, student activities, housing, etc.) | QIstaff | 1 | Poor | 3 | 6 | 160 | 6 | 19 | 8 | 1,487 | 5 | | | | | | | |
| | | 2 | | 1 | 2 | 139 | 5 | 20 | 8 | 1,515 | 5 | | | | | | | |
| | | 3 | | 5 | 10 | 212 | 8 | 17 | 7 | 2,501 | 8 | | | | | | | |
| | | 4 | | 5 | 10 | 389 | 15 | 44 | 18 | 4,722 | 15 | | | | | | | |
| | | 5 | | 12 | 24 | 495 | 19 | 43 | 18 | 6,496 | 21 | **4.7** | 4.7 | .03 | 4.5 | .12 | 4.8 | -.04 |
| | | 6 | | 9 | 18 | 401 | 16 | 38 | 16 | 5,504 | 18 | | | | | | | |
| | | 7 | Excellent | 5 | 10 | 372 | 15 | 35 | 14 | 4,668 | 15 | | | | | | | |
| | | — | Not applicable | 10 | 20 | 390 | 15 | 29 | 12 | 3,683 | 12 | | | | | | | |
| | | | Total | 50 | 100 | 2,558 | 100 | 245 | 100 | 30,576 | 100 | | | | | | | |
| e. Other administrative staff and offices (registrar, financial aid, etc.) | QIadmin | 1 | Poor | 2 | 4 | 178 | 7 | 22 | 9 | 1,702 | 6 | | | | | | | |
| | | 2 | | 5 | 10 | 162 | 6 | 21 | 9 | 1,743 | 6 | | | | | | | |
| | | 3 | | 7 | 14 | 250 | 10 | 22 | 9 | 2,756 | 9 | | | | | | | |
| | | 4 | | 5 | 10 | 423 | 17 | 37 | 15 | 5,216 | 17 | | | | | | | |
| | | 5 | | 8 | 16 | 588 | 23 | 53 | 22 | 7,185 | 23 | **4.9** | 4.6 | .12 | 4.6 | .17 | 4.7 | .07 |
| | | 6 | | 9 | 18 | 450 | 18 | 46 | 19 | 5,845 | 19 | | | | | | | |
| | | 7 | Excellent | 13 | 26 | 399 | 16 | 39 | 16 | 4,730 | 15 | | | | | | | |
| | | — | Not applicable | 1 | 2 | 108 | 4 | 3 | 1 | 1,429 | 5 | | | | | | | |
| | | | Total | 50 | 100 | 2,558 | 100 | 243 | 100 | 30,606 | 100 | | | | | | | |
| **14. How much does your institution emphasize the following?** | | | | | | | | | | | | | | | | | | |
| a. Spending significant amounts of time studying and on academic work | empstudy | 1 | Very little | 2 | 4 | 45 | 2 | 3 | 1 | 436 | 1 | | | | | | | |
| | | 2 | Some | 6 | 12 | 361 | 14 | 36 | 15 | 3,984 | 13 | | | | | | | |
| | | 3 | Quite a bit | 22 | 44 | 1,127 | 44 | 103 | 43 | 13,267 | 43 | **3.2** | 3.2 | -.03 | 3.2 | -.05 | 3.3 | -.09 |
| | | 4 | Very much | 20 | 40 | 1,013 | 40 | 100 | 41 | 12,918 | 42 | | | | | | | |
| | | | Total | 50 | 100 | 2,546 | 100 | 242 | 100 | 30,605 | 100 | | | | | | | |
| b. Providing support to help students succeed academically | SEacademic | 1 | Very little | 1 | 2 | 118 | 5 | 7 | 3 | 1,227 | 4 | | | | | | | |
| | | 2 | Some | 14 | 28 | 608 | 24 | 65 | 27 | 6,692 | 22 | | | | | | | |
| | | 3 | Quite a bit | 17 | 34 | 1,073 | 42 | 94 | 39 | 13,396 | 44 | **3.0** | 3.0 | .09 | 3.0 | .06 | 3.0 | .05 |
| | | 4 | Very much | 18 | 36 | 747 | 29 | 77 | 32 | 9,206 | 30 | | | | | | | |
| | | | Total | 50 | 100 | 2,546 | 100 | 243 | 100 | 30,521 | 100 | | | | | | | |
| c. Using learning support services (tutoring services, writing center, etc.) | SElearnsup | 1 | Very little | 7 | 14 | 204 | 8 | 9 | 4 | 1,990 | 7 | | | | | | | |
| | | 2 | Some | 18 | 36 | 589 | 23 | 60 | 25 | 7,036 | 23 | | | | | | | |
| | | 3 | Quite a bit | 12 | 24 | 946 | 37 | 87 | 36 | 12,043 | 39 | **2.6** | 2.9 * | -.33 | 3.0 * | -.46 | 3.0 * | -.37 |

**Seniors[a] in Natural-Math Science**

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 4 | Very much | 13 | 26 | 813 | 32 | 85 | 35 | 9,497 | 31 | | ▼ | | ▼ | | ▼ | |
| | | | Total | 50 | 100 | 2,552 | 100 | 241 | 100 | 30,566 | 100 | | | | | | | |
| d. Encouraging contact among students from different backgrounds (social, racial/ethnic, religious, etc.) | SEdiverse | 1 | Very little | 11 | 22 | 438 | 17 | 44 | 18 | 4,753 | 16 | | | | | | | |
| | | 2 | Some | 19 | 38 | 798 | 31 | 81 | 33 | 9,904 | 32 | | | | | | | |
| | | 3 | Quite a bit | 7 | 14 | 771 | 30 | 63 | 26 | 9,469 | 31 | **2.4** | 2.6 | -.12 | 2.5 | -.09 | 2.6 | -.14 |
| | | 4 | Very much | 13 | 26 | 545 | 21 | 55 | 23 | 6,435 | 21 | | | | | | | |
| | | | Total | 50 | 100 | 2,552 | 100 | 243 | 100 | 30,561 | 100 | | | | | | | |
| e. Providing opportunities to be involved socially | SEsocial | 1 | Very little | 2 | 4 | 227 | 9 | 16 | 7 | 2,078 | 7 | | | | | | | |
| | | 2 | Some | 16 | 32 | 738 | 29 | 73 | 30 | 8,006 | 26 | | | | | | | |
| | | 3 | Quite a bit | 22 | 44 | 934 | 37 | 77 | 32 | 12,341 | 40 | **2.8** | 2.8 | .01 | 2.9 | -.08 | 2.9 | -.08 |
| | | 4 | Very much | 10 | 20 | 649 | 25 | 75 | 31 | 8,131 | 27 | | | | | | | |
| | | | Total | 50 | 100 | 2,548 | 100 | 241 | 100 | 30,556 | 100 | | | | | | | |
| f. Providing support for your overall well-being (recreation, health care, counseling, etc.) | SEwellness | 1 | Very little | 4 | 8 | 275 | 11 | 25 | 10 | 2,568 | 8 | | | | | | | |
| | | 2 | Some | 12 | 24 | 716 | 28 | 67 | 28 | 8,154 | 27 | | | | | | | |
| | | 3 | Quite a bit | 19 | 39 | 914 | 36 | 74 | 31 | 11,817 | 39 | **2.9** | 2.8 | .12 | 2.8 | .05 | 2.8 | .05 |
| | | 4 | Very much | 14 | 29 | 650 | 25 | 76 | 31 | 8,029 | 26 | | | | | | | |
| | | | Total | 49 | 100 | 2,555 | 100 | 242 | 100 | 30,568 | 100 | | | | | | | |
| g. Helping you manage your non-academic responsibilities (work, family, etc.) | SEnonacad | 1 | Very little | 17 | 34 | 899 | 35 | 83 | 34 | 9,990 | 33 | | | | | | | |
| | | 2 | Some | 21 | 42 | 886 | 35 | 88 | 36 | 11,494 | 38 | | | | | | | |
| | | 3 | Quite a bit | 7 | 14 | 505 | 20 | 46 | 19 | 6,204 | 20 | **2.0** | 2.1 | -.05 | 2.1 | -.06 | 2.1 | -.07 |
| | | 4 | Very much | 5 | 10 | 265 | 10 | 26 | 11 | 2,857 | 9 | | | | | | | |
| | | | Total | 50 | 100 | 2,555 | 100 | 243 | 100 | 30,545 | 100 | | | | | | | |
| h. Attending campus activities and events (performing arts, athletic events, etc.) | SEactivities | 1 | Very little | 7 | 14 | 375 | 15 | 29 | 12 | 3,498 | 11 | | | | | | | |
| | | 2 | Some | 21 | 42 | 826 | 32 | 72 | 30 | 9,396 | 31 | | | | | | | |
| | | 3 | Quite a bit | 14 | 28 | 847 | 33 | 77 | 32 | 11,295 | 37 | **2.5** | 2.6 | -.12 | 2.7 | -.26 | 2.7 | -.23 |
| | | 4 | Very much | 8 | 16 | 501 | 20 | 62 | 26 | 6,361 | 21 | | | | | | | |
| | | | Total | 50 | 100 | 2,549 | 100 | 240 | 100 | 30,550 | 100 | | | | | | | |
| i. Attending events that address important social, economic, or political issues | SEevents | 1 | Very little | 11 | 22 | 550 | 22 | 49 | 20 | 5,254 | 17 | | | | | | | |
| | | 2 | Some | 24 | 48 | 962 | 38 | 100 | 42 | 11,556 | 38 | | | | | | | |
| | | 3 | Quite a bit | 12 | 24 | 706 | 28 | 53 | 22 | 9,332 | 31 | **2.1** | 2.3 | -.19 | 2.3 | -.20 | 2.4 * | -.30 |
| | | 4 | Very much | 3 | 6 | 328 | 13 | 38 | 16 | 4,371 | 14 | | | | | | ▽ | |
| | | | Total | 50 | 100 | 2,546 | 100 | 240 | 100 | 30,513 | 100 | | | | | | | |
| **15. About how many hours do you spend in a typical 7-day week doing the following?** | | | | | | | | | | | | | | | | | | |
| a. Preparing for class (studying, reading, | tmprephrs (Recoded version | 0 | 0 hrs | 1 | 2 | 6 | 0 | 0 | 0 | 92 | 0 | | | | | | | |
| | | 3 | 1-5 hrs | 1 | 2 | 227 | 9 | 21 | 9 | 2,475 | 8 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

