**Wed., Dec. 13, 9am-4pm**

**K-12 Teachers: Advanced 3D Printing and Design Workshop**

Explore applications of 3D printing in various K-12 curricular areas!

The creation of 3D objects with included openings or cavities can assist students in visualization, planning and technological understanding. Standards-oriented examples to be explored may be taken from geometry, chemistry, mathematics, geography, physics, and elementary mechanics.

**Prior familiarity with the simple use of 3D printers is assumed**, such as that gained from the "3D Printing Workshop: Hands-On Classroom Technology" workshop previously offered by MSU-St. Andrews, Midland, Mich. This advanced course includes the use of double-headed 3D printers, and of water-soluble filament for structural support and cavity filling.

**Instructors:** Tracy Zhang, PhD, and Robert Bubeck, PhD

**Location:** MSU-St. Andrews, 1910 W. St. Andrews Road, Midland, Mich. (MAP)

**Cost:** complimentary, including lunch, but please register before Dec. 8!

https://vprgs.msu.edu/form/advanced-3d-printing-and-design-workshop-dec-13

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