Samueli School of Engineering
M.S./Ph.D. in Engineering with a Concentration in Materials and Manufacturing Technology

Program Learning Outcomes

Core Knowledge. Students will be able to:

- Demonstrate general knowledge of core topics in Materials Science and Manufacturing Technology and deep knowledge in the candidate's area of specialization, necessary for professional practice and/or academic research.

Pedagogy. Students will be able to:

- Communicate effectively to large and small groups in pedagogical settings in lecture and/or discussion formats.

Scholarly Communication. Students will be able to:

- Structure a coherent academic argument that rigorously presents and evaluates research data.
- Make clear presentations and professional documents that summarize their research and its significance.

Professional Leadership. Students will be able to:

- Lead independent research projects
- Manage a team of technical staff in pursuit of basic and applied research

Independent Research. Students will be able to:

- Develop and carry out independent research projects with theoretical and methodological rigor.

Broader Impacts. Students will be able to:

- Apply their knowledge to problems of industrial relevance.
- Understand the technological and societal impacts of their research.