### Seniors[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k] (Your seniors compared with): Tennessee Tech Mean | Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| writing, doing homework or lab work, analyzing data, rehearsing, and other academic activities) | *of* tmprep *created by NSSE. Values are estimated number of hours per week.)* | 8 | 6-10 hrs | 9 | 18 | 510 | 20 | 65 | 27 | 5,406 | 18 | | | | | | | |
| | | 13 | 11-15 hrs | 10 | 20 | 511 | 20 | 48 | 20 | 5,927 | 19 | | | | | | | |
| | | 18 | 16-20 hrs | 13 | 26 | 502 | 20 | 38 | 16 | 5,999 | 20 | **18.0** | 16.8 | .14 | 15.7 | .27 | 17.4 | .07 |
| | | 23 | 21-25 hrs | 4 | 8 | 305 | 12 | 33 | 14 | 4,203 | 14 | | | | | | | |
| | | 28 | 26-30 hrs | 5 | 10 | 196 | 8 | 20 | 8 | 2,616 | 9 | | | | | | | |
| | | 33 | More than 30 hrs | 7 | 14 | 301 | 12 | 19 | 8 | 3,890 | 13 | | | | | | | |
| | | | Total | 50 | 100 | 2,558 | 100 | 244 | 100 | 30,608 | 100 | | | | | | | |
| b. Participating in co-curricular activities (organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc.) | tmcocurrhrs | 0 | 0 hrs | 11 | 22 | 971 | 38 | 96 | 40 | 9,273 | 30 | | | | | | | |
| | *(Recoded version of* tmcocurr *created by NSSE. Values are estimated number of hours per week.)* | 3 | 1-5 hrs | 17 | 34 | 799 | 31 | 79 | 33 | 10,213 | 33 | | | | | | | |
| | | 8 | 6-10 hrs | 11 | 22 | 337 | 13 | 36 | 15 | 4,963 | 16 | | | | | | | |
| | | 13 | 11-15 hrs | 2 | 4 | 199 | 8 | 11 | 5 | 2,709 | 9 | | | | | | | |
| | | 18 | 16-20 hrs | 3 | 6 | 124 | 5 | 8 | 3 | 1,688 | 6 | **7.7** | 5.2 | .36 | 4.8 * ▲ | .41 | 5.9 | .25 |
| | | 23 | 21-25 hrs | 2 | 4 | 60 | 2 | 7 | 3 | 866 | 3 | | | | | | | |
| | | 28 | 26-30 hrs | 2 | 4 | 32 | 1 | 3 | 1 | 352 | 1 | | | | | | | |
| | | 33 | More than 30 hrs | 2 | 4 | 33 | 1 | 3 | 1 | 479 | 2 | | | | | | | |
| | | | Total | 50 | 100 | 2,555 | 100 | 243 | 100 | 30,543 | 100 | | | | | | | |
| c. Working for pay **on campus** | tmworkonhrs | 0 | 0 hrs | 30 | 60 | 1,551 | 61 | 152 | 62 | 17,036 | 56 | | | | | | | |
| | *(Recoded version of* tmworkon *created by NSSE. Values are estimated number of hours per week.)* | 3 | 1-5 hrs | 4 | 8 | 153 | 6 | 11 | 5 | 2,732 | 9 | | | | | | | |
| | | 8 | 6-10 hrs | 11 | 22 | 280 | 11 | 24 | 10 | 4,445 | 15 | | | | | | | |
| | | 13 | 11-15 hrs | 1 | 2 | 218 | 9 | 21 | 9 | 2,851 | 9 | | | | | | | |
| | | 18 | 16-20 hrs | 3 | 6 | 221 | 9 | 18 | 7 | 2,330 | 8 | **3.8** | 5.1 | -.16 | 5.5 | -.20 | 5.0 | -.17 |
| | | 23 | 21-25 hrs | 1 | 2 | 73 | 3 | 5 | 2 | 679 | 2 | | | | | | | |
| | | 28 | 26-30 hrs | 0 | 0 | 31 | 1 | 4 | 2 | 250 | 1 | | | | | | | |
| | | 33 | More than 30 hrs | 0 | 0 | 26 | 1 | 9 | 4 | 273 | 1 | | | | | | | |
| | | | Total | 50 | 100 | 2,553 | 100 | 244 | 100 | 30,596 | 100 | | | | | | | |
| d. Working for pay **off campus** | tmworkoffhrs | 0 | 0 hrs | 27 | 54 | 1,204 | 47 | 111 | 46 | 16,993 | 56 | | | | | | | |
| | *(Recoded version of* tmworkoff *created by NSSE. Values are estimated number of hours per week.)* | 3 | 1-5 hrs | 4 | 8 | 122 | 5 | 6 | 2 | 1,692 | 6 | | | | | | | |
| | | 8 | 6-10 hrs | 4 | 8 | 166 | 7 | 15 | 6 | 2,020 | 7 | | | | | | | |
| | | 13 | 11-15 hrs | 5 | 10 | 190 | 7 | 14 | 6 | 2,084 | 7 | | | | | | | |
| | | 18 | 16-20 hrs | 3 | 6 | 260 | 10 | 18 | 7 | 2,569 | 8 | **7.3** | 10.3 * ▽ | -.25 | 12.1 ** ▼ | -.38 | 7.9 | -.05 |
| | | 23 | 21-25 hrs | 2 | 4 | 178 | 7 | 18 | 7 | 1,891 | 6 | | | | | | | |
| | | 28 | 26-30 hrs | 2 | 4 | 153 | 6 | 23 | 10 | 1,188 | 4 | | | | | | | |
| | | 33 | More than 30 hrs | 3 | 6 | 277 | 11 | 37 | 15 | 2,101 | 7 | | | | | | | |
| | | | Total | 50 | 100 | 2,550 | 100 | 242 | 100 | 30,538 | 100 | | | | | | | |
| Estimated number of hours working for pay | tmworkhrs *(Continuous variable created* | | | | | | | | | | | **11.1** | 15.3 * | -.34 | 17.3 ** | -.46 | 12.9 | -.15 |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

### Seniors[a] in Natural-Math Science

| Item wording or description | Variable name[l] (created by NSSE) | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k] (Your seniors compared with): Tennessee Tech Mean | Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| e. Doing community service or volunteer work | tmservicehrs (*Recoded version of* tmservice *created by NSSE. Values are estimated number of hours per week.*) | 0 | 0 hrs | 20 | 40 | 1,190 | 47 | 125 | 51 | 14,224 | 47 | **4.6** | 3.4 ▼ | .22 | 2.8 ▼ | .37 | 3.0 | .33 |
| | | 3 | 1-5 hrs | 16 | 32 | 887 | 35 | 82 | 34 | 11,570 | 38 | | | | | | | |
| | | 8 | 6-10 hrs | 9 | 18 | 255 | 10 | 22 | 9 | 2,794 | 9 | | | | | | | |
| | | 13 | 11-15 hrs | 2 | 4 | 102 | 4 | 8 | 3 | 952 | 3 | | | | | | | |
| | | 18 | 16-20 hrs | 1 | 2 | 46 | 2 | 4 | 2 | 505 | 2 | | | | | | | |
| | | 23 | 21-25 hrs | 0 | 0 | 35 | 1 | 2 | 1 | 219 | 1 | | | | | | | |
| | | 28 | 26-30 hrs | 0 | 0 | 14 | 1 | 1 | 0 | 86 | 0 | | | | | | | |
| | | 33 | More than 30 hrs | 2 | 4 | 17 | 1 | 0 | 0 | 181 | 1 | | | | | | | |
| | | | Total | 50 | 100 | 2,546 | 100 | 244 | 100 | 30,531 | 100 | | | | | | | |
| f. Relaxing and socializing (time with friends, video games, TV or videos, keeping up with friends online, etc.) | tmrelaxhrs (*Recoded version of* tmrelax *created by NSSE. Values are estimated number of hours per week.*) | 0 | 0 hrs | 0 | 0 | 80 | 3 | 8 | 3 | 721 | 2 | **15.0** | 10.2 ** ▲ | .62 | 11.6 * ▲ | .39 | 10.8 ** ▲ | .53 |
| | | 3 | 1-5 hrs | 8 | 16 | 747 | 29 | 57 | 23 | 7,882 | 26 | | | | | | | |
| | | 8 | 6-10 hrs | 11 | 22 | 747 | 29 | 61 | 25 | 9,175 | 30 | | | | | | | |
| | | 13 | 11-15 hrs | 12 | 24 | 466 | 18 | 59 | 24 | 5,905 | 19 | | | | | | | |
| | | 18 | 16-20 hrs | 7 | 14 | 255 | 10 | 27 | 11 | 3,486 | 11 | | | | | | | |
| | | 23 | 21-25 hrs | 4 | 8 | 104 | 4 | 10 | 4 | 1,418 | 5 | | | | | | | |
| | | 28 | 26-30 hrs | 0 | 0 | 49 | 2 | 7 | 3 | 646 | 2 | | | | | | | |
| | | 33 | More than 30 hrs | 8 | 16 | 100 | 4 | 15 | 6 | 1,310 | 4 | | | | | | | |
| | | | Total | 50 | 100 | 2,548 | 100 | 244 | 100 | 30,543 | 100 | | | | | | | |
| g. Providing care for dependents (children, parents, etc.) | tmcarehrs (*Recoded version of* tmcare *created by NSSE. Values are estimated number of hours per week.*) | 0 | 0 hrs | 38 | 76 | 1,729 | 68 | 169 | 69 | 23,461 | 77 | **3.3** | 4.1 | -.09 | 4.4 | -.11 | 2.9 | .05 |
| | | 3 | 1-5 hrs | 5 | 10 | 324 | 13 | 29 | 12 | 2,910 | 10 | | | | | | | |
| | | 8 | 6-10 hrs | 1 | 2 | 161 | 6 | 11 | 4 | 1,264 | 4 | | | | | | | |
| | | 13 | 11-15 hrs | 2 | 4 | 84 | 3 | 8 | 3 | 692 | 2 | | | | | | | |
| | | 18 | 16-20 hrs | 1 | 2 | 46 | 2 | 8 | 3 | 497 | 2 | | | | | | | |
| | | 23 | 21-25 hrs | 0 | 0 | 44 | 2 | 1 | 0 | 245 | 1 | | | | | | | |
| | | 28 | 26-30 hrs | 0 | 0 | 16 | 1 | 0 | 0 | 168 | 1 | | | | | | | |
| | | 33 | More than 30 hrs | 3 | 6 | 149 | 6 | 19 | 8 | 1,284 | 4 | | | | | | | |
| | | | Total | 50 | 100 | 2,553 | 100 | 245 | 100 | 30,521 | 100 | | | | | | | |
| h. Commuting to campus (driving, walking, etc.) | tmcommutehrs (*Recoded version of* tmcommute *created by NSSE. Values are estimated number of hours per week.*) | 0 | 0 hrs | 4 | 8 | 348 | 14 | 30 | 12 | 6,386 | 21 | **5.0** | 5.7 | -.12 | 5.5 | -.10 | 4.7 | .06 |
| | | 3 | 1-5 hrs | 29 | 59 | 1,353 | 53 | 135 | 55 | 16,091 | 53 | | | | | | | |
| | | 8 | 6-10 hrs | 11 | 22 | 486 | 19 | 44 | 18 | 5,082 | 17 | | | | | | | |
| | | 13 | 11-15 hrs | 4 | 8 | 210 | 8 | 22 | 9 | 1,722 | 6 | | | | | | | |
| | | 18 | 16-20 hrs | 1 | 2 | 66 | 3 | 7 | 3 | 599 | 2 | | | | | | | |
| | | 23 | 21-25 hrs | 0 | 0 | 33 | 1 | 5 | 2 | 243 | 1 | | | | | | | |
| | | 28 | 26-30 hrs | 0 | 0 | 13 | 1 | 0 | 0 | 125 | 0 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

