

Cell and Molecular Biology Combined Degree Program

Podcast

Hello, my name is Maggie and I am a staff member in The Graduate School at Grand Valley State University. Thank you for taking the time to learn more about Grand Valley's Cell and Molecular Biology combined degree program. A combined degree program allows students to complete their bachelor's and master's degree in as few as 5 years, thus saving both time and money compared to completing both degrees separately. Today we're going to cover the admissions process, program requirements, and the qualities that distinguish this program.

Let's start by explaining to you what this program entails. The Cell and Molecular Biology combined degree is for students with a passion for the life sciences who want to receive research experience as a GVSU undergraduate, and who wish to distinguish themselves when applying for employment in their field or for graduate or professional training. Cell and Molecular Biology focuses on determining how cells develop and function as well as the application of this knowledge in fields such as biotechnology, pharmacology, and biomedicine. In addition, Grand Valley's Cell and Molecular Biology combined degree program can prepare GVSU students for further advanced education such as a Ph.D. and/or medical school. While a traditional student would require 6 or more years to complete both a Bachelor's and Master's degree, students in Grand Valley's combined degree program are able to complete both degrees in as few as 5 years.

Cell and Molecular Biology prepares students for careers in the Life Sciences, including: biomedical research; biotechnology; forensics; the pharmaceutical industry and agriculture; as well as medicine, higher education, and more. Employment in the life sciences is expected to grow by about 10% in the next 10 years. The average annual wage for a U.S. bioscience worker reached \$94,543 in 2014. These earnings are \$43,000 greater, on average, than the overall U.S. private sector wage of \$51,148.

Interested students will apply directly to the Department of Cell and Molecular Biology for the combined degree program during their third academic year at GVSU. The application requirements for the combined degree program include a GPA of 3.25 or greater, completion of the nine lower division core courses with a grade of at least a B in five of the nine courses and no less than a C+ in any of the nine courses, two letters of recommendation, academic transcripts, a letter of intent, and a curriculum vitae. If English is not your native language you must provide scores from one of our approved standardized tests such as the TOEFL, IELTS, MELAB, or the PTE Academic. There is a \$30 nonrefundable application fee, however this fee is waived if you attended GVSU previously or are currently attending GVSU.

More program details as well as the online application can be found on the combined degree programs webpage, www.gvsu.edu/gs/combineddegreeprograms.

Some great news about Grand Valley's graduate programs is that tuition rates for Michigan resident and non-resident students are the same. In other words, there are no extra costs for being an out of state student. Current tuition costs and information about scholarships and financial aid can be found at www.gvsu.edu/financialaid or by calling 616-331-3234. For information on graduate assistantships, please contact The Graduate School at gradschool@gvsu.edu.

The Bachelor of Science in CMB consists of a series of high-impact laboratory and computational courses as well as a research project which prepares students for employment or graduate training in the life sciences and professional schools, such as medical or dental school. The combined degree program offers qualified GVSU undergraduates the option to earn both a Bachelor and Master of Science in Cell and Molecular Biology in an accelerated time frame. Students admitted to the program may take graduate courses after completing 90 undergraduate credits. Up to 12 credit hours of graduate work may be used in partial satisfaction of the requirements for the undergraduate degree.

Students must complete 36 credit hours at the graduate level to complete the graduate portion of the program. Approximately 10 credit hours of the graduate degree are courses covering laboratory techniques such as cell and tissue culture and DNA and RNA manipulation. In addition, about 10 credit hours of the graduate degree will cover topics such as cell biology, molecular biology, bioinformatics, and genomics. All students will complete a culminating experience which can be either an internship in a research lab or industry setting, or a thesis.

Additionally, all students in this program take courses in scientific communication, ethics and professionalism in science, and responsible conduct of research. For a complete listing of all courses please visit www.gvsu.edu/cmb.

Courses for this program are offered both in Grand Rapids in our excellent lab facilities in the Cook-DeVos Center for Health Sciences and in Allendale in the Kindschi Hall of Science. Recent students have participated in internships at the Van Andel Institute, the Michigan State College of Human Medicine, Spectrum Health, and various area biotechnology companies including Empirical Biosciences, NxGen MDx and Perrigo.

That is just a snapshot of the Cell and Molecular Biology combined degree program at Grand Valley State University. Any questions can be directed to the Graduate Program Director, Mark Staves, at stavesm@gvsu.edu or to The Graduate School at gradschool@gvsu.edu. Thank you for your time and we hope you have enjoyed this podcast.