

### **Table 3.1: Desired Student Outcomes**

**Students completing the undergraduate degree in Aerospace Engineering will be knowledgeable in the following areas:**

**K1** - The professional context of the practice of aerospace engineering and expectations of new graduates in aerospace engineering organizations, including an awareness of ethics issues, economics, and the business environment;

**K2** - The history of aerospace engineering, providing a perspective on current events;

**K3** - Aerospace engineering as a highly multidisciplinary endeavor, requiring a systems perspective to integrate technologies and manage complexity; and

**K4-Kn** - Major principles and scientific methods underlying the technologies comprising aerospace vehicles and systems.

**In addition, students will have developed the following general skills and abilities:**

**A1** - Written, oral, and graphical communication skills;

**A2** - An ability to quantitatively estimate, model, analyze, and compute;

**A3** - An ability to define and conduct experiments using modern laboratory instruments, and to interpret experimental results;

**A4** - An ability to seek out and gather information, enabling independent and lifelong learning;

**A5** - Interpersonal and organizational skills that enable individuals to work effectively in teams;

**A6** - An ability to identify needs, requirements, and constraints, and to design appropriate engineering solutions;

**A7** - An ability to formulate technical problems clearly, and to correctly apply appropriate methods and procedures for their solution;

**A8** - An ability to program computers, with skills in the use of modern engineering analysis, simulation software and operating systems.