**Seniors[a] in Natural-Math Science**

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 33 | More than 30 hrs | 0 | 0 | 50 | 2 | 2 | 1 | 371 | 1 | | | | | | | |
| | | | Total | 49 | 100 | 2,559 | 100 | 245 | 100 | 30,619 | 100 | | | | | | | |
| **16. Of the time you spend preparing for class in a typical 7-day week, about how much is on *assigned reading?*** | | | | | | | | | | | | | | | | | | |
| | reading | 1 | Very little | 20 | 40 | 505 | 20 | 52 | 21 | 5,550 | 18 | | | | | | | |
| | | 2 | Some | 18 | 36 | 846 | 33 | 81 | 33 | 10,722 | 35 | | | | | | | |
| | | 3 | About half | 9 | 18 | 644 | 25 | 61 | 25 | 7,716 | 25 | **1.9** | 2.5 *** ▼ | -.57 | 2.5 *** ▼ | -.54 | 2.6 *** ▼ | -.59 |
| | | 4 | Most | 3 | 6 | 417 | 16 | 40 | 16 | 4,954 | 16 | | | | | | | |
| | | 5 | Almost all | 0 | 0 | 139 | 5 | 10 | 4 | 1,637 | 5 | | | | | | | |
| | | | Total | 50 | 100 | 2,551 | 100 | 244 | 100 | 30,579 | 100 | | | | | | | |
| | tmreadinghrs *(Continuous variable created by NSSE. Calculated as a proportion of* tmprephrs *based on* reading*, where Very little=.10; Some=.25; About half=.50; Most=.75; Almost all=.90)* | | | | | | | | | | | **5.2** | 7.0 * ▽ | -.29 | 6.5 | -.23 | 7.2 * ▼ | -.32 |
| | tmreadinghrscol *(Collapsed version of* tmreadinghrs *created by NSSE.)* | 1 | 0 hrs | 1 | 2 | 6 | 0 | 0 | 0 | 90 | 0 | | | | | | | |
| | | 2 | More than zero, up to 5 hrs | 33 | 66 | 1,277 | 50 | 127 | 52 | 14,580 | 48 | | | | | | | |
| | | 3 | More than 5, up to 10 hrs | 10 | 20 | 715 | 28 | 68 | 28 | 8,990 | 29 | | | | | | | |
| | | 4 | More than 10, up to 15 hrs | 2 | 4 | 248 | 10 | 22 | 9 | 3,061 | 10 | | | | | | | |
| | | 5 | More than 15, up to 20 hrs | 3 | 6 | 139 | 5 | 13 | 5 | 1,952 | 6 | | | | | | | |
| | | 6 | More than 20, up to 25 hrs | 1 | 2 | 120 | 5 | 11 | 5 | 1,331 | 4 | | | | | | | |
| | | 7 | More than 25 hrs | 0 | 0 | 39 | 2 | 2 | 1 | 484 | 2 | | | | | | | |
| | | | Total | 50 | 100 | 2,544 | 100 | 243 | 100 | 30,488 | 100 | | | | | | | |
| **17. How much has your experience at this institution contributed to your knowledge, skills, and personal development in the following areas?** | | | | | | | | | | | | | | | | | | |
| a. Writing clearly and effectively | pgwrite | 1 | Very little | 2 | 4 | 177 | 7 | 22 | 9 | 1,997 | 7 | | | | | | | |
| | | 2 | Some | 14 | 28 | 673 | 26 | 71 | 29 | 7,378 | 24 | | | | | | | |
| | | 3 | Quite a bit | 22 | 44 | 965 | 38 | 68 | 28 | 12,061 | 39 | **2.9** | 2.9 | -.01 | 2.9 | .02 | 2.9 | -.05 |
| | | 4 | Very much | 12 | 24 | 739 | 29 | 82 | 34 | 9,120 | 30 | | | | | | | |
| | | | Total | 50 | 100 | 2,554 | 100 | 243 | 100 | 30,556 | 100 | | | | | | | |
| b. Speaking clearly and effectively | pgspeak | 1 | Very little | 2 | 4 | 228 | 9 | 24 | 10 | 2,651 | 9 | | | | | | | |
| | | 2 | Some | 12 | 24 | 647 | 25 | 71 | 29 | 8,017 | 26 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Frequencies and Statistical Comparisons: Natural-Math Science

## Tennessee Technological University

### Seniors[a] in Natural-Math Science

| | Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 3 | Quite a bit | 28 | 56 | 945 | 37 | 74 | 30 | 11,361 | 37 | **2.8** | 2.9 | -.02 | 2.8 | .02 | 2.8 | -.01 |
| | | | 4 | Very much | 8 | 16 | 741 | 29 | 76 | 31 | 8,571 | 28 | | | | | | | |
| | | | | Total | 50 | 100 | 2,561 | 100 | 245 | 100 | 30,600 | 100 | | | | | | | |
| c. | Thinking critically and analytically | pgthink | 1 | Very little | 0 | 0 | 67 | 3 | 5 | 2 | 644 | 2 | | | | | | | |
| | | | 2 | Some | 7 | 14 | 319 | 12 | 39 | 16 | 3,393 | 11 | | | | | | | |
| | | | 3 | Quite a bit | 23 | 46 | 938 | 37 | 79 | 32 | 10,875 | 36 | **3.3** | 3.3 | -.06 | 3.3 | -.04 | 3.4 | -.13 |
| | | | 4 | Very much | 20 | 40 | 1,232 | 48 | 121 | 50 | 15,710 | 51 | | | | | | | |
| | | | | Total | 50 | 100 | 2,556 | 100 | 244 | 100 | 30,622 | 100 | | | | | | | |
| d. | Analyzing numerical and statistical information | pganalyze | 1 | Very little | 1 | 2 | 98 | 4 | 9 | 4 | 950 | 3 | | | | | | | |
| | | | 2 | Some | 7 | 14 | 463 | 18 | 58 | 24 | 4,969 | 16 | | | | | | | |
| | | | 3 | Quite a bit | 21 | 42 | 902 | 35 | 77 | 31 | 10,776 | 35 | **3.2** | 3.2 | .08 | 3.1 | .16 | 3.2 | .01 |
| | | | 4 | Very much | 21 | 42 | 1,100 | 43 | 101 | 41 | 13,924 | 45 | | | | | | | |
| | | | | Total | 50 | 100 | 2,563 | 100 | 245 | 100 | 30,619 | 100 | | | | | | | |
| e. | Acquiring job- or work-related knowledge and skills | pgwork | 1 | Very little | 4 | 8 | 300 | 12 | 40 | 16 | 3,364 | 11 | | | | | | | |
| | | | 2 | Some | 10 | 20 | 738 | 29 | 71 | 29 | 8,845 | 29 | | | | | | | |
| | | | 3 | Quite a bit | 20 | 40 | 837 | 33 | 68 | 28 | 10,261 | 33 | **3.0** | 2.7 | .22 | 2.6 * ▲ | .30 | 2.8 | .21 |
| | | | 4 | Very much | 16 | 32 | 686 | 27 | 65 | 27 | 8,163 | 27 | | | | | | | |
| | | | | Total | 50 | 100 | 2,561 | 100 | 244 | 100 | 30,633 | 100 | | | | | | | |
| f. | Working effectively with others | pgothers | 1 | Very little | 3 | 6 | 147 | 6 | 21 | 9 | 1,599 | 5 | | | | | | | |
| | | | 2 | Some | 12 | 24 | 605 | 24 | 58 | 24 | 7,199 | 24 | | | | | | | |
| | | | 3 | Quite a bit | 22 | 44 | 1,000 | 39 | 85 | 35 | 12,257 | 40 | **2.9** | 3.0 | -.07 | 2.9 | -.02 | 3.0 | -.08 |
| | | | 4 | Very much | 13 | 26 | 800 | 31 | 81 | 33 | 9,541 | 31 | | | | | | | |
| | | | | Total | 50 | 100 | 2,552 | 100 | 245 | 100 | 30,596 | 100 | | | | | | | |
| g. | Developing or clarifying a personal code of values and ethics | pgvalues | 1 | Very little | 6 | 12 | 358 | 14 | 52 | 21 | 4,135 | 14 | | | | | | | |
| | | | 2 | Some | 10 | 20 | 695 | 27 | 64 | 26 | 8,457 | 28 | | | | | | | |
| | | | 3 | Quite a bit | 24 | 48 | 823 | 32 | 64 | 26 | 9,988 | 33 | **2.8** | 2.7 | .05 | 2.6 | .17 | 2.7 | .04 |
| | | | 4 | Very much | 10 | 20 | 681 | 27 | 64 | 26 | 8,044 | 26 | | | | | | | |
| | | | | Total | 50 | 100 | 2,557 | 100 | 244 | 100 | 30,624 | 100 | | | | | | | |
| h. | Understanding people of other backgrounds (economic, racial/ethnic, political, religious, nationality, etc.) | pgdiverse | 1 | Very little | 8 | 16 | 344 | 13 | 40 | 16 | 3,843 | 13 | | | | | | | |
| | | | 2 | Some | 14 | 28 | 740 | 29 | 76 | 31 | 9,289 | 30 | | | | | | | |
| | | | 3 | Quite a bit | 18 | 36 | 809 | 32 | 67 | 27 | 9,806 | 32 | **2.6** | 2.7 | -.10 | 2.6 | -.02 | 2.7 | -.10 |
| | | | 4 | Very much | 10 | 20 | 666 | 26 | 62 | 25 | 7,681 | 25 | | | | | | | |
| | | | | Total | 50 | 100 | 2,559 | 100 | 245 | 100 | 30,619 | 100 | | | | | | | |
| i. | Solving complex real-world problems | pgprobsolve | 1 | Very little | 3 | 6 | 291 | 11 | 28 | 12 | 3,040 | 10 | | | | | | | |
| | | | 2 | Some | 15 | 30 | 742 | 29 | 75 | 31 | 9,057 | 30 | | | | | | | |

