# BIOINFORMATICS AND COMPUTATIONAL BIOLOGY, MASTER OF SCIENCE (M.S.)

| Course | Title | Credits |
|---|---|---|
| **Core Requirements** | | |
| BIOI601 | Probability and Statistics | 3 |
| BIOI602 | Principles of Data Science | 3 |
| BIOI603 | Principles of Machine Learning | 3 |
| BIOI604 | (Principles of Molecular Biology, Genetics, and Genomics) | 3 |
| BIOI605 | (Data Sources and Data Management in Bioinformatics) | 3 |
| BIOI606 | (Sequence and Alignment) | 3 |
| BIOI607 | (Data Structures and Algorithms for Bioinformatics) | 3 |
| BIOI610 | (Genome Annotation) | 3 |
| BIOI611 | (Analysis of Gene Expression Data) | 3 |
| **Elective Requirement (choose one of the following):** | | **3** |
| BIOI621 | (Genome Assembly and Annotation) | |
| BIOI622 | (Metagenomics Data Analysis) | |
| BIOI699 | (Capstone Research) | |
| **Total Credits** | | **30** |