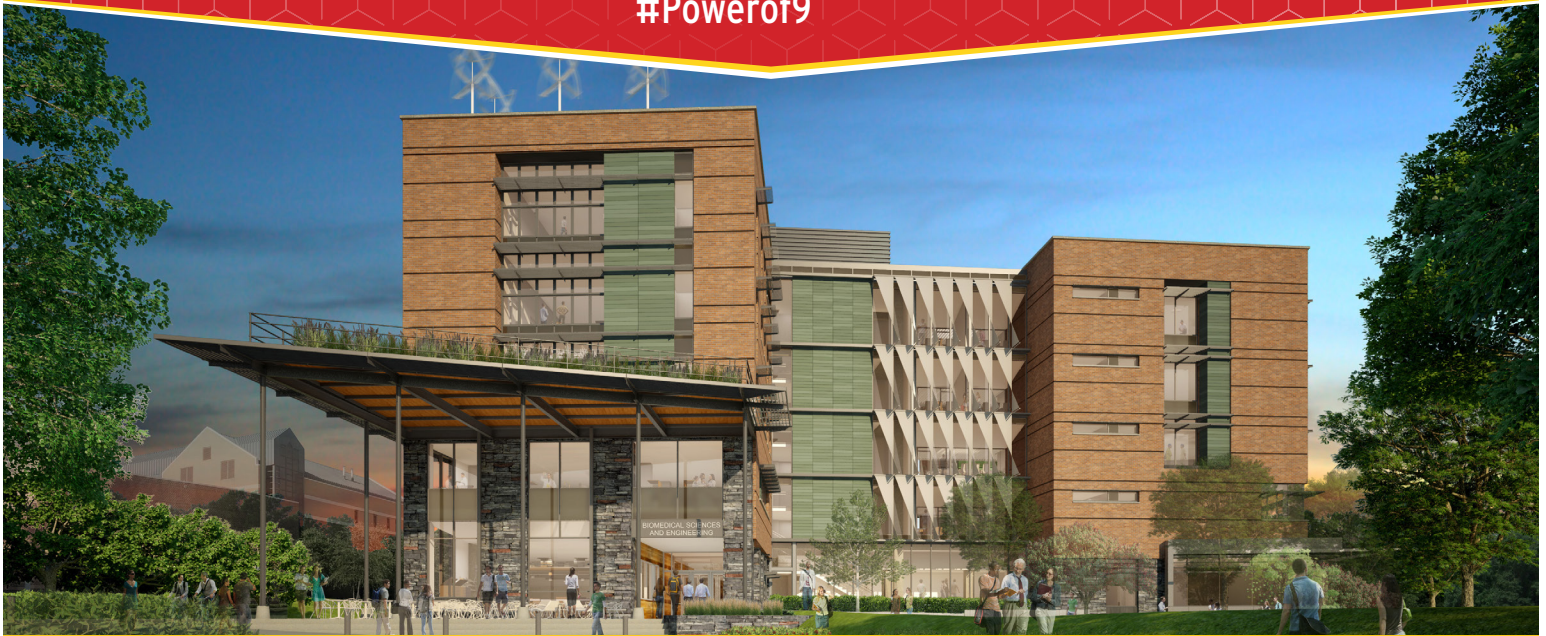




The Universities

AT SHADY GROVE

#Powerof9



The Biomedical Sciences and Engineering Education Facility: Built for Breakthroughs

Montgomery County and the state of Maryland have a long history of investing in education. With the addition of the Biomedical Sciences and Engineering Education Facility (BSE), the Universities at Shady Grove (USG) will be able to take that investment to a new level—setting a new standard in quality higher education that directly meets the region’s workforce development needs in the fields of science, technology, engineering, math and medical sciences (STEMM).

The state-of-the-art facility will be one of the most sustainably sourced and built laboratory buildings in the country, with **cutting edge teaching laboratories, collaborative learning spaces, clinical training facilities, academic offices and expanded student services** necessary to support program and enrollment growth.

