The MS in Bioinformatics and Molecular Biochemistry has a Biochemistry track (https://smhs.gwu.edu/biochemistry/programs/ms-biochemistry) and a Bioinformatics track (https://smhs.gwu.edu/biochemistry/programs/ms-bioinformatics). The program provides schedule flexibility (classes are held in the late afternoons and evenings), options to choose between thesis or non-thesis tracks and between a 1-year or a 2-year program. It combines a rigorous and up-to-date curriculum with hands-on experience in a myriad of laboratories and research initiatives, and allows students to partially create their own program by offering a diverse elective courses pool. The program includes students coming from many countries, and our graduates have gone on to successfully pursue many career paths. In addition, the Institute of Biomedical Sciences offers a PhD track in Biochemistry and Molecular Genetics.

**REQUIREMENTS**

Specific admission requirements are shown on the Graduate Program Finder. (http://www.gwu.edu/all-graduate-programs)

The following requirements must be fulfilled:

The general requirements stated under Columbian College of Arts and Sciences, Graduate Programs (http://bulletin.gwu.edu/arts-sciences/#degeregulationtext).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOC 6221</td>
<td>Proteins, Pathways, and Human Health</td>
<td></td>
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<tr>
<td>BIOC 6222</td>
<td>Biochemical Genetics and Medicine</td>
<td></td>
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<tr>
<td>BIOC 6223</td>
<td>Bioinformatics</td>
<td></td>
</tr>
<tr>
<td>BIOC 6227</td>
<td>Biochemistry Seminar (taken twice for a total of 2 credits)</td>
<td></td>
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</tbody>
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**Required for bioinformatics track**

- BIOC 6236 Medical Genomics
- BIOC 6237 Proteomics and Biomarkers
- BIOC 6240 Next Generation Sequencing

**Required for biochemistry track**

- BIOC 6224 Molecular Biology and Protein Methods
- BIOC 6260 Analytic Methods for Lipids and Carbohydrates

**Electives and thesis**

Non-thesis option: 13 credits in elective courses.

Thesis option: BIOC 6998, BIOC 6999, and 7 credits in elective courses.

Students who wish to pursue the thesis option should contact the department for details.