

Vaccinology Minor

23 Credits



Required Courses

15 Credits

Course #	Title	Credits
Biol 380	Molecular Biology	3
Biol 385	Molecular Biology Laboratory	1
Biol 275	Quantitative Biology	4
Micr 470*	Basic Immunology	3
Micr 471*	Immunology and Serology Lab	2
BCBT 210	Introduction to Vaccinology Seminar	1
BCBT 410	Vaccinology Senior Seminar	1

* Course must be taken at NDSU

Biosciences / Chemistry Restricted Elective

4 credits

Course #	Title	Credits
Biol 350	Microbiology	4
Biol 360	Cellular and Molecular Physiology	4
Chem 400	Biochemistry I	3
Chem 405	Biochemistry I Laboratory	1

Research / Industry Restricted Elective

4 credits

Course #	Title	Credits
BCBT 475	Biotechniques: Research and Communication I	2
BCBT 476	Biotechniques: Research and Communication II	2
Biol 497**	Undergraduate Research in Biology	1 – 3
Chem 497**	Undergraduate Research in Chemistry	1 – 3
BCBT 420	Introduction to Working in a Regulated Biochemistry and Biotechnology Industry	4
BCBT 425	Introduction to Validation in the Biochemistry and Biotechnology Industry	4
BCBT 430	Introduction to Quality Assurance and Quality Control in Biochemistry and Biotechnology Industry	4
BCBT 469	Biochemistry and Biotechnology Internship	1 - 4

** Research Must Apply Techniques Related to Vaccinology Industry