

### EEE.8-1.3 Advanced Automatic Control Systems

- 1<sup>st</sup> Module:** State-space representation and analysis
- 2<sup>nd</sup> Module:** State transition matrix
- 3<sup>rd</sup> Module:** Canonical forms
- 4<sup>th</sup> Module:** Characteristic equation, eigenvalues and eigenvectors
- 5<sup>th</sup> Module:** Controllability of linear systems
- 6<sup>th</sup> Module:** Observability of linear systems
- 7<sup>th</sup> Module:** Lyapunov stability methods
- 8<sup>th</sup> Module:** Pole-placement design by state feedback techniques
- 9<sup>th</sup> Module:** State feedback with integral control
- 10<sup>th</sup> Module:** Transient response analysis
- 11<sup>th</sup> Module:** Optimal control