When fully utilized, it will serve thousands of additional students in STEMM programs, and will allow USG to provide even more businesses with qualified STEMM graduates to help fuel our region’s economy. The students who learn in the facility’s labs and advance their education in the BSE will be the same men and women who staff the professional labs, research centers, and medical facilities of this region for years to come.

“Our state has always placed emphasis on education and workforce development. That emphasis has served our students, residents, and companies based here quite well—but data shows us the emphasis must continue—especially in science, technology, engineering, and math.”

— ANTONIO MOREIRA, PHD
VICE PROVOST FOR ACADEMIC
AFFAIRS, UMBC

New STEMM Programs

Maryland's premier research and teaching universities, University of Maryland, College Park; University of Maryland, Baltimore; University of Maryland, Baltimore County; and Salisbury University, will be the first to offer new undergraduate and graduate degrees in healthcare, biosciences, engineering, and computational science—all of which are critical and rapidly growing industries in our region.

UMBC

- BS Translational Life Science Technology (Bioinformatics track available)
- BS Computer Science (Data Science and Cybersecurity tracks available)
- BS Mechanical Engineering
- MPS Biotechnology
- MPS Cybersecurity
- MPS Data Science
- MPS Technical Management

University of Maryland, Baltimore

- BS/MS Dual Degree Clinical Dental Hygiene Leader
- MS Medical Cannabis Science and Therapeutics
- MS Pharmaceutical Sciences
- Post Baccalaureate Certificate in Oral Health Science

University of Maryland, College Park

- BS Biocomputational Engineering
- BS Biological Sciences
- BS Embedded Systems and the Internet of Things
- BS Fermentation Science
- BS Information Science
- MEd Special Studies in STEM Education

Salisbury University

- BFA Art, Graphic Design Track
- BS Exercise Science
- MS Health and Human Performance

ADDITIONAL STEMM PROGRAMS COMING SOON

Key Features of the BSE

Academic Learning Spaces

BSE includes 12 active learning classrooms, 2 lecture halls (120 and 160 seats), computer classroom and computer lab, collaborative learning spaces for small groups of student and faculty and 20 state-of-the-art laboratories (wet and dry). More than half of the BSE space is dedicated to laboratories, some of which are dedicated to specific academic programs in the engineering and life sciences arenas but many are shared spaces for use by multiple programs. The laboratories are supported by lab preparation areas as well as an electrical shop and a fabrication shop.

Shady Grove Health and Dental Services Facility

The dental facility includes 24 advanced operatories to provide comprehensive dental care to community patients provided by faculty supervised advanced general education dental students and dental hygiene students.

Interprofessional Clinical Training Facility

Students, faculty and staff from healthcare, social work and social sciences programs will engage in interprofessional teams to provide collaborative standardized clinical care and foster improved patient outcomes. The interprofessional clinical training facility is co-located with the dental services facility and shares a patient waiting area. It includes three patient examination rooms, a patient briefing room and student/faculty team workstations.

Product Design Laboratory

The product design laboratory (wet and dry lab space) and maker space was designed specifically for student research (independent study and guided research) that incorporates team-based and project-based learning. Local and regional businesses and organizations will be invited to identify real-world problems that students can solve and enhance their career-readiness skills. Students will have opportunities to take advantage of the fabrication and electrical shops as well as 3D printing, project storage spaces and makerspace materials and supplies.

Lab for Entrepreneurship and Transformative Leadership

The lab will provide opportunities for students to learn design thinking, innovation strategies and entrepreneurship skills necessary for today's graduates to be career-ready and play their part in nurturing the economic growth of the region. The lab will provide state-of-the-art workspaces for student teams and their mentors, from all academic programs, to work collaboratively with businesses to develop new ideas and technologies.

For more information about the BSE, or to get involved, visit shadygrove.umd.edu/BSE or email rsmith25@umd.edu.



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