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JANUARY
Multivariate/ Multicollineer Data Fusion Techniques
Coordinator and Lecturer: Lawrence A. Klein, PhD, author of Sensor and Data Fusion: A Tool for Information Dominance and Decision-Making, Prentice Hall and Information Networking and Signal Processing and Sensor Technologies and Data Representations in DC. Textbook and Lab Hours: 24
Reg#: 202048
Fee: $2905 Through Dec 20: $2905 After: $3195

Multivariate Signal Processing in Transmitter and Receiver Desigms
Digital Signal Processing (DSP) is the enabling technology for the signal-conditioning and signal-processing tasks performed in modern modulators and demodulators. Learn the structure, unique attributes and capabilities, and implementation considerations of advanced multivariable wire structures, and related issues.
Coordinator and Lecturer: Irving J. Harris, PhD, Cadence Signal Processing Chair Professor of Electrical and Computer Engineering, San Diego State University. Textbook and Lab Hours: 24
Reg#: 1.8 CEU (18 hours of instruction)
Fee: $2905 Through Dec 20: $2905 After: $3195

Satellite Thermal Control
The first course in a two-course series. A basic understanding of satellite thermal design, the factors which influence thermal control subsystems, and the complications of the different thermal design and operation approaches. It is essential for students to be familiar with satellite thermal design and thermal control.
Coordinator and Lecturer: David G. Sheren, Senior Engineering Specialist, Satellite Thermal Department, The Aerospace Corporation. Textbook and Lab Hours: 10.1 CEU (90 hours of instruction)
Reg#: 1.8 CEU (18 hours of instruction)
Fee: $2905 Through Dec 20: $2905 After: $3195

FEBRUARY
Airline Design Leads and Certification
Learn the methods for performing airline design analyses as well as how to present and validate those analyses to civil or military authorities. Topics include how to design methods manuals which impact airline structural integrity.
Coordinator and Lecturer: William J. Jordan, MA, Leads and Flight Certification Consultant, Kwartemp Industries Corporation. Textbook and Lab Hours: 1 CEU (10 hours of instruction)
Reg#: 1.0 CEU (10 hours of instruction)
Fee: $175 Through Jan 18, 2016 (Min-Tax)

AVG Aircraft Design
This course covers the conceptual design, development, and operation of Brownies / Uninhabited Air Vehicles (UAVs), excluding commercial vehicles (AVGs). Learn aspects from choosing layout design and analysis of aerodynamics in design and optimization.
Coordinator and Lecturer: Daniel J. Huey, PhD, President, Conceptual Research Corporation, and author of Aircraft Design: An Integrated Approach to Computer-Aided Design and Analysis (McGraw-Hill). Textbook and Lab Hours: 1 CEU (10 hours of instruction)
Reg#: 1.0 CEU (10 hours of instruction)
Fee: $175 Through Jan 18, 2016 (Min-Tax)

Airframe Stress Analysis and Sizing
Learn basic techniques for evaluating airframe stress and weight. Learn how to reduce sizing of aircraft structures by identifying the right structural configurations and materials. This course provides reliable airframe sizing information and data to pilots, flight engineers, and other professionals based on past experiences and real-world projects.
Coordinator and Lecturer: Michael C. Fu, PhD, President, All Airline Consulting Company. Textbook and Lab Hours: 4 CEU (36 hours of instruction)
Reg#: 1 CEU (4 hours of instruction)
Fee: $175 Through Dec 11, 2015 (Min-Tax)

Composite Airframe Structures
Learn to design lightweight and efficient composite airframe structures with structural integrity in specifications and regulations for a broad range of aircraft configurations, including transports, fighters, and general aviation aircraft.
Coordinator and Lecturer: Michael C. Fu, PhD, President, All Airline Consulting Company. Textbook and Lab Hours: 2 CEU (18 hours of instruction)
Reg#: 1.0 CEU (2 hours of instruction)
Fee: Through Dec 11, 2015 (Min-Tax)

MAY
Spacecraft Design and System Engineering
The course covers the conceptual design, development, and operational aspects of spacecraft. Learn aspects from choosing layout design, analyzing space missions, and predicting spacecraft performance.
Coordinator and Lecturer: Bernard Sklar, PhD, President, Communications Engineering Services. Textbook and Lab Hours: 2 CEU (18 hours of instruction)
Reg#: 1.0 CEU (2 hours of instruction)
Fee: $175 Through Mar 25, 2016 (Min-Tax)

Modern Microwave Antenna Measurements
Join an industry panel, thought leaders, and researchers investigating microstrip measurements methodologies, designs, and applications for advanced microwave antenna systems. Learn the design, use, and evaluation of all capabilities and understand measurements technology at the core of the U.S. defense industry.
Coordinator and Lecturer: Donald L. England, PhD, Professor of Antenna Engineering, California State Polytechnic, University. Textbook and Lab Hours: 1 CEU (10 hours of instruction)
Reg#: 1.0 CEU (10 hours of instruction)
Fee: Through April 25, 2016 (Min-Tax)

Kalman Filter Theory and Applications
The Kalman filter is probably the most successful and widely-used part of “modern control theory” and a central piece of the process through sample designs and implementations. Real-time MATLAB simulations illustrate essential concepts. The Kalman filter is probably the most successful and widely-used part of “modern control theory” and a central piece of the
Coordinator and Lecturer: Hangphong (Lily) L. Phan, Boeing Senior Technical Fellow, Boeing integrated Defense Systems. Textbook and Lab Hours: 1.2 CEU (12 hours of instruction)
Reg#: 1.2 CEU (12 hours of instruction)
Fee: Through Apr 25, 2016 (Min-Tax)

JUNE
System and Software Architecting
Brainstorm how your services and applications will be architected, and how to architect and build modern software applications and services. Learn to design, develop, and support web-based and mobile applications.
Coordinator and Lecturer: Bruce R. Steltz, PhD, WES, WES, President, Applications Technology LLC, Austin, TX, USA. Textbook and Lab Hours: 1.2 CEU (12 hours of instruction)
Reg#: 1.2 CEU (12 hours of instruction)
Fee: Through Feb 15, 2016 (Min-Tax)

Criticality Structural of Now and Aging Metallic Aircraft
Learn the conceptual and physical relations for fatigue, durability, and damage tolerance analysis of metallic aircraft structures. The lecture examines the uses of modern fatigue and fracture mechanics technology in the design of faster, lighter, and more efficient aircraft and aircraft systems. The course is designed for design engineers, design managers, or those who wish to pursue a career in fatigue, durability, or damage tolerance analysis.
Coordinator and Lecturer: Matthew Creager, PhD, President, Structural Integrity Engineering. Textbook and Lab Hours: 1.2 CEU (12 hours of instruction)
Reg#: 1.2 CEU (12 hours of instruction)
Fee: Through Feb 15, 2016 (Min-Tax)

Lithium-Ion Battery Technology
Emerging as a viable, safe, and cost-effective energy source due to its significant weight and volume advantage, lithium-ion technology is rapidly being adopted by the aerospace, automotive, and consumer electronics industries worldwide. Learn how to utilize this technology’s development, design, and application. Explore safe battery technology design options. Learn the battery’s components, functions, and applications for aerospace, automotive, and consumer electronics.
Coordinator and Lecturer: Hangphong (Lily) L. Phan, Boeing Senior Technical Fellow, Boeing Integrated Defense Systems. Textbook and Lab Hours: 1.2 CEU (12 hours of instruction)
Reg#: 1.2 CEU (12 hours of instruction)
Fee: Through Feb 15, 2016 (Min-Tax)