## Seniors[a] in Natural-Math Science

| Item wording or description | Variable name[l] | Values[m] | Response options | Frequency Distributions: Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Statistical Comparisons[k]: Tennessee Tech Mean | Your seniors compared with: Carnegie Class Mean | Carnegie Class Effect size[n] | THEC Peer Group Mean | THEC Peer Group Effect size[n] | NSSE 2016 & 2017 Mean | NSSE 2016 & 2017 Effect size[n] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 3 | Quite a bit | 20 | 40 | 855 | 34 | 70 | 29 | 10,649 | 35 | **2.8** | 2.7 | .08 | 2.7 | .08 | 2.8 | .06 |
| | | 4 | Very much | 12 | 24 | 664 | 26 | 69 | 29 | 7,860 | 26 | | | | | | | |
| | | | Total | 50 | 100 | 2,552 | 100 | 242 | 100 | 30,606 | 100 | | | | | | | |
| j. Being an informed and active citizen | pgcitizen | 1 | Very little | 9 | 18 | 434 | 17 | 54 | 22 | 4,553 | 15 | | | | | | | |
| | | 2 | Some | 20 | 40 | 823 | 32 | 75 | 31 | 9,850 | 32 | | | | | | | |
| | | 3 | Quite a bit | 16 | 32 | 741 | 29 | 60 | 25 | 9,474 | 31 | **2.3** | 2.6 | -.21 | 2.5 | -.12 | 2.6 | -.26 |
| | | 4 | Very much | 5 | 10 | 553 | 22 | 54 | 22 | 6,639 | 22 | | | | | | | |
| | | | Total | 50 | 100 | 2,551 | 100 | 243 | 100 | 30,516 | 100 | | | | | | | |
| **18. How would you evaluate your entire educational experience at this institution?** | | | | | | | | | | | | | | | | | | |
| | evalexp | 1 | Poor | 2 | 4 | 91 | 4 | 6 | 2 | 771 | 3 | | | | | | | |
| | | 2 | Fair | 2 | 4 | 404 | 16 | 45 | 18 | 3,785 | 12 | | | | | | | |
| | | 3 | Good | 23 | 46 | 1,175 | 46 | 100 | 41 | 13,320 | 44 | **3.3** | 3.1 | .28 | 3.2 | .24 | 3.2 | .13 |
| | | 4 | Excellent | 23 | 46 | 892 | 35 | 94 | 38 | 12,740 | 42 | | | | | | | |
| | | | Total | 50 | 100 | 2,562 | 100 | 245 | 100 | 30,616 | 100 | | | | | | | |
| **19. If you could start over again, would you go to the *same institution* you are now attending?** | | | | | | | | | | | | | | | | | | |
| | sameinst | 1 | Definitely no | 2 | 4 | 194 | 8 | 22 | 9 | 1,605 | 5 | | | | | | | |
| | | 2 | Probably no | 5 | 10 | 432 | 17 | 34 | 14 | 4,366 | 14 | | | | | | | |
| | | 3 | Probably yes | 18 | 36 | 1,005 | 39 | 90 | 37 | 12,242 | 40 | **3.3** | 3.0 * ▲ | .30 | 3.1 | .26 | 3.2 | .19 |
| | | 4 | Definitely yes | 25 | 50 | 931 | 36 | 98 | 40 | 12,443 | 41 | | | | | | | |
| | | | Total | 50 | 100 | 2,562 | 100 | 244 | 100 | 30,656 | 100 | | | | | | | |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Respondent Profile: Natural-Math Science

## Tennessee Technological University

## Natural-Math Science

### First-Year Students[a]

| | Item wording or description | Variable name | Response options | Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20a. | How many majors do you plan to complete? (Do not count minors.) | MAJnum | One | 25 | 81 | 2,031 | 83 | 212 | 80 | 22,566 | 78 |
| | | | More than one | 6 | 19 | 422 | 17 | 52 | 20 | 6,200 | 22 |
| | | | Total | 31 | 100 | 2,453 | 100 | 264 | 100 | 28,766 | 100 |
| | First major or expected first major, in NSSE's default related-major categories. *(This does not reflect any customization made for the* Major Field Report.) | MAJfirstcol *(Recoded from* MAJfirst.) | Arts & Humanities | 0 | 0 | 15 | 1 | 1 | 0 | 200 | 1 |
| | | | Biological Sci., Agriculture, & Natural Resources | 21 | 68 | 1,776 | 72 | 183 | 69 | 20,247 | 70 |
| | | | Physical Sci., Mathematics, & Computer Science | 9 | 29 | 533 | 22 | 63 | 24 | 6,882 | 24 |
| | | | Social Sciences | 0 | 0 | 35 | 1 | 1 | 0 | 490 | 2 |
| | | | Business | 0 | 0 | 9 | 0 | 1 | 0 | 139 | 0 |
| | | | Communications, Media, & Public Relations | 0 | 0 | 1 | 0 | 0 | 0 | 18 | 0 |
| | | | Education | 0 | 0 | 11 | 0 | 0 | 0 | 124 | 0 |
| | | | Engineering | 0 | 0 | 34 | 1 | 6 | 2 | 313 | 1 |
| | | | Health Professions | 1 | 3 | 32 | 1 | 7 | 3 | 237 | 1 |
| | | | Social Service Professions | 0 | 0 | 6 | 0 | 2 | 1 | 76 | 0 |
| | | | All Other | 0 | 0 | 1 | 0 | 0 | 0 | 38 | 0 |
| | | | Undecided, Undeclared | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| | | | Total | 31 | 100 | 2,453 | 100 | 264 | 100 | 28,767 | 100 |
| | Second major or expected second major, in NSSE's default related-major categories. *(This does not reflect any customization made for the* Major Field Report.) | MAJsecondcol *(Recoded from* MAJsecond.) | Arts & Humanities | 0 | 0 | 43 | 10 | 5 | 10 | 799 | 13 |
| | | | Biological Sci., Agriculture, & Natural Resources | 4 | 67 | 107 | 26 | 7 | 14 | 1,357 | 22 |
| | | | Physical Sci., Mathematics, & Computer Science | 0 | 0 | 130 | 31 | 21 | 41 | 2,050 | 33 |
| | | | Social Sciences | 0 | 0 | 41 | 10 | 5 | 10 | 803 | 13 |
| | | | Business | 0 | 0 | 13 | 3 | 2 | 4 | 218 | 4 |
| | | | Communications, Media, & Public Relations | 0 | 0 | 4 | 1 | 0 | 0 | 29 | 0 |
| | | | Education | 1 | 17 | 12 | 3 | 1 | 2 | 164 | 3 |
| | | | Engineering | 1 | 17 | 18 | 4 | 2 | 4 | 184 | 3 |
| | | | Health Professions | 0 | 0 | 35 | 8 | 7 | 14 | 357 | 6 |
| | | | Social Service Professions | 0 | 0 | 6 | 1 | 1 | 2 | 83 | 1 |
| | | | All Other | 0 | 0 | 4 | 1 | 0 | 0 | 63 | 1 |
| | | | Undecided, Undeclared | 0 | 0 | 6 | 1 | 0 | 0 | 70 | 1 |
| | | | Total | 6 | 100 | 419 | 100 | 51 | 100 | 6,177 | 100 |
| 21. | What is your class level? | class | Freshman/First-year | 23 | 74 | 2,136 | 88 | 223 | 85 | 25,800 | 90 |
| | | | Sophomore | 8 | 26 | 246 | 10 | 35 | 13 | 2,267 | 8 |
| | | | Junior | 0 | 0 | 34 | 1 | 2 | 1 | 387 | 1 |
| | | | Senior | 0 | 0 | 10 | 0 | 1 | 0 | 85 | 0 |
| | | | Unclassified | 0 | 0 | 13 | 1 | 2 | 1 | 80 | 0 |
| | | | Total | 31 | 100 | 2,439 | 100 | 263 | 100 | 28,619 | 100 |
| 22. | Thinking about this | fulltime | No | 0 | 0 | 53 | 2 | 8 | 3 | 582 | 2 |

### Seniors[a]

| | Item wording or description | Variable name | Response options | Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 20a. | How many majors do you plan to complete? (Do not count minors.) | MAJnum | One | 38 | 76 | 2,120 | 83 | 198 | 80 | 24,082 | 78 |
| | | | More than one | 12 | 24 | 449 | 17 | 48 | 20 | 6,649 | 22 |
| | | | Total | 50 | 100 | 2,569 | 100 | 246 | 100 | 30,731 | 100 |
| | First major or expected first major, in NSSE's default related-major categories. *(This does not reflect any customization made for the* Major Field Report.) | MAJfirstcol *(Recoded from* MAJfirst.) | Arts & Humanities | 0 | 0 | 21 | 1 | 2 | 1 | 224 | 1 |
| | | | Biological Sci., Agriculture, & Natural Resources | 35 | 70 | 1,624 | 63 | 155 | 63 | 19,762 | 64 |
| | | | Physical Sci., Mathematics, & Computer Science | 14 | 28 | 736 | 29 | 80 | 33 | 8,734 | 28 |
| | | | Social Sciences | 0 | 0 | 87 | 3 | 4 | 2 | 894 | 3 |
| | | | Business | 0 | 0 | 8 | 0 | 0 | 0 | 118 | 0 |
| | | | Communications, Media, & Public Relations | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 |
| | | | Education | 0 | 0 | 15 | 1 | 1 | 0 | 177 | 1 |
| | | | Engineering | 1 | 2 | 38 | 1 | 3 | 1 | 385 | 1 |
| | | | Health Professions | 0 | 0 | 27 | 1 | 1 | 0 | 238 | 1 |
| | | | Social Service Professions | 0 | 0 | 4 | 0 | 0 | 0 | 124 | 0 |
| | | | All Other | 0 | 0 | 7 | 0 | 0 | 0 | 59 | 0 |
| | | | Undecided, Undeclared | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 |
| | | | Total | 50 | 100 | 2,568 | 100 | 246 | 100 | 30,729 | 100 |
| | Second major or expected second major, in NSSE's default related-major categories. *(This does not reflect any customization made for the* Major Field Report.) | MAJsecondcol *(Recoded from* MAJsecond.) | Arts & Humanities | 1 | 8 | 43 | 10 | 6 | 13 | 769 | 12 |
| | | | Biological Sci., Agriculture, & Natural Resources | 7 | 58 | 107 | 24 | 6 | 13 | 1,611 | 24 |
| | | | Physical Sci., Mathematics, & Computer Science | 3 | 25 | 151 | 34 | 16 | 33 | 2,172 | 33 |
| | | | Social Sciences | 0 | 0 | 62 | 14 | 8 | 17 | 977 | 15 |
| | | | Business | 0 | 0 | 8 | 2 | 2 | 4 | 162 | 2 |
| | | | Communications, Media, & Public Relations | 0 | 0 | 3 | 1 | 0 | 0 | 43 | 1 |
| | | | Education | 0 | 0 | 11 | 2 | 1 | 2 | 207 | 3 |
| | | | Engineering | 0 | 0 | 3 | 1 | 0 | 0 | 123 | 2 |
| | | | Health Professions | 1 | 8 | 40 | 9 | 7 | 15 | 366 | 6 |
| | | | Social Service Professions | 0 | 0 | 5 | 1 | 1 | 2 | 61 | 1 |
| | | | All Other | 0 | 0 | 12 | 3 | 1 | 2 | 99 | 1 |
| | | | Undecided, Undeclared | 0 | 0 | 3 | 1 | 0 | 0 | 42 | 1 |
| | | | Total | 12 | 100 | 448 | 100 | 48 | 100 | 6,632 | 100 |
| 21. | What is your class level? | class | Freshman/First-year | 0 | 0 | 2 | 0 | 0 | 0 | 46 | 0 |
| | | | Sophomore | 1 | 2 | 15 | 1 | 1 | 0 | 259 | 1 |
| | | | Junior | 0 | 0 | 219 | 9 | 15 | 6 | 2,956 | 10 |
| | | | Senior | 45 | 90 | 2,261 | 89 | 227 | 93 | 26,784 | 88 |
| | | | Unclassified | 4 | 8 | 54 | 2 | 2 | 1 | 551 | 2 |
| | | | Total | 50 | 100 | 2,551 | 100 | 245 | 100 | 30,596 | 100 |
| 22. | Thinking about this | fulltime | No | 9 | 18 | 446 | 18 | 42 | 17 | 3,984 | 13 |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Respondent Profile: Natural-Math Science

