

ENGINEERING

Engineering Technology Students: Comparing Recent Survey Responses

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The general population is unfamiliar with the job prospects or degree content of engineering technology (ET). Further, ET is an understudied subset of STEM, encouraging a recent push by the National Academy of Engineering for more study into this population to encourage program growth and retention of ET students.

Surveys were sent out online to collect data from Purdue University ET undergraduates (N = 609) and graduates (N = 226), and data from ET undergraduates (N = 60) and graduates (N = 43) nationwide. This survey focused on demographics, career factors, and public understanding of ET. The datasets were compared using z-test statistical methods, revealing that Purdue students felt more prepared for a career at graduation (z = 5.0823, p < 0.00001) and more respected than students from other institutions (z = 3.368, p = 0.00076). However, both groups of students felt that the public does not completely understand ET, shown by a combination of both datasets (42% reporting no understanding). Although the dataset was small for this study, the research team hopes to expand the dataset in the coming years. This study suggests that other institutions may benefit from adopting methods used by Purdue, and that more work is needed to educate the public about ET.

There is ongoing research by the group to study this population in more detail, including collecting in-depth information about ET and engineering students from other institutions nationwide. By raising awareness for ET, it is hoped that more students will consider it when selecting a major and that employers will become more aware of what graduates of the field are capable of.

Research faculty advisor Anne Lucietto writes: "Liza's research is supported by NAE to learn more about the engineering technology population and encouraging growth in an underrecognized area of STEM. Findings she has generated provide the foundation for more work in this area, understanding the students, and the attraction to this field of study."

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The reported respect that Purdue and United States ET graduates experienced at work from coworkers and superiors. United States ET graduates reported less respect than Purdue graduates.