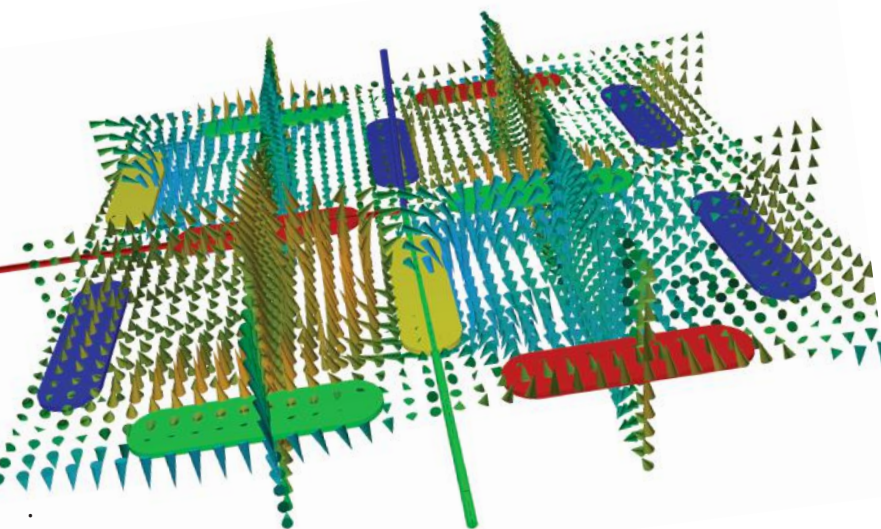


Computational Materials Science and Engineering

- Are you fascinated by the use of computer simulations to predict material behavior, from the atomistic length scale all the way up to industrial products?
- Would you like to learn how to model the behavior of complex 3D microstructures when they are exposed to mechanical stresses, or compositional and thermal gradients?

Then this unique new Master of Science degree program may be just what you are looking for!

The M.S. in Computational Materials Science and Engineering (CMSE) is a full-time coursework-based degree that provides an advanced foundational education to professionals interested in careers in computational MSE. The program is aimed at students who wish to learn how computational approaches can contribute to creating a fundamental understanding of materials structure, properties and processing. After completing this three-semester program, students will understand how to use and implement computational tools and adapt them to solve problems in MSE.



The CMSE Program Provides Computational Courses On The Following Topics:

- Methods of Computational Materials Science
- Electronic and Atomistic Simulation Tools
- Mesoscale Simulation Tools
- Data Analytics for Materials Science
- 3D and 4D Analysis Tools
- Computational Thermodynamics

Students can augment these courses with a mix of elective and research units.

Applicants interested in learning about foundations in current and emerging computation have the option to apply for the 4-semester CMSE + Integrated Study in Computer Science in conjunction with CMU's School of Computer Science.

Department of Materials Science & Engineering
Carnegie Mellon University
5000 Forbes Avenue
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Pittsburgh, PA 15213
412-268-2700

Application Window:
October 1 - January 15



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