Research and Extension
Mr. Haughey’s research focuses on three primary areas: 1) instrumentation and controls, 2) mechatronics, and 3) engineering/technology education. In terms of instrumentation and controls, he is interested in applying automated control systems to solve advanced manufacturing problems related to machine operation, product flow, and power usage. Mr. Haughey’s research in mechatronics (electro-mechanical systems control by a computer software system) emphasizes how these systems can be deployed to autonomously navigate through their environment as mobile robots. Extending this to his research in engineering/technology education, he is interested in evaluating how these projects can influence student engagement, impact student learning, and affect departmental course budgets. In each of these areas, Mr. Haughey looks to apply his research to help and engage the community in his locale.

Current Research Projects
Currently, Mr. Haughey is examining the interactions between mechatronic projects and students in a first-year undergraduate classroom. Specifically, he is analyzing how student engagement can be influenced, how student’s motivational orientation to learn is changed, what variables can predict this change, and what cost structures are associated with these projects.

Other Professional Interests
Mr. Haughey is very interested in promoting technology, management, and the application of engineering principles in the professional workplace. To this end, he has served the Association of Technology, Management, and Applied Engineering (ATMAE) as a Board of Accreditation member and Board of Certification ad-hoc member for the past four years. Additionally, Mr. Haughey enjoys mentoring the department’s ATMAE affiliated ITEC student club to engage with the technology profession.