Biosystems Analytics & Technology MS Curriculum

Core Coursework	Course	12 Units
Applied Biostatistics	BE 513	3
Biosystems Analytics	BE 534	3
Design of Experiments	STAT 571B	3
Scientific Writing	ENVS 508	3
Theory & Methods	Course	6 Units
Research Methods	BE 501	2
Graduate Seminar - presenting	BE 696A	2
Graduate Seminar - non-presenting	BE 696B	2
Thesis / Report	Course	5 Units
Thesis or Report	BE 910 or BE 909	5
Electives	Course	7 Units
Chosen with approval of Graduate Committee		
TOTAL		30 UNITS

Elective Suggestions

Seeking More Depth In: Analytics

Electives	Course	Units
Metagenomics	BE 587	3
Applied Cyberinfrastructure Concepts	INFO/BE 529	3
Advanced Data Visualization	CSC 544	3
Algorithms in Bioinformatics	CSC 550	3

Seeking More Depth In: Sensors & Controls

Electives	Course	Units
Sensors & Controls	BE 547	3
Applied Instrumentation for Controlled Environment Agriculture	BE 579	3
Remote Sensing Data and Methods	BE 585	3
Introduction to Machine Learning	INFO 521	3

Applying Supporting and Core Coursework to an Area of Interest: Controlled Environment Ag

Electives	Course	Units
Applied Instrumentation for Controlled Environment Agriculture	BF 579	3
Controlled Environment Systems	BE 583	3
·		2
Plant Physiology	PLS 575A	3
Greenhouse Pest Management: Methods and Practice	ENTO 597C	3

Applying Supporting & Core Coursework to Area of Interest: Remote Sensing, Precision Ag

Electives	Course	Units
Globalization, Sustainability, and Innovation	BE 552	3
Applications of Geographic Information Systems	RNR 503	3
Geographic Applications of Remote Sensing	RNR 583	3
Microbial Biogeochemistry and Global Change	PLS 510	3

SAMPLE PLAN OF STUDY

Semester 1	Semester 1		Semester 2		Semester 3		
Course prefix and number	Units	Course prefix and number	Units	Course prefix and number	Units	Course prefix and number	Units
BE 513 Applied Biostatistics	3	BE 501 Research Methods	2	Electives	4	STAT 571B Design of Experiments	3
Elective	3	ENVS 508 Scientific Writing	3	BE 696B Graduate Seminar II – non- presenting	1	BE 696A Graduate Seminar I - presenting	1
BE 696B Graduate Seminar II – non- presenting	1	BE 534 Biosystems Analytics	3	BE 910 or BE 909 Thesis or Report	2	BE 910 or BE 909 Thesis or Report	2
BE 910 or BE 909 Thesis or Report	1	BE 696A Graduate Seminar I - presenting	1			Schedule thesis / report defense	
Total	8	Total	9	Total	7	Total	6