BS/MS BIOINFORMATICS SAMPLE SCHEDULE
Non-thesis Option

	Fall	Spring
Year 1	General Biology (BIOL 101) (3) General Chemistry A (CHEM 101) (3) Applied Calculus I (MATH 131)[1] (3) CORE: Philosophical Knowledge Tier 1 (3) CORE: Theology and Religious Studies Tier 1 (3) UNIV 101 (1)	General Chemistry B (CHEM 102) (3) Introduction to Programming (COMP 170) (3) Applied Calculus II (MATH 132)[2] (3) CORE: Historical Knowledge Tier 1 (3) CORE: College Writing Seminar (3)
	Total Credit Hours: 16	*Total Credit Hours: 15*
Year 2	Genetics (BIOL 282) (3) Genetics Lab (BIOL 283) (1) Organic Chemistry A (CHEM 223)[3] (3) Discrete Structures (COMP 163) (3) CORE: Literary Knowledge & Experience Tier 1 (3) CAS Elective (3)	Genomics (BIOL 387)[4,5] (3) Organic Chemistry B (CHEM 224)[6] (3) Data Structures (COMP 271) (3) CORE: Historical Knowledge Tier 2 (3) CORE: Societal and Cultural Knowledge Tier 1 (3)
	Total Credit Hours: 16	*Total Credit Hours:15*
Year 3	Bioinformatics (BIOL 388)[7] (3) Biochemistry (CHEM 361) (3) CORE: Theology and Religious Studies Tier 2 (3) CORE: Philosophical Knowledge Tier 2 (3) CAS Language Requirement 1 (3)[8] Bioinformatics Research (BIOI 399)[9,10] (3)	Proteomics (CHEM 365)[11] (3) Introduction to Biostatistics (STAT 335) (3) CORE: Literary Knowledge & Experience Tier 2 (3) CORE: Artistic Knowledge and Experience (3) CAS Language Requirement 2 (3)[8] ** APPLY FOR ACCELERATED PROGRAM **
	Total Credit Hours: 18	*Total Credit Hours:15*
Year 4	Design and Analysis of Algorithms (COMP 363) (3) CORE: Societal and Cultural Knowledge Tier 2 (3) CAS Elective (3) CAS Elective (3) CORE: Ethics (3)	**Advanced Bioinformatics (BIOI 500) (2)** **Bioinformatics Seminar (BIOI 501) (1)** **Computational Biology (COMP 488) (4)** **Quant. Bioinformatics (STAT 437) (3)** **Bioinformatics Elective (3)** CAS Elective (3)
	Total Credit Hours: 15	*Total Credit Hours: 16*
Year 5	**Bioinformatics Elective (3)** **Bioinformatics Elective (3)** **Bioinformatics Elective (3)**	**Bioinformatics Seminar (BIOI 501) (1)** **Bioinformatics Elective (3)** **Bioinformatics Elective (3)** **Bioinformatics Internship (BIOI 498) (1)**
	Total Credit Hours: 9	*Total Credit Hours:8*

[1] May substitute with MATH 161; **[2]** May substitute with MATH 162; **[3]** May substitute with CHEM 221; **[4]** Offered in Spring semester only; [5] May substitute with BIOL 392 (Fall Only course); **[6]** May substitute with CHEM 222; [7] Offered in Fall semester only; **[8]** Language competency required at the 102 level by course or test; **[9]** May substitute with BIOI 397 or BIOI 398 and may be repeated more than once (although only 1 credit hour is required); [10] 3 credit hours of BIOI 397, 398, or 399 fulfills Engaged Learning requirement; **[11]** CHEM 365 is offered every Spring semester of odd years.

Notes: CAS requires 2 Writing Intensive (WI) courses; many CORE Tier 2 courses are available as WI. Bold indicates courses required of the MS degree, totaling 30 credit hours. Courses applied towards both BS and MS degree in bold, underline.

Updated 11/2017