

Award Grant 1700603

Regional Additive Manufacturing Pathways

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RAMP – Regional Additive Manufacturing Pathways

The overarching goal of the Harford Community College (HCC) ATE grant 1700603 – Regional Additive Manufacturing Pathways (RAMP) @ HCC is to develop an Additive Manufacturing Certificate Program (AMCP). AMCP is targeted towards Harford County Public School (HCPS) high school (HS) students across the entire service area of Harford County which includes rural and under-represented populations. AMCP will develop core competencies for additive manufacturing technicians as stated in the national standards and align with local industry needs.

A major accomplishment from year three of the grant was the approval of the Additive Manufacturing Certificate Program (AMCP) by the Maryland Higher Education Commission (MHEC). AMCP consists of 5 courses which focuses on various concepts of additive manufacturing as defined by local industry during a modified DACUM.

The assimilation of the hard core technology knowledge with ever so important soft skills comes together in the 5th course as a capstone internship project.

ENGT 230 – Additive Manufacturing Capstone

- The over-arching theme: what does it mean to be a “contributing” employee
- Present the idea of “leveling up” in their career (3 levels of a contributing).
- Assess problem-solving abilities and decision-making skills using reflective questions
- presentation on the additive manufacturing technology and their “leveling” journey.
- How Leveling UP impacts other areas of life

PI Antol and Dr. Slowinski (curriculum design consultant) developed the course using collaborating web based mind mapping software package known as *miro*. A portion of the mind map serves as a watermark here and details of the mind map are highlighted in the 90 presentation video.