GRADUATE EMBEDDED CERTIFICATE IN COMPUTATIONAL MATERIALS SCIENCE AND ENGINEERING

The learning outcomes for the Certificate are:

(1) Broad contextual knowledge of multiple computational methods adopted in materials related disciplines,

(2) Hands-on experience in at least one computational method, and

(3) Ability to understand and interpret computational components of research articles and technical reports. These outcomes will be evaluated by their grades and scores in the appropriate parts of the respective courses.

Contact the School of Materials Science and Engineering for more information.

Code	Title	Credit Hours
Core Course		
MSE 6140	Computational Materials Science and Engineering	3
Electives		**9**
MSE 6795	Mathematical, Statistical, and Computational Techniques in Materials Science	
MSE 8803	Special Topics (Density Functional Theory for Materials Scientists)	
MSE 8803	Special Topics (Molecular Dynamics and Monte Carlo Methods)	
ME 8883	Special Topics in Mechanics of Materials (Materials Informatics)	
ME 4042	Interactive Computer-Aided Design and Computer-Aided Engineering	
ME 6124	Finite-Element Method: Theory and Practice	
CHEM 6485	Computational Chemistry	
Total Credit Hours		**12**