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- Develop analytical skills and optimization methods
- Broaden perspectives working with systems through all phases
- Analyze architecture issues associated with real-time systems, information assurance, networked enterprises, and virtual and physical architecture prototypes
- Learn models and tools for alternatives analysis and decision making
- Explore queuing theory and analysis
- Use detail design for reliability, maintainability, logistics, affordability

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**INSTRUCTOR BIO**

**Dr. James Cale (Spring Semester)** is an Associate Professor in System Engineering at Colorado State University in Fort Collins, CO. His research focuses on modeling, control and design optimization of energy sources and systems. His background and interests are in the areas of energy conversion, power electronics, finite-inertia power systems. Computational and applied electromagnetics, biologically-inspired optimization methods, microgrids, power hardware-in-the-loop, and machine learning algorithms.

**Bill Wood (Fall Semester)** has a 45 year background in the US Air Force and Aerospace industry, highlighted by work on a number of major classified and unclassified systems for the US Government. His technical foundation is in the areas of Astrodynamics and Software while his practical applications ranged from satellite constellation operations to large scale air combat control integration.