Out of Department Courses Accepted by ECE at CSU

## 4/22/24

This list can be updated and students can ask about courses not on this list, by emailing the department's Graduate Advisor. Courses on the list indicate approval by ECE's Graduate Committee and Department Head.

BIOM533 Biomolecular Tools for Engineers

CM506 Protein Basics for non-biologists

Computer Science courses, CS prefix- 400 level and 500 level and 600 level are accepted.

GRAD510 Fundamentals of High-Performance Computing

GRAD530 Introduction to Graduate Research

GRAD544 Ethical Conduct of Research

**GRAD550 Stem Communication** 

GRAD575 Ethical Issues in Big Data Research

MATH550 (but note: credit not allowed for both ENGR550 and MATH550) – Numerical Methods in Science & Engineering

MATH569 series Linear Algebra

MECH502 Advanced/Additive Manufacturing Engineering

MECH513 Simulation Modeling & Experimentation

MECH518 Orbital Mechanics

**MECH524** Principles of Dynamics

MECH529 Advanced Mechanical Systems

MECH531 Materials Engineering

MECH564 Fundamentals of Robot Mechanics & Controls

MECH570 Bioengineering

MECH575 Solar and Alternative Energies

MECH630 Biological Inspired Robotics

NSCI575 Ethical Issues in Big Data

STAA561 Probability with Applications

SYSE501 /ENGR501 Foundations of Systems Engineering - only counts for ME students

ENGR510 Engineering Optimation: Method/Application ENGR520 Engineering Decision Support/Expert Systems ENGR525 Intellectual Property and Invention ENGR531 Engineering Risk Analysis ENGR533 Spaceflight and Biological Systems ENGR570 Coupled Electromechanical Systems **ENGR665 Stochastic Simulation** SYSE530 Overview of Systems Engineering Processes SYSE/ENGR532 Dynamics of Complex Engineering Systems SYSE541 Engineering Data Design and Visualization SYSE549 Secure Vehicle and Industrial Networking SYSE567 Systems Engineering Architecture SYSE/ENGR569 Cybersecurity Awareness for Systems Engineers SYSE571 Analytics in Systems Engineering SYSE573 Cost Optimization for Systems Engineers SYSE711 Ethics in Systems Engineering