

# AEROSPACE

## SHORT COURSES

# Principles of Aerospace Engineering (AERO0421)

**Instructor: Willem A.J. Anemaat**

### **Course Description**

The course will provide an introduction to aerospace engineering principles for non-aerospace professionals. Explanation of different disciplines in an aircraft development program are discussed. Class discussions include introduction to atmosphere, aircraft components, aerodynamics, weight and balance, stability and control, aircraft performance and an introduction to loads. Fixed wing aircraft, VTOL aircraft and helicopters as well as spacecraft (limited) will be introduced.

### **Who Should Attend?**

Certification Engineers, Design Engineers, Engineering Management, Program Managers, Business Development Personnel, and Designated Engineering Representatives (DER)/Organization Designation Authorization Unit Members (ODA UM).

### **Learning Objectives**

- Identify major components that make up an aircraft.
- Understand what is involved in designing and analyzing aircraft.
- Understand aircraft terminology to be able to communicate with aerospace engineers.

### **Classroom hours / CEUs**

21 classroom hours

2.1 CEUs

### **Certificate Track**

Aircraft Design (AD)

### **Course Fees**

Early registration course fee: \$1,995 if you register and pay by the early registration deadline (45 days out).

Regular registration course fee: \$2,095 if you register and pay after the early registration deadline.

### **Course Materials**

Course materials, including outlines, presentation copies, and supplementary materials, will be accessible through Canvas, KU's online learning system. Instructions to access Canvas will be provided upon completed registration. Students are required to bring a computer or other electronic device with PDF-viewing capabilities with them to class each day. If you require accommodation contact us at [professionalprograms@ku.edu](mailto:professionalprograms@ku.edu) and we will work with you on an accessible solution.

### **U.S. Federal Employee Discount**

This course is available to U.S. federal employees at 10% off the registration fee. To receive the federal employee discount, you must enter the code FGVT116 during the checkout process. Please note that you must validate your eligibility to receive this discount by entering your U.S. government email address (ending in .gov or .mil) when creating your online registration profile. This discount is available for both the early registration and regular registration fees.

### **Instructor Bio**

**Willem A. J. Anemaat** is president and co-founder of Design, Analysis and Research Corporation (DARcorporation), an aeronautical engineering and prototype development company. DARcorporation specializes in airplane design and engineering consulting services, wind and water tunnel testing and design and testing of wind energy devices. Anemaat is the software architect for the Advanced Aircraft Analysis (AAA) software, an airplane preliminary design and analysis tool. He has been actively involved with more than 400 airplane design projects and has run many subsonic wind tunnel tests for clients. Anemaat has more than 30 publications in the field of airplane design and analysis. He is the recipient of the SAE 2010 Forest R. McFarland Award, an AIAA Associate Fellow and an associate editor for the AIAA Journal of Aircraft. Anemaat is Vice-Chair of the AIAA Aircraft Design Technical Committee. Anemaat holds an M.S.A.E. degree from the Delft University of Technology in The Netherlands and a Ph.D. in aerospace engineering from The University of Kansas.

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