



MARSHALL FOR ALL

MARSHALL FOREVER

STUDENT-FIRST PRIORITIES

Increase Access | Ensure Affordability | Grow Support Programs
Deliver on Demand | Enable Lifetime Achievements



ADVANCED ENERGY

AREAS OF DISTINCTION

WHY IS THIS STRATEGICALLY IMPORTANT?

Global renewable energy market to reach nearly \$2 billion by 2030

High demand in various job markets: Solar (+20m jobs), Bioenergy (+13.7m jobs), Wind (+5.5m jobs) and Hydro (+3.7m jobs)

Creates a more resilient power grid through energy distribution and connectivity

Improves global health

HOW MARSHALL IS LEADING.

Cutting-edge green battery and **energy storage technologies**

Developing more **sustainable energy resources**

Training a skilled and **market-ready workforce**

Educating future leaders on the relationship between the environment, energy resources & the economy



ADVANCED MANUFACTURING

AREAS OF DISTINCTION

WHY IS THIS STRATEGICALLY IMPORTANT?

More than 2,000 job openings expected locally over the next two years

Supply chain challenges responsible for 40% of current inflation

Increased automated processes require new skillsets

Increased business development opportunities

HOW MARSHALL IS LEADING.

306 manufacturers served in 2022

764 industry workers trained in 2022

100% of our graduates hired locally

62 companies gained WV suppliers



AVIATION



AREAS OF DISTINCTION

WHY IS THIS STRATEGICALLY IMPORTANT?

Demand - 602,000 pilots, 610,000 technicians and 899,000 cabin crew will be needed worldwide over the next 20 years.*

The U.S. advanced air mobility market (includes flying taxis and cargo drones) expected to generate \$115 billion annually by 2035.**

By 2038 there will be an estimated shortage of 61,000 helicopter pilots worldwide.*

Marshall University is committed to providing solutions to the aviation industry and preparing WV citizens for rewarding and economically impactful careers.

**Boeing Pilot and Technician Outlook, 2022-2041*

***Aerospace News: Aviation International News*

HOW MARSHALL IS LEADING.

Offers direct and immediate access to executive leaders of the most exclusive aviation companies in the world - **leading to an incredible networking base for our students.**

Graduates are immediately employable in the aviation industry, with many accepting offers through distinct career pathway programs before graduation.

Students train with company-specific operating procedures to address industry calls for focused, individualized training programs.

Offers boutique education, training, and micro-credentialing catered to current and future non-degree-seeking aviator professionals and aviation businesses.



CYBER

AREAS OF DISTINCTION

WHY IS THIS STRATEGICALLY IMPORTANT?

The cost of cybercrime is predicted to hit \$10.5 trillion by 2025

300,000 new strains of malware are created daily

Ransomware attacks increased nearly 90% over the last year

Job market is expected to grow over 30% in the next decade

HOW MARSHALL IS LEADING.

Strategic academic partner with **U.S. Department of Defense**

Assisted in the rescue of **80 human trafficking victims; led to 30 arrests**

2020 National Cyber League Champions, finished in the top 1% in 2022, top 8 finishes since 2016

Advancing cybersecurity through multidisciplinary research, education and outreach programs



FORENSIC SCIENCE

AREAS OF DISTINCTION

WHY IS THIS STRATEGICALLY IMPORTANT?

Demand – employment projected to grow by 11% over the next decade

WV forensic science industry has received over \$10 million in grants and contracts since 2016

Essential to national security and overall public safety

HOW MARSHALL IS LEADING.

Ranked #1 for 11 of the past 13 years on national testing

1 of 2 universities in the country with an accredited DNA lab that is also designated a Criminal Justice Agency

Has DNA tested over 10,000 national cases, including over 2,500 sexual assault cases in WV

97% job placement over the past decade



INNOVATION DISTRICT

AREAS OF DISTINCTION

WHY IS THIS STRATEGICALLY IMPORTANT?

To increase W.V.'s capacity to compete locally and on a global scale

Helps develop an ecosystem for local talent development

Builds an infrastructure that attracts companies to W.V.

HOW MARSHALL IS LEADING.

New state-of-the-art Brad D. Smith Center for Business & Innovation

New home for the Institute for Cyber Security and Marshall Advanced Manufacturing Center

Creation of Innovation Resource Hub, an entrepreneurial ecosystem

(To be completed this fall)



HEALTH SCIENCES

AREAS OF DISTINCTION

WHY IS THIS STRATEGICALLY IMPORTANT?

The opioid epidemic has cost the U.S. economy more than \$1.3 trillion

WV has the 2nd highest rate of obesity and 4th highest rate of childhood obesity

WV has one of the oldest populations in the US, above avg. rates for cancer, heart disease, and diabetes

HOW MARSHALL IS LEADING.

Over the last 5 years, the SOM has matriculated 316 WV residents (avg of 78% per year) - more than any other med. school in WV

26 residency and fellowship programs help address physician shortages in WV - since 2019, 51% of grads have stayed in WV or the Tri-State area

New Division of Addiction Science works at providing comprehensive solutions to substance use disorder

Home to the Center for Biomedical Research Center of Excellence, focused on obesity prevention

Mobile Medical programs serve rural communities | new rural residencies started in general surgery and psychiatry

Current research initiatives are focused on **dementia-related therapies and general geriatrics**