## Tennessee Technological University

## Natural-Math Science

### First-Year Students[a]

| | Item wording or description | Variable name | Response options | Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | current academic term, are you a full-time student? | | Yes | 31 | 100 | 2,370 | 98 | 254 | 97 | 27,891 | 98 |
| | | | Total | 31 | 100 | 2,423 | 100 | 262 | 100 | 28,473 | 100 |
| 23a. | How many courses are you taking for credit this current academic term? | coursenum | 0 | 0 | 0 | 8 | 0 | 2 | 1 | 73 | 0 |
| | | | 1 | 0 | 0 | 8 | 0 | 1 | 0 | 81 | 0 |
| | | | 2 | 0 | 0 | 19 | 1 | 1 | 0 | 179 | 1 |
| | | | 3 | 0 | 0 | 91 | 4 | 5 | 2 | 1,154 | 4 |
| | | | 4 | 10 | 32 | 718 | 29 | 49 | 19 | 8,933 | 31 |
| | | | 5 | 12 | 39 | 796 | 33 | 93 | 35 | 9,834 | 34 |
| | | | 6 | 7 | 23 | 454 | 19 | 57 | 22 | 4,855 | 17 |
| | | | 7 or more | 2 | 6 | 346 | 14 | 54 | 21 | 3,531 | 12 |
| | | | Total | 31 | 100 | 2,440 | 100 | 262 | 100 | 28,640 | 100 |
| b. | Of these, how many are *entirely online* ? | onlinenum | 0 | 27 | 87 | 2,012 | 83 | 205 | 78 | 25,004 | 88 |
| | | | 1 | 3 | 10 | 273 | 11 | 35 | 13 | 2,536 | 9 |
| | | | 2 | 1 | 3 | 77 | 3 | 14 | 5 | 537 | 2 |
| | | | 3 | 0 | 0 | 36 | 1 | 6 | 2 | 215 | 1 |
| | | | 4 | 0 | 0 | 15 | 1 | 1 | 0 | 90 | 0 |
| | | | 5 | 0 | 0 | 5 | 0 | 2 | 1 | 65 | 0 |
| | | | 6 | 0 | 0 | 5 | 0 | 0 | 0 | 22 | 0 |
| | | | 7 or more | 0 | 0 | 8 | 0 | 0 | 0 | 28 | 0 |
| | | | Total | 31 | 100 | 2,431 | 100 | 263 | 100 | 28,497 | 100 |
| | Collapsed recode of courses taken online *(Based on responses to* coursenum *and* onlinenum.) | onlinecrscol | No courses taken online | 27 | 87 | 2,011 | 83 | 204 | 78 | 25,000 | 88 |
| | | | Some courses taken online | 4 | 13 | 372 | 15 | 52 | 20 | 3,209 | 11 |
| | | | All courses taken online | 0 | 0 | 47 | 2 | 6 | 2 | 284 | 1 |
| | | | Total | 31 | 100 | 2,430 | 100 | 262 | 100 | 28,493 | 100 |
| 24. | What have most of your grades been up to now at this institution? | grades | C- or lower | 0 | 0 | 38 | 2 | 4 | 2 | 420 | 1 |
| | | | C | 1 | 3 | 71 | 3 | 5 | 2 | 716 | 3 |
| | | | C+ | 2 | 6 | 100 | 4 | 17 | 7 | 1,153 | 4 |
| | | | B- | 4 | 13 | 148 | 6 | 17 | 7 | 1,667 | 6 |
| | | | B | 5 | 16 | 413 | 17 | 46 | 18 | 4,770 | 17 |
| | | | B+ | 2 | 6 | 426 | 18 | 38 | 15 | 5,115 | 18 |
| | | | A- | 5 | 16 | 500 | 21 | 48 | 18 | 5,946 | 21 |
| | | | A | 12 | 39 | 733 | 30 | 85 | 33 | 8,787 | 31 |
| | | | Total | 31 | 100 | 2,429 | 100 | 260 | 100 | 28,574 | 100 |
| 25. | Did you begin college at this institution or elsewhere? | begincol | Started here | 27 | 87 | 2,265 | 93 | 241 | 92 | 26,701 | 93 |
| | | | Started elsewhere | 4 | 13 | 173 | 7 | 21 | 8 | 1,869 | 7 |
| | | | Total | 31 | 100 | 2,438 | 100 | 262 | 100 | 28,570 | 100 |
| 26. | Since graduating from | attend_voc | Vocational or technical school | 1 | 3 | 51 | 2 | 8 | 3 | 529 | 2 |

### Seniors[a]

| | Item wording or description | Variable name | Response options | Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | current academic term, are you a full-time student? | | Yes | 40 | 82 | 2,093 | 82 | 203 | 83 | 26,437 | 87 |
| | | | Total | 49 | 100 | 2,539 | 100 | 245 | 100 | 30,421 | 100 |
| 23a. | How many courses are you taking for credit this current academic term? | coursenum | 0 | 3 | 6 | 70 | 3 | 2 | 1 | 503 | 2 |
| | | | 1 | 0 | 0 | 73 | 3 | 7 | 3 | 576 | 2 |
| | | | 2 | 6 | 12 | 147 | 6 | 15 | 6 | 1,429 | 5 |
| | | | 3 | 1 | 2 | 298 | 12 | 28 | 11 | 3,516 | 11 |
| | | | 4 | 17 | 34 | 777 | 30 | 61 | 25 | 9,827 | 32 |
| | | | 5 | 14 | 28 | 630 | 25 | 57 | 23 | 8,340 | 27 |
| | | | 6 | 3 | 6 | 289 | 11 | 33 | 14 | 3,512 | 11 |
| | | | 7 or more | 6 | 12 | 272 | 11 | 41 | 17 | 2,912 | 10 |
| | | | Total | 50 | 100 | 2,556 | 100 | 244 | 100 | 30,615 | 100 |
| b. | Of these, how many are *entirely online* ? | onlinenum | 0 | 43 | 86 | 1,881 | 74 | 155 | 64 | 25,018 | 82 |
| | | | 1 | 5 | 10 | 446 | 18 | 56 | 23 | 3,915 | 13 |
| | | | 2 | 1 | 2 | 129 | 5 | 20 | 8 | 1,008 | 3 |
| | | | 3 | 0 | 0 | 48 | 2 | 10 | 4 | 301 | 1 |
| | | | 4 | 0 | 0 | 22 | 1 | 3 | 1 | 111 | 0 |
| | | | 5 | 0 | 0 | 6 | 0 | 0 | 0 | 45 | 0 |
| | | | 6 | 0 | 0 | 4 | 0 | 0 | 0 | 40 | 0 |
| | | | 7 or more | 1 | 2 | 7 | 0 | 0 | 0 | 46 | 0 |
| | | | Total | 50 | 100 | 2,543 | 100 | 244 | 100 | 30,484 | 100 |
| | Collapsed recode of courses taken online *(Based on responses to* coursenum *and* onlinenum.) | onlinecrscol | No courses taken online | 43 | 86 | 1,881 | 74 | 155 | 64 | 25,018 | 82 |
| | | | Some courses taken online | 6 | 12 | 610 | 24 | 83 | 34 | 5,065 | 17 |
| | | | All courses taken online | 1 | 2 | 52 | 2 | 6 | 2 | 401 | 1 |
| | | | Total | 50 | 100 | 2,543 | 100 | 244 | 100 | 30,484 | 100 |
| 24. | What have most of your grades been up to now at this institution? | grades | C- or lower | 0 | 0 | 18 | 1 | 2 | 1 | 148 | 0 |
| | | | C | 0 | 0 | 69 | 3 | 3 | 1 | 760 | 2 |
| | | | C+ | 1 | 2 | 141 | 6 | 17 | 7 | 1,306 | 4 |
| | | | B- | 4 | 8 | 209 | 8 | 23 | 9 | 2,069 | 7 |
| | | | B | 6 | 12 | 488 | 19 | 41 | 17 | 5,634 | 18 |
| | | | B+ | 7 | 14 | 466 | 18 | 46 | 19 | 5,444 | 18 |
| | | | A- | 14 | 28 | 430 | 17 | 42 | 17 | 6,055 | 20 |
| | | | A | 18 | 36 | 733 | 29 | 71 | 29 | 9,154 | 30 |
| | | | Total | 50 | 100 | 2,554 | 100 | 245 | 100 | 30,570 | 100 |
| 25. | Did you begin college at this institution or elsewhere? | begincol | Started here | 37 | 74 | 1,505 | 59 | 148 | 60 | 20,828 | 68 |
| | | | Started elsewhere | 13 | 26 | 1,046 | 41 | 97 | 40 | 9,735 | 32 |
| | | | Total | 50 | 100 | 2,551 | 100 | 245 | 100 | 30,563 | 100 |
| 26. | Since graduating from | attend_voc | Vocational or technical school | 1 | 2 | 133 | 5 | 13 | 5 | 1,305 | 4 |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Respondent Profile: Natural-Math Science

