

Capability Statement – Additive Manufacturing

Institution: Drake State Community & Technical College

UEI Number: **Y6RMRVLNFZK1** CAGE Code: **1Z450** NAICS ID: **611210** SIC: **8222**
Federal EIN No: **63-0439942**

Certificates, Registrations, Accreditations: SACSCOC, ACEN, HVAC Excellence, ASE Excellence, NIMS

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Overview:

Drake State Community & Technical College is a two-year historically Black public institution (HBCU) and a member college of the Alabama Community College System (ACCS). Founded in 1961 to support the technical and vocational education needs of African Americans, Drake State expanded its offerings to include transferrable general education courses in 2012.

Research Capabilities:

Advanced Manufacturing welding, robotic welding, and plasma cutting; machine tool and precision milling; mechatronics, electrical engineering, and robotics maintenance.

Additive Manufacturing computer-aided design, additive manufacturing of polymer samples and concrete structures.

Health Sciences nursing career pathways for CNA, MAC, LPN, and RN medical professionals.

Math and Computer Sciences IT networking, cyber security, systems administration, and web development.

Facilities:

Concrete 3D printing laboratory – 3D printer based on ABB robotic arm with a 2.6m reach.

Engineering Design Laboratory – Markforged 3D printer, Makerbot 3D printers.

Machine Tool Facility – CNC 3-axes and 5-axes mills; lathe with live tooling, jet manual, and collet lathes; grinding, drilling, and sawing equipment.

Computer Information Technology Laboratories – Apple laboratory, SYSCO laboratory, COMPTIA-certified Academy and Testing Center.

Past Performance:

National Aeronautics Space Administration (NASA), which includes two cooperative agreements on additive manufacturing of concrete structures applicable to lunar exploration and work on designing and prototyping lunar habitat outfitting components. MUREP grant for expanding engineering career pathways to minorities who are historically underrepresented in STEM. *Department of Commerce*, which includes a two-year grant to expand access to broadband to minority communities of Madison County, Alabama.