

ENGR 4315 : Computational Modeling of Materials

Computational modeling is used to analyze materials and systems at multiple scales. Multi-scale modeling begins with first principle calculations at the quantum mechanics level, proceeds to the atomic level, and concludes with the continuum level. Modeling techniques discussed at each level include: density functional theory, molecular dynamics, and finite element analysis.

Credits 3

Course ID

008952

Requisites

[ENGR 4315](#) Prerequisite: [ENGR 3347](#)

Semester Offered

Fall semester, odd years