## Tennessee Technological University

## Natural-Math Science

### First-Year Students[a]

| | Item wording or description | Variable name | Response options | Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | high school, which of the following types of schools have you attended *other than* the one you are now attending? (Select all that apply.) | attend_com | Community or junior college | 5 | 16 | 184 | 8 | 13 | 5 | 2,019 | 7 |
| | | attend_col | 4-year college or university other than this one | 2 | 6 | 217 | 9 | 24 | 9 | 2,137 | 8 |
| | | attend_none | None | 23 | 74 | 1,934 | 80 | 208 | 80 | 23,413 | 82 |
| | | attend_other | Other | 2 | 6 | 84 | 3 | 9 | 3 | 737 | 3 |
| 27. | What is the highest level of education you ever expect to complete? | edaspire | Some college but less than a bachelor's degree | 2 | 6 | 118 | 5 | 18 | 7 | 1,279 | 4 |
| | | | Bachelor's degree (B.A., B.S., etc.) | 8 | 26 | 367 | 15 | 37 | 14 | 4,119 | 14 |
| | | | Master's degree (M.A., M.S., etc.) | 6 | 19 | 553 | 23 | 42 | 16 | 6,596 | 23 |
| | | | Doctoral or professional degree (Ph.D., J.D., M.D., etc.) | 15 | 48 | 1,396 | 57 | 163 | 63 | 16,524 | 58 |
| | | | Total | 31 | 100 | 2,434 | 100 | 260 | 100 | 28,518 | 100 |
| 28. | What is the highest level of education completed by either of your parents (or those who raised you)? | parented | Did not finish high school | 1 | 3 | 181 | 7 | 15 | 6 | 1,354 | 5 |
| | | | High school diploma or G.E.D. | 6 | 19 | 412 | 17 | 38 | 15 | 4,023 | 14 |
| | | | Attended college, but did not complete degree | 5 | 16 | 271 | 11 | 37 | 14 | 2,622 | 9 |
| | | | Associate's degree (A.A., A.S., etc.) | 3 | 10 | 235 | 10 | 32 | 12 | 2,574 | 9 |
| | | | Bachelor's degree (B.A., B.S., etc.) | 7 | 23 | 658 | 27 | 60 | 23 | 8,056 | 28 |
| | | | Master's degree (M.A., M.S., etc.) | 8 | 26 | 489 | 20 | 58 | 22 | 6,582 | 23 |
| | | | Doctoral or professional degree (Ph.D., J.D., M.D., etc.) | 1 | 3 | 170 | 7 | 18 | 7 | 3,216 | 11 |
| | | | Total | 31 | 100 | 2,416 | 100 | 258 | 100 | 28,427 | 100 |
| | First-generation status *(Neither parent holds a bachelor's degree.)* | firstgen *(Recoded from* parented.) | Not first-generation | 16 | 52 | 1,317 | 55 | 136 | 53 | 17,854 | 63 |
| | | | First-generation | 15 | 48 | 1,099 | 45 | 122 | 47 | 10,573 | 37 |
| | | | Total | 31 | 100 | 2,416 | 100 | 258 | 100 | 28,427 | 100 |
| 29. | What is your gender identity? | genderid | Man | 11 | 35 | 686 | 28 | 70 | 27 | 8,995 | 32 |
| | | | Woman | 17 | 55 | 1,697 | 70 | 187 | 72 | 18,994 | 67 |
| | | | Another gender identity | 2 | 6 | 23 | 1 | 2 | 1 | 278 | 1 |
| | | | I prefer not to respond | 1 | 3 | 24 | 1 | 2 | 1 | 278 | 1 |
| | | | Total | 31 | 100 | 2,430 | 100 | 261 | 100 | 28,545 | 100 |
| 30. | Enter your year of birth (e.g., 1994): | agecat *(Recoded from the information entered in* birthyear.) | 19 or younger | 28 | 90 | 2,253 | 93 | 225 | 87 | 26,488 | 93 |
| | | | 20-23 | 3 | 10 | 109 | 5 | 21 | 8 | 1,437 | 5 |
| | | | 24-29 | 0 | 0 | 23 | 1 | 6 | 2 | 250 | 1 |
| | | | 30-39 | 0 | 0 | 18 | 1 | 7 | 3 | 106 | 0 |
| | | | 40-55 | 0 | 0 | 10 | 0 | 1 | 0 | 55 | 0 |
| | | | Over 55 | 0 | 0 | 2 | 0 | 0 | 0 | 10 | 0 |
| | | | Total | 31 | 100 | 2,415 | 100 | 260 | 100 | 28,346 | 100 |
| 31a. | Are you an | internat | No | 31 | 100 | 2,287 | 95 | 243 | 94 | 26,812 | 95 |

### Seniors[a]

| | Item wording or description | Variable name | Response options | Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | high school, which of the following types of schools have you attended *other than* the one you are now attending? (Select all that apply.) | attend_com | Community or junior college | 17 | 34 | 988 | 39 | 67 | 27 | 9,301 | 31 |
| | | attend_col | 4-year college or university other than this one | 8 | 16 | 599 | 24 | 71 | 29 | 6,768 | 22 |
| | | attend_none | None | 26 | 52 | 1,134 | 45 | 117 | 48 | 15,920 | 52 |
| | | attend_other | Other | 0 | 0 | 94 | 4 | 10 | 4 | 899 | 3 |
| 27. | What is the highest level of education you ever expect to complete? | edaspire | Some college but less than a bachelor's degree | 2 | 4 | 117 | 5 | 9 | 4 | 1,063 | 3 |
| | | | Bachelor's degree (B.A., B.S., etc.) | 12 | 24 | 474 | 19 | 35 | 14 | 5,361 | 18 |
| | | | Master's degree (M.A., M.S., etc.) | 13 | 26 | 744 | 29 | 67 | 27 | 8,257 | 27 |
| | | | Doctoral or professional degree (Ph.D., J.D., M.D., etc.) | 23 | 46 | 1,216 | 48 | 134 | 55 | 15,848 | 52 |
| | | | Total | 50 | 100 | 2,551 | 100 | 245 | 100 | 30,529 | 100 |
| 28. | What is the highest level of education completed by either of your parents (or those who raised you)? | parented | Did not finish high school | 1 | 2 | 183 | 7 | 6 | 2 | 1,340 | 4 |
| | | | High school diploma or G.E.D. | 6 | 12 | 451 | 18 | 46 | 19 | 4,367 | 14 |
| | | | Attended college, but did not complete degree | 6 | 12 | 288 | 11 | 29 | 12 | 2,738 | 9 |
| | | | Associate's degree (A.A., A.S., etc.) | 4 | 8 | 257 | 10 | 27 | 11 | 2,764 | 9 |
| | | | Bachelor's degree (B.A., B.S., etc.) | 15 | 30 | 713 | 28 | 65 | 27 | 8,836 | 29 |
| | | | Master's degree (M.A., M.S., etc.) | 12 | 24 | 416 | 16 | 48 | 20 | 6,607 | 22 |
| | | | Doctoral or professional degree (Ph.D., J.D., M.D., etc.) | 6 | 12 | 237 | 9 | 24 | 10 | 3,826 | 13 |
| | | | Total | 50 | 100 | 2,545 | 100 | 245 | 100 | 30,478 | 100 |
| | First-generation status *(Neither parent holds a bachelor's degree.)* | firstgen *(Recoded from* parented.) | Not first-generation | 33 | 66 | 1,366 | 54 | 137 | 56 | 19,269 | 63 |
| | | | First-generation | 17 | 34 | 1,179 | 46 | 108 | 44 | 11,209 | 37 |
| | | | Total | 50 | 100 | 2,545 | 100 | 245 | 100 | 30,478 | 100 |
| 29. | What is your gender identity? | genderid | Man | 15 | 30 | 928 | 37 | 88 | 36 | 11,227 | 37 |
| | | | Woman | 32 | 64 | 1,555 | 61 | 155 | 63 | 18,620 | 61 |
| | | | Another gender identity | 2 | 4 | 21 | 1 | 0 | 0 | 270 | 1 |
| | | | I prefer not to respond | 1 | 2 | 38 | 1 | 2 | 1 | 426 | 1 |
| | | | Total | 50 | 100 | 2,542 | 100 | 245 | 100 | 30,543 | 100 |
| 30. | Enter your year of birth (e.g., 1994): | agecat *(Recoded from the information entered in* birthyear.) | 19 or younger | 0 | 0 | 22 | 1 | 2 | 1 | 364 | 1 |
| | | | 20-23 | 45 | 92 | 1,754 | 70 | 173 | 71 | 23,672 | 78 |
| | | | 24-29 | 2 | 4 | 488 | 19 | 37 | 15 | 4,104 | 14 |
| | | | 30-39 | 1 | 2 | 168 | 7 | 18 | 7 | 1,557 | 5 |
| | | | 40-55 | 1 | 2 | 78 | 3 | 12 | 5 | 526 | 2 |
| | | | Over 55 | 0 | 0 | 11 | 0 | 1 | 0 | 82 | 0 |
| | | | Total | 49 | 100 | 2,521 | 100 | 243 | 100 | 30,305 | 100 |
| 31a. | Are you an | internat | No | 50 | 100 | 2,435 | 97 | 241 | 99 | 29,188 | 96 |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Respondent Profile: Natural-Math Science

