

## Course Map

**"Gaseous Electronics is the study partially ionized gases and their application to technologically relevant devices."**

**MICROSCOPIC**



**MACROSCOPIC**

Electron collisions

Cross sections, rate coefficients

Gas discharge theory

Electron production, loss

Sheaths

Electron distribution functions

Transport coefficients

Low pressure dc discharge devices

High pressure discharges and  
e-beam pumped plasmas

rf and microwave discharges

Diagnostics

Applications:

Plasma etching

Toxic Gas Remediation

Special Topics