

Department of Industrial & Systems Engineering

Vision	A resource for comprehensive ISE education and research training and an engine for scientific contributions with society-level impact.						
Strategy	<p style="text-align: center;">How are we going to get there</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <p>Recruit outstanding and diverse faculty in critical methodological and demanding application areas</p> <p>Expand department interdisciplinary research</p> <p>Develop center/institute level research activity in each research thrust area</p> </div> <div style="width: 30%; text-align: center;"> <p>Increase ISE foundation support through new and expanding alumni and corporate relations</p> </div> <div style="width: 30%;"> <p>Create world-class undergraduate curriculum for highly skilled and uniquely qualified candidates</p> <p>Deliver high-demand professional degree and certificate programs</p> <p>Increase department PhD student supervision and quality through practical research and teacher training</p> </div> </div>						
Initiatives	Data Science & Analytics Training & Research	Energy Systems Research	Health Systems Engineering Training & Research Advances	Human Systems Engineering Education & Research	Operations Research & Quantitative Finance	Supply Chain & Logistics Systems Analysis & Research	Systems Engineering & Engineering Management Education
Framework	The Center for Applied Optimization (CAO) & the Computational Data Analytics (CDA) Lab	Computational Optimization & Energy Systems (COES) Lab	The Health-ENGINE Lab	UF Human-Systems Engineering (HSE) Lab	CAO, COES Lab, & the Risk Management & Financial Engineering (RMFE) Lab	The Supply Chain & Logistics Engineering (SCALE) Center	UF ISE OEM PROGRAM + UF ISE at REEF (educational contract)
Programs	Biomedical data analysis Network criticality & robustness Data driven Smart Green Manufacturing & Energy	Data-Driven Stochastic Optimization Models & Algorithms + Energy Storage Policy Development + Large-Scale Optimization Algorithms for Electricity Generation Scheduling	Stochastic models & service mechanisms for care delivery with health-IT + Simulation & optimization for health policy & operations + Data driven optimization for diagnosis & treatment	Driver safety + Human activity recognition with wearable technology & machine learning + Mobile health & patient monitoring	Applied probability for service systems, mathematical programming & algorithms, risk regulation policy revision	Inventory & production planning for remanufacturing systems + Supply chain design & operation for food & bio-fuel crops + Aircraft maintenance planning & scheduling + Data-driven stochastic inventory control	Systems Engineering Certificate + MS/ME in Engineering Management
Future Plans	Fundraising for Data Science & Analytics Training & Research	Fundraising for Energy Systems Research	Fundraising for Health Systems Engineering Training & Research Advances	Fundraising for Human Systems Engineering Education & Research	Fundraising for Operations Research & Quantitative Finance	Fundraising for Supply Chain & Logistics Systems Analysis & Research	Fundraising for Systems Engineering & Engineering Management Education