Appendix H-5: Approved Biosystems Engineering Design and Technical electives

The Biosystems Engineering major Design and Technical electives should be chosen in consultation with the student’s ABE Faculty Advisor and/or the ABE Academic Program Coordinator prior to registration.

The following courses may be used to satisfy the 12 units of BE Design electives. Courses used as the design electives may not be used to satisfy another major requirement.

ABE 422, Open Channel Flow
ABE 426, Watershed Engineering
ABE 427, Computer Applications in Hydraulics
ABE 428, Control of Erosion Processes
ABE 452, Globalization, Sustainability and Innovation
ABE 455, Soil and Water Resources Engineering
ABE 456, Irrigation Systems Design
ABE 458, Soil, Wetlands and Wastewater Reuse
ABE 459, Design of Onsite Wastewater Treatment and Dispersal Systems
ABE 467, Advanced Watershed Hydrology
ABE 475A, Physiology of Plant Production under Controlled Environment
ABE 481A, Engineering of Biological Processes
ABE 481B, Cell and Tissue Engineering
ABE 482 Integrated Engineered Solutions in the Food-Water-Energy Nexus
ABE 483 Controlled Environment Systems
ABE 487 Metagenomics: From Genes to Ecosystems
ABE 488 Micro and Nano Transducer Physics and Design
ABE 497C Greenhouse Pest Management: Methods and Practice

The following courses may be used to satisfy the 12 units of Technical electives. Courses used as the Technical electives may not be used to satisfy another major requirement.

ABE 422, Open Channel Flow
ABE 426, Watershed Engineering
ABE 427, Computer Applications in Hydraulics
ABE 428, Control of Erosion Processes
ABE 452, Globalization, Sustainability and Innovation
ABE 455, Soil and Water Resources Engineering
ABE 456, Irrigation Systems Design
ABE 458, Soil, Wetlands and Wastewater Reuse
ABE 459, Design of Onsite Wastewater Treatment and Dispersal Systems
ABE 467, Advanced Watershed Hydrology
ABE 475A, Physiology of Plant Production under Controlled Environment
ABE 481A, Engineering of Biological Processes
ABE 481B, Cell and Tissue Engineering
ABE 482 Integrated Engineered Solutions in the Food-Water-Energy Nexus
ABE 483 Controlled Environment Systems
ABE 487 Metagenomics: From Genes to Ecosystems
ABE 488 Micro and Nano Transducer Physics and Design
ABE 492 Directed Research
ABE 497C Greenhouse Pest Management: Methods and Practice

Additional approved courses that may be used to satisfy the BE Technical elective requirement: