

DUAL BACHELOR OF SCIENCE WITH A MAJOR IN HEALTH DATA SCIENCE AND MASTER OF SCIENCE IN THE FIELD OF HEALTH DATA SCIENCE, BIOINFORMATICS CONCENTRATION

PUBH 3201 Introduction to Bioinformatics

PUBH 3202 Introduction to Genomics

Visit the BS in health data science (<https://publichealth.gwu.edu/programs/health-data-science-bs/>) and MS in health data science (<https://publichealth.gwu.edu/programs/health-data-science-ms/>) program websites for additional information about the individual programs.

The Milken Institute School of Public Health offers a dual bachelor of science with a major in health data science (<http://bulletin.gwu.edu/public-health/biostatistics-bioinformatics/bs-health-data-science/>) (BS) and master of science in health data science, bioinformatics concentration (<http://bulletin.gwu.edu/public-health/biostatistics-bioinformatics/ms-health-data-science-applied-bioinformatics-concentration/>) (MS) degree. The program allows students to take up to 9 graduate credits as part of their undergraduate degree, thereby decreasing the number of credits normally required for the master's degree. All requirements for both degrees must be fulfilled.

Students interested in the dual degree program should confer with the graduate advisor. Visit the program website (<https://business.gwu.edu/four-plus-one/>) for additional information.

Credit sharing: 9 credits

| Code | Title | Credits |
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MS courses taken during the BS program and corresponding BS courses waived:

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| PUBH 6854 | Applied Computing in Health Data Science | |
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One of the following BS courses is waived:

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| CSCI 1011 | Introduction to Programming with Java |
| or CSCI 1012 | Introduction to Programming with Python |
| or PUBH 4201 | Practical Computing |

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| PUBH 6884 | Bioinformatics Algorithms and Data Structures |
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One of the following BS courses is waived:

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| CSCI 1112 | Algorithms and Data Structures |
| or PUBH 4202 | Bioinformatics Algorithms and Data Structures |

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| PUBH 6860 | Principles of Bioinformatics |
| or PUBH 6861 | Public Health Genomics |
| or PUBH 6886 | Statistical and Machine Learning for Public Health Research |

One of the following BS courses is waived:

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| CSCI 4364 | Machine Learning |
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