



Montague-CTE Scholar Alaa Elwany (2017)

College of Engineering – Industrial & Systems Engineering



Center for Teaching Excellence
DEAN OF FACULTIES

WHAT?

Additive Manufacturing (AM): commonly known as 3D printing, AM is an emerging technology representing one of the forefronts of the 4th industrial revolution

The Montague CTE award was used to support the development of:

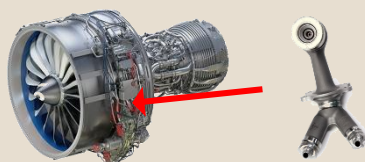
1. Undergraduate education: the **first** undergraduate course on-campus fully dedicated for 3D printing and additive manufacturing
2. Professional Education: the **first and only** workforce development certificate at the state of Texas on the same topic



3D printing of metals in action



3D printed prosthetic device



3D printed jet engine nozzle

Need: train Aggies and the Texas' advanced manufacturing workforce to unlock life-saving opportunities offered by AM

SELECTED OUTCOMES

She said YES!

Aggie student at ISEN 489 supported by Montague CTE award 3D prints his wedding ring, and gets a YES!



Aggie project group in ISEN 489



Designed and 3D printed in Aggieland!



Fly'EM Aggies!

Employees from US government research Labs 3D printing a functional flying drone In Aggieland.



Professional Students from US working on their 3D Printed drone in the Montague CTE-supported TEES advanced manufacturing certificate

- To date, **Montague CTE** has supported the development of 3 courses on next-generation manufacturing technologies.
 - In 1 year we have trained:
 - 50 undergraduate Aggies
 - 25 professionals from NASA, DOE, DOD, the oil and gas, and the automotive industry
- AND COUNTING!