## CHEG-228: Advanced Spectroscopy

The chief aim of this course is to provide an understanding of how the tools of modern spectroscopy can be applied to unravel the structural and dynamical properties of molecular systems, with a focus on optical techniques. The course will cover the theoretical basis of light-matter interactions and factors governing the rotational, vibrational and electronic spectra of diatomic and polyatomic molecules. It will conclude with a consideration of what can be learned when cuttingedge spectroscopic techniques are applied to large, complex systems.

Credits: 3

**Program:** Chemical Engineering

1 2023-2024