Code	**ECE 501**
Name	**Linear Systems**
Hour per week	3 (3 + 0)
Credit	3
ECTS	10
Level/Year	Graduate
Semester	Spring
Type	Elective
Prerequisites	none
Content	The purpose of this course is to provide the students with the fundamental tools of linear system design, analysis, and control. The course content includes Introduction to Linear Systems, State-space representation and analysis, Solution for state-space linear time-invariant (LTI) systems, Controllability and Observability, State Feedback Control, Optimal Control, Stability, Discrete-time systems, Design Considerations and Steady-state accuracy, MIMO systems, Passivity, Polynomial representations and designs.