## Tennessee Technological University

## Natural-Math Science

### First-Year Students[a]

### Seniors[a]

| | Item wording or description | Variable name | Response options | Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % | Tennessee Tech Count | Tennessee Tech % | Carnegie Class Count | Carnegie Class % | THEC Peer Group Count | THEC Peer Group % | NSSE 2016 & 2017 Count | NSSE 2016 & 2017 % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | international student? | | Yes | 0 | 0 | 121 | 5 | 16 | 6 | 1,507 | 5 | 0 | 0 | 86 | 3 | 3 | 1 | 1,114 | 4 |
| | | | Total | 31 | 100 | 2,408 | 100 | 259 | 100 | 28,319 | 100 | 50 | 100 | 2,521 | 100 | 244 | 100 | 30,302 | 100 |
| | [If answered "yes"] Country of citizenship, collapsed into regions by NSSE. Responses to *country* are in the data file. | countrycol *(Recoded from country.)* | Africa Sub-Saharan | 0 | 0 | 16 | 14 | 3 | 20 | 150 | 11 | 0 | 0 | 9 | 12 | 0 | 0 | 114 | 11 |
| | | | Asia | 0 | 0 | 46 | 41 | 8 | 53 | 798 | 56 | 0 | 0 | 35 | 45 | 1 | 33 | 554 | 54 |
| | | | Canada | 0 | 0 | 6 | 5 | 0 | 0 | 58 | 4 | 0 | 0 | 4 | 5 | 0 | 0 | 60 | 6 |
| | | | Europe | 0 | 0 | 11 | 10 | 2 | 13 | 134 | 9 | 0 | 0 | 6 | 8 | 0 | 0 | 99 | 10 |
| | | | Latin America and Caribbean | 0 | 0 | 21 | 19 | 0 | 0 | 174 | 12 | 0 | 0 | 15 | 19 | 2 | 67 | 146 | 14 |
| | | | Middle East and North Africa | 0 | 0 | 11 | 10 | 2 | 13 | 94 | 7 | 0 | 0 | 7 | 9 | 0 | 0 | 50 | 5 |
| | | | Oceania | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 11 | 1 |
| | | | Unknown region/uncoded | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | Total | 0 | 0 | 111 | 100 | 15 | 100 | 1,424 | 100 | 0 | 0 | 77 | 100 | 3 | 100 | 1,034 | 100 |
| 32. | What is your racial or ethnic identification? (Select all that apply.) | re_amind | American Indian or Alaska Native | 0 | 0 | 61 | 3 | 10 | 4 | 619 | 2 | 0 | 0 | 54 | 2 | 5 | 2 | 618 | 2 |
| | | re_asian | Asian | 1 | 3 | 338 | 14 | 20 | 8 | 4,021 | 14 | 7 | 14 | 286 | 11 | 12 | 5 | 3,727 | 12 |
| | | re_black | Black or African American | 0 | 0 | 361 | 15 | 101 | 39 | 2,990 | 11 | 0 | 0 | 217 | 9 | 48 | 20 | 2,102 | 7 |
| | | re_latino | Hispanic or Latino | 0 | 0 | 498 | 21 | 10 | 4 | 3,723 | 13 | 0 | 0 | 486 | 19 | 11 | 5 | 3,230 | 11 |
| | | re_pacific | Native Hawaiian or Other Pacific Islander | 0 | 0 | 32 | 1 | 2 | 1 | 326 | 1 | 1 | 2 | 22 | 1 | 1 | 0 | 256 | 1 |
| | | re_white | White | 29 | 94 | 1,286 | 53 | 139 | 53 | 18,266 | 64 | 41 | 84 | 1,524 | 60 | 167 | 69 | 21,254 | 70 |
| | | re_other | Other | 0 | 0 | 76 | 3 | 10 | 4 | 774 | 3 | 1 | 2 | 82 | 3 | 7 | 3 | 884 | 3 |
| | | re_pnr | I prefer not to respond | 1 | 3 | 53 | 2 | 4 | 2 | 769 | 3 | 1 | 2 | 109 | 4 | 8 | 3 | 1,231 | 4 |
| | Racial or ethnic identification | re_all *(Recoded from* re_amind *to* re_pnr *where each student is represented only once.)* | American Indian or Alaska Native | 0 | 0 | 13 | 1 | 0 | 0 | 114 | 0 | 0 | 0 | 10 | 0 | 1 | 0 | 124 | 0 |
| | | | Asian | 1 | 3 | 277 | 11 | 14 | 5 | 3,271 | 12 | 5 | 10 | 247 | 10 | 9 | 4 | 2,996 | 10 |
| | | | Black or African American | 0 | 0 | 288 | 12 | 85 | 33 | 2,336 | 8 | 0 | 0 | 187 | 7 | 47 | 19 | 1,653 | 5 |
| | | | Hispanic or Latino | 0 | 0 | 386 | 16 | 4 | 2 | 2,606 | 9 | 0 | 0 | 364 | 14 | 7 | 3 | 2,195 | 7 |
| | | | Native Hawaiian/Other Pac. Islander | 0 | 0 | 13 | 1 | 0 | 0 | 82 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 69 | 0 |
| | | | White | 29 | 94 | 1,108 | 46 | 121 | 47 | 16,150 | 57 | 40 | 82 | 1,348 | 53 | 153 | 63 | 19,204 | 63 |
| | | | Other | 0 | 0 | 46 | 2 | 6 | 2 | 451 | 2 | 1 | 2 | 54 | 2 | 4 | 2 | 512 | 2 |
| | | | Multiracial | 0 | 0 | 237 | 10 | 26 | 10 | 2,630 | 9 | 2 | 4 | 210 | 8 | 14 | 6 | 2,453 | 8 |
| | | | I prefer not to respond | 1 | 3 | 53 | 2 | 4 | 2 | 769 | 3 | 1 | 2 | 109 | 4 | 8 | 3 | 1,231 | 4 |
| | | | Total | 31 | 100 | 2,421 | 100 | 260 | 100 | 28,409 | 100 | 49 | 100 | 2,537 | 100 | 243 | 100 | 30,437 | 100 |
| 33. | Are you a member of a social fraternity or sorority? | greek | No | 29 | 94 | 2,254 | 93 | 234 | 90 | 25,996 | 91 | 42 | 84 | 2,328 | 92 | 214 | 88 | 27,126 | 89 |
| | | | Yes | 2 | 6 | 174 | 7 | 27 | 10 | 2,473 | 9 | 8 | 16 | 212 | 8 | 30 | 12 | 3,349 | 11 |
| | | | Total | 31 | 100 | 2,428 | 100 | 261 | 100 | 28,469 | 100 | 50 | 100 | 2,540 | 100 | 244 | 100 | 30,475 | 100 |
| 34. | Which of the following best describes where you are living while attending college? | living | Residence hall, dormitory or other camp. | 16 | 52 | 1,421 | 59 | 170 | 65 | 20,594 | 73 | 4 | 8 | 397 | 16 | 43 | 18 | 7,166 | 24 |
| | | | Fraternity or sorority house | 0 | 0 | 9 | 0 | 0 | 0 | 139 | 0 | 0 | 0 | 9 | 0 | 2 | 1 | 440 | 1 |
| | | | Residence (house, apartment, etc.) *within walking distance* to the institution | 2 | 6 | 181 | 7 | 21 | 8 | 1,649 | 6 | 18 | 37 | 540 | 21 | 48 | 20 | 8,706 | 29 |

## Natural-Math Science

| | Item wording or description | Variable name | Response options | First-Year Students[a] | | | | | | | | Seniors[a] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Tennessee Tech | | Carnegie Class | | THEC Peer Group | | NSSE 2016 & 2017 | | Tennessee Tech | | Carnegie Class | | THEC Peer Group | | NSSE 2016 & 2017 | |
| | | | | Count | % | Count | % | Count | % | Count | % | Count | % | Count | % | Count | % | Count | % |
| | | | Residence (house, apartment, etc.) *farther than walking distance* to the institution | 11 | 35 | 692 | 29 | 61 | 23 | 5,151 | 18 | 27 | 55 | 1,471 | 58 | 144 | 59 | 13,206 | 43 |
| | | | None of the above | 2 | 6 | 121 | 5 | 9 | 3 | 844 | 3 | 0 | 0 | 114 | 5 | 7 | 3 | 903 | 3 |
| | | | Total | 31 | 100 | 2,424 | 100 | 261 | 100 | 28,377 | 100 | 49 | 100 | 2,531 | 100 | 244 | 100 | 30,421 | 100 |
| 35. | Are you a student-athlete on a team sponsored by your institution's athletics department? | athlete | No | 31 | 100 | 2,250 | 93 | 241 | 93 | 25,242 | 89 | 49 | 98 | 2,402 | 95 | 234 | 96 | 28,038 | 92 |
| | | | Yes | 0 | 0 | 167 | 7 | 18 | 7 | 3,144 | 11 | 1 | 2 | 126 | 5 | 9 | 4 | 2,363 | 8 |
| | | | Total | 31 | 100 | 2,417 | 100 | 259 | 100 | 28,386 | 100 | 50 | 100 | 2,528 | 100 | 243 | 100 | 30,401 | 100 |
| 36. | Are you a current or former member of the U.S. Armed Forces, Reserves, or National Guard? | veteran | No | 31 | 100 | 2,384 | 99 | 255 | 98 | 27,908 | 98 | 49 | 100 | 2,440 | 96 | 232 | 96 | 29,308 | 96 |
| | | | Yes | 0 | 0 | 36 | 1 | 5 | 2 | 462 | 2 | 0 | 0 | 89 | 4 | 10 | 4 | 1,076 | 4 |
| | | | Total | 31 | 100 | 2,420 | 100 | 260 | 100 | 28,370 | 100 | 49 | 100 | 2,529 | 100 | 242 | 100 | 30,384 | 100 |
| 37a. | Have you been diagnosed with any disability or impairment? | disability | No | 26 | 84 | 2,105 | 87 | 224 | 86 | 24,550 | 86 | 43 | 86 | 2,130 | 84 | 198 | 81 | 25,767 | 85 |
| | | | Yes | 5 | 16 | 236 | 10 | 26 | 10 | 2,986 | 10 | 5 | 10 | 318 | 13 | 31 | 13 | 3,727 | 12 |
| | | | I prefer not to respond | 0 | 0 | 84 | 3 | 9 | 3 | 935 | 3 | 2 | 4 | 92 | 4 | 14 | 6 | 971 | 3 |
| | | | Total | 31 | 100 | 2,425 | 100 | 259 | 100 | 28,471 | 100 | 50 | 100 | 2,540 | 100 | 243 | 100 | 30,465 | 100 |
| b. | *[If answered "yes"]* Which of the following has been diagnosed? (Select all that apply.) | dis_sense | A sensory impairment (vision or hearing) | 1 | 20 | 27 | 12 | 3 | 12 | 451 | 15 | 1 | 20 | 46 | 15 | 3 | 10 | 407 | 11 |
| | | dis_mobility | A mobility impairment | 0 | 0 | 15 | 7 | 0 | 0 | 158 | 5 | 1 | 20 | 27 | 9 | 4 | 13 | 272 | 7 |
| | | dis_learning | A learning disability (e.g., ADHD, dyslexia) | 1 | 20 | 85 | 37 | 12 | 46 | 1,205 | 41 | 1 | 20 | 121 | 38 | 14 | 45 | 1,611 | 43 |
| | | dis_mental | A mental health disorder | 5 | 100 | 98 | 43 | 10 | 38 | 1,340 | 45 | 1 | 20 | 129 | 41 | 11 | 35 | 1,706 | 46 |
| | | dis_other | A disability or impairment not listed above | 2 | 40 | 54 | 23 | 6 | 23 | 530 | 18 | 2 | 40 | 72 | 23 | 11 | 35 | 683 | 18 |
| | Disability or impairment | disability_all | A sensory impairment | 0 | 0 | 17 | 1 | 3 | 1 | 291 | 1 | 0 | 0 | 29 | 1 | 1 | 0 | 235 | 1 |
| | | *(Recoded from* disability *and* dis_sense *to* dis_other *where each student is represented only once.)* | A mobility impairment | 0 | 0 | 11 | 0 | 0 | 0 | 92 | 0 | 0 | 0 | 15 | 1 | 1 | 0 | 137 | 0 |
| | | | A learning disability | 0 | 0 | 56 | 2 | 8 | 3 | 765 | 3 | 1 | 2 | 79 | 3 | 9 | 4 | 1,016 | 3 |
| | | | A mental health disorder | 2 | 6 | 65 | 3 | 6 | 2 | 861 | 3 | 1 | 2 | 80 | 3 | 4 | 2 | 1,078 | 4 |
| | | | A disability or impairment not listed | 0 | 0 | 38 | 2 | 5 | 2 | 337 | 1 | 2 | 4 | 51 | 2 | 7 | 3 | 427 | 1 |
| | | | More than one disability or impairment | 3 | 10 | 43 | 2 | 4 | 2 | 622 | 2 | 1 | 2 | 62 | 2 | 9 | 4 | 813 | 3 |
| | | | No disability or impairment | 26 | 84 | 2,105 | 87 | 224 | 86 | 24,550 | 86 | 43 | 86 | 2,130 | 84 | 198 | 81 | 25,767 | 85 |
| | | | Prefer not to respond | 0 | 0 | 84 | 3 | 9 | 3 | 935 | 3 | 2 | 4 | 92 | 4 | 14 | 6 | 971 | 3 |
| | | | Total | 31 | 100 | 2,419 | 100 | 259 | 100 | 28,453 | 100 | 50 | 100 | 2,538 | 100 | 243 | 100 | 30,444 | 100 |
| 38. | Which of the following best describes your sexual orientation? | sexorient17 | Straight (heterosexual) | 25 | 81 | 1,269 | 85 | 127 | 88 | 16,238 | 85 | 45 | 90 | 1,272 | 86 | 64 | 85 | 17,554 | 85 |
| | | | Bisexual | 5 | 16 | 83 | 6 | 7 | 5 | 1,048 | 5 | 0 | 0 | 53 | 4 | 3 | 4 | 1,008 | 5 |
| | | | Gay | 0 | 0 | 23 | 2 | 1 | 1 | 267 | 1 | 0 | 0 | 22 | 1 | 2 | 3 | 386 | 2 |
| | | | Lesbian | 0 | 0 | 8 | 1 | 1 | 1 | 185 | 1 | 0 | 0 | 23 | 2 | 4 | 5 | 181 | 1 |

