

Professional Biography

Eric N. Wooldridge, PE, RA, MsEng

Eric Wooldridge is a Professor, Registered Architect, a Professional Engineer in multiple disciplines including Architectural, Mechanical, and Manufacturing systems, and holds multiple patents regarding insulated coolers, embalming systems, 3D printing, and forensics technologies. His Master's degree is in Manufacturing Systems Engineering with an additive manufacturing (AM) focus, and has been the primary driving force of the technology's integration into Kentucky's workforce for over a decade.



In 2024 He was awarded the Science and Society Award by the National Science Foundation for his work in Additive Manufacturing Education, and was the recipient of the 2021 NISOD Teaching Excellence Award. Wooldridge is the Director of the Additive Manufacturing (also known as 3D printing) Center for the Kentucky Community and Technical College System, and created the nation's first statewide 3D printing certificate program. In 2026 he lead the development of a new rigorous national certification exam for additive manufacturing to help standardize workforce training in the technology and accelerate industry adoption. His numerous National Science Foundation and USDA Rural Development grant projects focused on AM and virtual reality, have served to impact tens of thousands of students, businesses, and educators across the state and the nation.

In 2021, he developed the Rapid Response Additive Manufacturing Initiative. A federally funded, first of its kind project that created a network of 10 AM micro factory sites across Kentucky. Capable of providing a flexible, stop gap manufacturing response to supply chain breakdowns and production opportunities for the state. Wooldridge also developed and published the Phantom Hole Technique an AM application relevant to fused deposition modeling, and currently serves as an advisory board member of the Additive Manufacturing Coalition. His work has been published in numerous peer reviewed journals including the International Journal of Rapid Manufacturing and the Journal of Advanced Technological Education, and has developed several engineering innovations in the field of additive manufacturing.

More recently, Wooldridge was the Engineer of Record and builder of Kentucky's first ever concrete 3D printed home, known as "Floodbuster 1" and has become a national leader in concrete 3D printing education and new consumer products that can only be produced using concrete 3D printing technologies. He is the co-developer of the CoalCrete initiative a multi-state, federally funded project to scale concrete 3D printed infrastructure across Appalachia. Dedicated to supporting transportation, municipal applications, and business growth in the concrete 3D printing industry through education, engineering, financing access, and vertical integration.

Privately, Wooldridge is a fourth generation cattle farmer, land owner, and an agricultural technology promoter and developer. He also owns and operates an Architectural Engineering Firm, WDS, PLLC. Specializing in commercial design and construction engineering and administration, WDS has been designing and overseeing facility construction projects for over 25 years throughout Kentucky, Tennessee, and Ohio.