**Lesson Plan Outline Geometry in Construction**

**Title:**

Inscribed and Circumscribed Angles

**Objective(s):**

Students will explore the properties of inscribed and circumscribed angles

**Learning Standard(s):**

[CCSS.MATH.CONTENT.HSG.C.A.2](http://www.corestandards.org/Math/Content/HSG/C/A/2/)

Identify and describe relationships among inscribed angles, radii, and chords. *Include the relationship between central, inscribed, and circumscribed angles; inscribed angles on a diameter are right angles; the radius of a circle is perpendicular to the tangent where the radius intersects the circle.*

[*CCSS.MATH.CONTENT.HSG.C.A.3*](http://www.corestandards.org/Math/Content/HSG/C/A/3/)

Construct the inscribed and circumscribed circles of a triangle, and prove properties of angles for a quadrilateral inscribed in a circle.

**Activities:**

Students will design a circle and find the linear footage of various situations.

Students will use technology to define the relationships that exist between the angles and the arc length

**Materials:**

Cardboard

iPad with Geometry Pad

Inscribed & Circumscribed Angles W.S.