The Advanced Visualization Center is a comprehensive center for developing and implementing innovative, engaging curricula for education and workforce development. The technologically-advanced teaching and training opportunities provided in this center are ideally suited for 21st Century education, allowing industry, government, educators and entrepreneurs to virtually transform the learning experience.

The facility includes virtual and simulated environments, 3D and 4D object development labs, 3D and immersive experiences. The Immersive Use of Force Lab, a Rapid Prototyping Lab and teleconferencing areas are located in other facilities on the campus. AVC staff will create and produce interactive, simulated, and immersive learning objects to enhance education and training curricula.

The Advanced Visualization Center features ten labs in three locations on the campus of Wallace Community College Selma. For more information on the AVC please visit http://avc.wccs.edu or call 334-876-9412.
IMMERSIVE FLOATING MODEL LEARNING LAB
This lab provides an immersive environment by creating a realistic learn by doing experience.
Educational Use: This lab will be used for smaller groups to experience the 3D immersive virtual environment. Additionally, with the use of Unity 3D, full-scale simulated environments can be deployed within this area for a more complete immersion experience.
Workforce Development: Small groups can utilize this lab to experience the 3D environment so that a simulated workforce environment can be presented.

DEVELOPMENT LAB
This lab provides 3D content lifecycle development supporting advanced distance learning and simulation based initiatives for research and workforce/economic development.
Educational Use: This lab will be used by the center’s development staff to create and provide training to faculty, staff, and students.
Workforce Development: This lab will be used to create content for use in any workforce implementation of 3D technologies.

BROADCAST AND STUDIO LAB
This lab provides digital and 3D media in a leading edge environment in which students and faculty learn how to integrate virtual technologies with traditional and emerging broadcast technologies.
Educational Use: The digital media studio and lab provides digital and 3D media in a leading edge environment to facilitate the integration of virtual technologies with traditional and emerging digital media technologies, engaging students and faculty in the learning process.
Workforce Development: Workforce entities can utilize this lab to introduce their employees into digital content created by the center. Additionally, telepresence is integrated into the lab, which can be used for small 3D telepresence meetings.

TELEPRESENCE LAB
This lab provides an innovation hub for advanced distance learning by using cognitive eye-to-eye contact allowing for more effective collaboration of ideas, learning and discovery while reducing costs associated with travel and distance. The Telepresence Labs are located in the AVC, the Hank Sanders Technology Center, and the Administrative Building.
Educational Use: Utilizing a high definition teleconferencing system, this lab is capable of connecting teams simultaneously from multiple locations worldwide. This will be used to connect students as well as faculty with peers at other institutions where they share 3D objects and collaboratively discuss, develop, and implement 3D technologies.
Workforce Development: This lab can be used to connect workforce members to other entities worldwide while allowing the sharing of content (2D and 3D) so that all parties can simultaneously view and interact with shared 3D content.

VISUAL LEARNING LAB
This lab will provide an exciting and stimulating learning environment where students and faculty can virtually and visually communicate their ideas and discovery. The Visual Learning Lab is located in the AVC.
Educational Use: This lab will provide a space for students with the simulation and modeling technician certificate. Its primary use will be as a student classroom.
Workforce Development: This lab can be used for 3D visualization and has teleconference capabilities for larger groups.

RAPID PROTOTYPE LAB
This lab provides experience in modern design and manufacturing processes in an advanced learning environment using CAD data to create virtual and physical prototypes, accelerating design and production capabilities. The Rapid Prototyping Lab is located in the Classroom Building.
Educational Use: This lab, integrated into the Drafting and Design Technology department, will allow students to rapidly develop a 3D model of a physical object, visualize and manipulate the object virtually, and print the object on a 3D printer in a very short time frame.
Workforce Development: This lab will provide industry partners the ability to design, develop, test and deploy a product or project virtually throughout the entire development lifecycle.

EXPERIENCE AND DISCOVERY LAB
This lab will provide an exciting and innovative method of knowledge transfer for audiences to discover new ideas and concepts through “Edutainment” (the merging of education and entertainment technologies).
Educational Use: This lab will be used to showcase 3D technology to larger groups of students in a variety of situations. In addition, the telepodium can be used to bring in guest speakers to large groups of faculty, staff and students.
Workforce Development: This lab can be used to demonstrate 3D visualizations as well as utilize the telepodium for large scale meetings.

INTERACTIVE USE OF FORCE LAB
This lab provides an immersive environment by creating a realistic learn by doing experience.
Educational Use: This lab will provide Interactive Training for realistic use of force and firearms training. Customizable simulations will deliver safe, effective and true-to-life training for law enforcement, military, security and public safety agencies throughout the Southeast. We are continuously working to improve the capabilities of our systems, so you can be sure you’re investing in a state-of-the-art solution that will fit your needs perfectly for years to come.