

SREB

Aerospace Engineering - Course 2

Code: 9031

AEROSPACE ENGINEERING – COURSE 2

Test Code: 9031

Version: 01

Specific Competencies and Skills Tested in this Assessment:

Information about the AC course standards can be found in the front of the AC course teacher guide.

CTE

1A CTE

1B CTE

1C CTE

1D CTE

2A CTE

2B CTE

2C CTE

2D CTE

3A CTE

3C CTE

3D CTE

3G CTE

4 CTE

7A CTE

7F CTE

8F CTE

9A CTE

9B CTE

9D CTE

9E CTE

10B CTE

10C CTE

Aerospace Engineering – Course 2 (continued)

Literacy

RST.9.10.1 Literacy
RST.9-10.1 Literacy
RST.9.10.2 Literacy
RST.9-10.4 Literacy
RST.9.10.4 Literacy
RST.9-10.10 Literacy

Math

G-GMD.4 Math
G-MG.3 Math
G-SRT.11 Math
S-ID.2 Math
N-Q.3 Math
A-CED.4 Math

Science

HS-ETS-1 Science
HS-ETS-2 Science
HS-ETS-3 Science
HS-ETS-4 Science
HS-PS 2-1 Science

Aerospace Engineering – Course 2 (continued)

Written Assessment:

Administration Time: unlimited

Number of Questions: 60

Areas covered:

52%	CTE
17%	Literacy
10%	Math
22%	Science

Sample Questions:

One of the basic features of a continuous improvement system is the focus on:

- A. Reducing process variance
- B. Increasing the process variance
- C. Holding the variance constant
- D. Shifting the mean value to the target/design value through process changes

A twin tail on an aircraft is made from a rectangular stabilizer with two smaller rectangular fins mounted on both ends of the stabilizer. If the span between the fins is 50 feet and the width of the stabilizer is 10 feet, calculate the surface area of the stabilizer.

- A. 500 sq ft
- B. 2500 sq ft
- C. 100 sq ft
- D. 25 sq ft

One of the first steps in defining a new model airplane for your customers is:

- A. Gathering the right materials
- B. Defining the set of criteria of customer needs that will guide the development
- C. Conducting a thrust test on existing motors
- D. Selecting a motor controller