



# Master of Science in Biomechanics

## College of Health Professions (COHP)

### About the College

The College of Health Professions has a mission to prepare students to function as highly competent, collaborative, and socially responsible health care professionals in a dynamic health care environment. The outstanding faculty provide student centered education and clinical educational experiences, promote and provide support for continued professional development of practicing health care professionals, conduct research that relates to critical health care issues and populations, and provide services to surrounding communities in West Virginia.

The COHP prides itself on a rich history in health professions education and has graduated thousands of health care professionals who continue to provide high quality clinical care, professional education and research throughout various locations.

### Master of Science in Biomechanics

The Master of Science in Biomechanics program has a mission to prepare students for both advanced studies in human movement science and career paths such as physical therapy, medicine exercise science. With a diverse field, Biomechanics offers a wide variety of career possibilities and specializations. The varied curriculum of Marshall's MS in Biomechanics program prepares students for this varied career field.

For more information > [www.marshall.edu/biomechanics/master-of-science/](http://www.marshall.edu/biomechanics/master-of-science/)

The field of Biomechanics is expected to grow at a faster than average rate of 23% through 2024. The average salary for a Biomedical Engineer in May 2015 was \$86,200.

### Coursework - Sample

- Advanced Biomechanics
- Mechanical Analysis of Activity
- Instrumentation - Kinetics
- Instrumentation - Kinematics
- Research in Kinesiology
- Human Gait
- Devising and Implementing Training and Conditioning Programs
- Statistical Methods
- Exercise Metabolism
- Advanced Exercise Testing
- Trends in Biomechanics
- Biomechanical Instrumentation with Data Processing in Matlab
- Biomechanics Research Practicum

## INTO Marshall University Pathway Program

The innovative Pathway programs offered at INTO Marshall are designed to develop international students' academic knowledge and strengthen their language ability and study skills, enabling them to progress successfully to a Marshall University degree program.

Students who successfully complete a Pathway program are assured progression to a Marshall degree program upon submission of additional required application materials. Other benefits include:

- Full integration with domestic and international students on the Marshall campus
- Access to all Marshall cultural and athletic events and activities including the Recreation Center
- Classrooms and accommodations in the heart of Marshall's compact and accessible campus
- Highest level of support for student success
- Individual supplemental tutoring for any subject
- Highly trained and experienced university instructors
- Academic advising throughout the program

## Master of Science in Biomechanics

2-Semester Pathway	Degree Program Components			Program Information	
Fall: August 15, 2017 Spring: January 4, 2018	36-39 credit hour program 12 credit hours apply from Pathway 24-27 credit hours remaining toward degree				
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>• Bachelor's degree in Biomechanics, Exercise Science or equivalent</li> <li>• 2.25 undergraduate GPA</li> <li>• Language requirement:               <ul style="list-style-type: none"> <li>• TOEFL iBT 70 or</li> <li>• IELTS 6.0 or</li> <li>• Password Overall Level 7 or</li> <li>• PTEA 48 or</li> <li>• Completion of Academic English Level 5 with no grades below C</li> </ul> </li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>	<b>Progression Requirements</b> <ul style="list-style-type: none"> <li>• Minimum 3.0 GPA in graduate level courses</li> <li>• No grades below B in all 500/600 level courses</li> <li>• No grades below C in ENG 150, 151 and 160</li> <li>• No I grades</li> </ul> <b>Notes</b> Students without an undergraduate Biomechanics degree will require one additional course - Mechanical Analysis of Activity.  No Summer courses are offered for this program. Students starting their Pathway in the spring will take a break in the summer and continue with the second semester in the fall.  These courses are generally delivered through the INTO Marshall Center and are for Pathway students only.	
		ENG 150	Academic Listening and Speaking		3
		ENG 151	Academic Reading		3
		HS 635	Instrumentation - Kinetics		3
		HS 670	Research in Kinesiology		3
		<b>Total</b>			<b>12</b>
		<b>Semester 2</b>	<b>Course Title</b>		<b>Credit Hours</b>
		ENG 160	Academic Composition and Culture		6
		HS 610	Advanced Biomechanics		3
		HS 615	Instrumentation - Kinematics		3
	<b>Total</b>		<b>12</b>		
<b>1-Semester Pathway</b> Fall: August 15, 2017 Spring: January 4, 2018	36-39 credit hour program 9 credit hours apply from Pathway 27-30 credit hours remaining toward degree				
<b>Entry Requirements</b> <ul style="list-style-type: none"> <li>• Bachelor's degree in Biomechanics, Exercise Science or equivalent</li> <li>• 2.25 undergraduate GPA</li> <li>• Language requirement:               <ul style="list-style-type: none"> <li>• TOEFL iBT 80 or</li> <li>• IELTS 6.5 or</li> <li>• Completion of Academic English Level 6 with no grades below B</li> </ul> </li> </ul>	<b>Semester 1</b>	<b>Course Title</b>	<b>Credit Hours</b>		
		ENG 160	Academic Composition and Culture	6	
		HS 635	Instrumentation - Kinetics	3	
		HS 650	Human Gait	3	
		HS 670	Research in Kinesiology	3	
		<b>Total</b>		<b>15</b>	