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TO: The Faculty of the College of Engineering

FROM: The School of Aeronautics and Astronautics

RE: Change to Existing AAE 25100 Introduction to Aerospace Design Prerequisite

The faculty of the School of Aeronautics and Astronautics have approved the following changes to an existing course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

From: AAE 25100 Introduction to Aerospace Design

Sem. 1, 2, Cr 3; Lecture 3

Undergraduate level ENGR 13200 Minimum Grade of D- or ENGR 14200 Minimum Grade of D- or EPCS 12100 Minimum Grade of D- and Undergraduate level CGT 16300 Minimum Grade of D-, and Undergraduate level AAE 20000 Minimum Grade of S [may be taken concurrently]

The role of design in aerospace engineering. Introduction to aerodynamics, performance, propulsion, structures, stability and control, and weights. Layout and general arrangement of aerospace vehicles. Design concept generation and selection. Computational methods for design. Trade studies and graphical optimization. Conceptual design exercise involving aircraft, spacecraft, or both. Technical presentations and communication for aerospace engineering.

To: AAE 25100 Introduction to Aerospace Design

Sem. 1, 2; Lecture 3, cr. 3

Undergraduate level ENGR 13200 Minimum Grade of D- or ENGR 14200 Minimum Grade of D- or EPCS 12100 Minimum Grade of D- and Undergraduate level CGT 16300 Minimum Grade of C-, Undergraduate level CS 15900 Minimum Grade of C-[may be taken concurrently] and Undergraduate level AAE 20000 Minimum Grade of S [may be taken concurrently]

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Reason:

In AAE 25100 students are expected to use MATLAB and C programming skills to develop aircraft and spacecraft design and analysis code. CS 15900 covers MATLAB, C, and basic engineering programming skills, which makes it a necessary concurrent prerequisite.

Tom I-P. Shih, Professor and Head School of Aeronautics and Astronautics Approved for the faculty of the Schools of Engineering by the Engineering Curriculum Committee

ECC Minutes Date 2/9/16 Chairman ECC