

Variation algorithms in problems of continuum mechanics

This course includes generalization of classical variational methods of discrete mechanics for problems of continuum media. Peculiarities of this generalization will be shown by the examples of dynamics of multicomponent systems. Connection between variational principles of mechanics and variational methods of mathematical physics will be shown also. Main attention will be paid to interaction between components, formulation of boundary conditions, reduction of the initial heterogeneous model to homogeneous model suitable to analytical and numerical analysis.

Кількість кредитів: 4

Форма контролю: іспит

Викладач: Лимарченко О.С., д-р т. н., професор, завідувач кафедри механіки суцільних середовищ.