

Bioinformatics and Genomics Graduate Certificate 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 Bioinformatics and Genomics Graduate Certificate program. Today we are 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 certificate entails. The Bioinformatics and Genomics Graduate Certificate program offers additional qualifications and training to individuals who hold a Bachelor's or Master's degree in a variety of fields, such as biology, biochemistry, computer science, or statistics. The Certificate can also be a useful option to students who are planning to pursue or are currently pursuing a Master's degree at Grand Valley in programs such as Biotechnology, Health Informatics and Bioinformatics, Biostatistics, Data Analytics, Biology, Biomedical Science, or Computer Science. It will make students more competitive in their pursuit of professional jobs in life sciences, in both industry and academia. The certificate is a 12-credit hour program and can be completed in 1 year as a full-time student or 1.5-2 years to complete as a part-time student.

The field of bioinformatics has been growing rapidly and is impacting multiple areas, most importantly medicine and biotechnology. According to the U.S. Bureau of Labor Statistics employment in biotechnology related fields is projected to grow 10% from 2016 to 2026, faster than average for all occupations.

Standard Grand Valley admission requirements include completion of the online application as well as a Bachelor's degree from an accredited institution of higher education. Your application must include official transcripts, and 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 Grand Valley previously or are currently attending Grand Valley. In addition, specific admission requirements include undergraduate-level experience with life sciences, for example biology, genetics, or biochemistry; a current resume, and a personal statement of career goals and academic/professional background.

More program details as well as the online application can be found on the Graduate Bioinformatics and Genomics Certificate program on the Cell and Molecular Biology Department website at gvsu.edu/cmb.

The 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 gvsu.edu/financialaid or by calling 616-331-3234. For information on graduate assistantships, please contact The Graduate School at gradschool@gvsu.edu.

As I mentioned, the Graduate Certificate in Bioinformatics and Genomics at Grand Valley is a 12-credit program. Nine credit hours of core courses cover the areas of bioinformatics, genomics and molecular diagnostics, and computer modeling of biomolecules. Students also choose a minimum of one, 3-credit hour elective from a diverse list of statistics or programming courses. There is a

possibility of customizing the coursework depending on the student's background and career objectives. The elective course may open exciting opportunities to pursue more advanced training in statistical analysis or computer programming. All courses offer extensive hands-on experience with computational analysis of biological data. For a complete listing of all courses please visit Certificates at gvsu.edu/cmb.

The Graduate Bioinformatics and Genomics Certificate program provides the students with unique opportunities to gain experience using computers to solve biological and medical problems, such as those resolved by biotech/pharmaceutical industry or research labs. Students with programming/statistics background will learn how to use those skills to analyze biological and genetic data. Students with a life sciences background will have the opportunity to build their programming and statistics skills.

That is just a snapshot of the Graduate Bioinformatics and Genomics Certificate program at Grand Valley State University. We hope that you will consider applying to this program. Any questions can be directed to the Graduate Program Director, Dr. Agnieszka Szarecka, at szarecka@gvsu.edu or to The Graduate School at gradschool@gvsu.edu. Thank you for your time and we hope that you have enjoyed this podcast.