MATERIALS SCIENCE AND ENGINEERING

Learning outcomes

Master of Science (m.S.)

1. **KNOW:** Demonstrate appropriate breadth and depth of fundamental knowledge in materials science and engineering.
2. **THINK:** Review and critically analyze the ideas of other scientists and engineers, especially those addressing problems closely related to their own research.
3. **APPLY/CREATE:** Apply the scientific method using laboratory, computational and/or theoretical techniques to create new knowledge in material science and engineering or to design new materials.
4. **COMMUNICATE:** Effectively communicate unanswered questions about materials in writing and oral presentations; express the scientific and societal impact of their work; and disseminate new knowledge through archived publications, such as articles and theses.
5. **PROFESSIONAL PRACTICE:** Employ the highest ethical and professional standards, and the best practices in laboratory safety, in all research and academic endeavors.

Doctor of Philosophy (Ph.D.)

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