# NSSE 2017 Major Field Report, Part II: Comparisons to Other Institutions

## Respondent Profile: Natural-Math Science

## Tennessee Technological University

## Natural-Math Science

| Item wording or description | Variable name | Response options | First-Year Students[a] | | | | | | | | Seniors[a] | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Tennessee Tech | | Carnegie Class | | THEC Peer Group | | NSSE 2016 & 2017 | | Tennessee Tech | | Carnegie Class | | THEC Peer Group | | NSSE 2016 & 2017 | |
| | | | Count | % | Count | % | Count | % | Count | % | Count | % | Count | % | Count | % | Count | % |
| | | Queer | 0 | 0 | 4 | 0 | 0 | 0 | 127 | 1 | 0 | 0 | 6 | 0 | 0 | 0 | 151 | 1 |
| | | Questioning or unsure | 0 | 0 | 20 | 1 | 2 | 1 | 279 | 1 | 1 | 2 | 18 | 1 | 1 | 1 | 232 | 1 |
| | | Another sexual orientation | 1 | 3 | 30 | 2 | 2 | 1 | 317 | 2 | 3 | 6 | 16 | 1 | 1 | 1 | 312 | 2 |
| | | I prefer not to respond | 0 | 0 | 58 | 4 | 4 | 3 | 638 | 3 | 1 | 2 | 61 | 4 | 0 | 0 | 820 | 4 |
| | | Total | 31 | 100 | 1,495 | 100 | 144 | 100 | 19,099 | 100 | 50 | 100 | 1,471 | 100 | 75 | 100 | 20,644 | 100 |
| **Institution-reported information** | | | | | | | | | | | | | | | | | | |
| (Variables provided by your institution in your NSSE population file.) | | | | | | | | | | | | | | | | | | |
| Institution-reported: Sex | IRsex | Female | 20 | 65 | 1,738 | 71 | 192 | 73 | 19,522 | 68 | 33 | 66 | 1,595 | 62 | 158 | 64 | 19,107 | 62 |
| | | Male | 11 | 35 | 715 | 29 | 72 | 27 | 9,244 | 32 | 17 | 34 | 974 | 38 | 88 | 36 | 11,623 | 38 |
| | | Total | 31 | 100 | 2,453 | 100 | 264 | 100 | 28,766 | 100 | 50 | 100 | 2,569 | 100 | 246 | 100 | 30,730 | 100 |
| Institution-reported: Race or ethnicity | IRrace | American Indian or Alaska Native | 0 | 0 | 7 | 0 | 0 | 0 | 139 | 1 | 1 | 2 | 14 | 1 | 2 | 1 | 140 | 1 |
| | | Asian | 1 | 3 | 226 | 10 | 7 | 3 | 2,322 | 9 | 6 | 12 | 200 | 9 | 8 | 3 | 2,335 | 9 |
| | | Black or African American | 0 | 0 | 288 | 13 | 90 | 34 | 2,094 | 8 | 0 | 0 | 179 | 8 | 47 | 19 | 1,534 | 6 |
| | | Hispanic or Latino | 0 | 0 | 421 | 19 | 9 | 3 | 3,123 | 12 | 0 | 0 | 422 | 18 | 10 | 4 | 2,767 | 10 |
| | | Native Hawaiian/Other Pac. Islander | 0 | 0 | 5 | 0 | 0 | 0 | 45 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 56 | 0 |
| | | White | 29 | 94 | 1,042 | 47 | 117 | 44 | 14,654 | 58 | 41 | 82 | 1,308 | 56 | 159 | 65 | 17,650 | 65 |
| | | Other | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 |
| | | Foreign or nonresident alien | 0 | 0 | 90 | 4 | 19 | 7 | 1,174 | 5 | 0 | 0 | 67 | 3 | 3 | 1 | 899 | 3 |
| | | Two or more races/ethnicities | 1 | 3 | 91 | 4 | 16 | 6 | 980 | 4 | 2 | 4 | 62 | 3 | 13 | 5 | 959 | 4 |
| | | Unknown | 0 | 0 | 70 | 3 | 5 | 2 | 752 | 3 | 0 | 0 | 91 | 4 | 4 | 2 | 933 | 3 |
| | | Total | 31 | 100 | 2,240 | 100 | 263 | 100 | 25,293 | 100 | 50 | 100 | 2,350 | 100 | 246 | 100 | 27,276 | 100 |
| Institution-reported: Class level | IRclass | Freshman/First-Year | 31 | 100 | 2,453 | 100 | 264 | 100 | 28,767 | 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Sophomore | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Junior | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Senior | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 100 | 2,569 | 100 | 246 | 100 | 30,732 | 100 |
| | | Other | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Total | 31 | 100 | 2,453 | 100 | 264 | 100 | 28,767 | 100 | 50 | 100 | 2,569 | 100 | 246 | 100 | 30,732 | 100 |
| Institution-reported: First-time first-year (FTFY) student | IRftfy | Not first-time first-year | 6 | 19 | 198 | 8 | 32 | 12 | 2,039 | 7 | 50 | 100 | 2,569 | 100 | 246 | 100 | 30,472 | 99 |
| | | First-time first-year | 25 | 81 | 2,255 | 92 | 232 | 88 | 26,728 | 93 | 0 | 0 | 0 | 0 | 0 | 0 | 259 | 1 |
| | | Total | 31 | 100 | 2,453 | 100 | 264 | 100 | 28,767 | 100 | 50 | 100 | 2,569 | 100 | 246 | 100 | 30,731 | 100 |
| Institution-reported: Enrollment status | IRenrollment | Not full-time | 0 | 0 | 72 | 3 | 9 | 3 | 685 | 2 | 9 | 18 | 391 | 15 | 41 | 17 | 3,440 | 11 |
| | | Full-time | 31 | 100 | 2,381 | 97 | 255 | 97 | 28,082 | 98 | 41 | 82 | 2,178 | 85 | 205 | 83 | 27,292 | 89 |
| | | Total | 31 | 100 | 2,453 | 100 | 264 | 100 | 28,767 | 100 | 50 | 100 | 2,569 | 100 | 246 | 100 | 30,732 | 100 |

## Endnotes

a. All results are unweighted.

b. Standard deviation is a measure of the amount the individual scores deviate from the mean of all the scores in the distribution.

c. Standard error of the mean, used to compute a confidence interval (CI) around the sample mean. For example, the 95% CI is the range of values that is 95% likely to contain the true population mean, equal to the sample mean +/- 1.96 * SEM.

d. A percentile is the point in the distribution of student-level EI scores at or below which a given percentage of EI scores fall.

e. Degrees of freedom used to compute the *t* -tests. Values differ from Ns due to whether equal variances were assumed.

f. Statistical significance represents the probability that the difference between the mean of your institution and that of the comparison group occurred by chance: $*p < .05$, $**p < .01$, $***p < .001$ (2-tailed).

g. Cohen's *d:* The mean difference divided by the pooled standard deviation. Effect size indicates the practical importance of an observed difference. For EI comparisons, NSSE research has concluded that an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2015). Comparisons with an effect size of at least .3 in magnitude (before rounding) are highlighted in the Overview.

h. Percentage of students who responded "Done or in progress" except for service-learning which is the percentage who responded that at least "Some" courses included a community-based project.

i. Percentage point differences (institution – comp. group) rounded to whole numbers. Values less than one may not display a bar and may be shown as +0 or -0.
$*p < .05$, $**p < .01$, $***p < .001$ (*z* -test comparing participation rates).

j. Cohen's *h:* The standardized difference between two proportions. Effect size indicates the practical importance of an observed difference. NSSE research has found that interpretations vary by HIP: For service-learning, internships, study abroad, and culminating senior experiences, an effect size of about .2 may be considered small, .5 medium, and .8 large. For learning community and research with faculty, an effect size of about .1 may be considered small, .3 medium, and .5 large (Rocconi & Gonyea, 2015).

k. Means calculated from ordered response options (e.g., Very Often, Often, Sometimes, Never) assume equal intervals and should be interpreted with caution. Unless otherwise noted, statistical comparisons are two-tailed independent t-tests. Exceptions are the dichotomous high-impact practice items (11a to 11f) which are compared using a z-test.

l. Items that make up the Engagement Indicators include the following two-letter prefixes: CL = Collaborative Learning, DD = Discussions with Diverse Others, ET = Effective Teaching Practices, HO = Higher-Order Learning, LS = Learning Strategies, QI = Quality of Interactions, QR = Quantitative Reasoning, RI = Reflective and Integrative Learning, SE = Supportive Environment, and SF = Student-Faculty Interaction.

m. These are the values used to calculate means. For the majority of items, these values match the codes in the data file and codebook. For items estimating number of papers and hours per week, the values represent actual units using the midpoints of response option ranges and an estimate for unbounded options.

n. Effect size for independent *t* -tests uses Cohen's *d; z* -tests use Cohen's *h.*

o. Statistical comparison uses *z* -test to compare the percentage who responded "Done or in progress."

***Key to symbols:***

▲ **Your students' average** was significantly higher ($p < .05$) with an effect size at least .3 in magnitude.

△ **Your students' average** was significantly higher ($p < .05$) with an effect size less than .3 in magnitude.

▽ **Your students' average** was significantly lower ($p < .05$) with an effect size less than .3 in magnitude.

▼ **Your students' average** was significantly lower ($p < .05$) with an effect size at least .3 in magnitude.

Note: It is important to interpret the direction of differences relative to item wording and your institutional context.

***Reference:*** Rocconi, L., & Gonyea, R. M. (2015). Contextualizing student engagement effect sizes: An empirical analysis. Paper presented at the Association for Institutional Research Annual Forum, Denver, CO.