## UNDERGRADUATE AND PROFESSIONAL MAJOR CHANGE BULLETIN NO. 1 Fall 2011

## **Faculty Senate Approved 9/15/2011**

## ---Tier III [T] COURSES---

The courses listed below reflect the Tier III curricular changes approved by the Faculty Senate Steering Committee in Summer 2011. All changes are effective Fall 2011.

Prefix	Course Number	New Revise Drop	Current	Proposed	Effective Date
AFS	401	Revise	Advanced Systems Analysis and Design in Agricultural & Food Systems 3 (2-2) Prereq AFS 301; Stat 212 or 412; senior standing; Rec Engl 402. Problem solving methodologies as applied to integrated agricultural systems analysis and design problems; strong emphasis on teamwork.	[T] Advanced Systems Analysis and Design in Agricultural & Food Systems 3 (2-2) Prereq AFS 301; Stat 212 or 412; senior standing; Rec Engl 402. Problem solving methodologies as applied to integrated agricultural systems analysis and design problems; strong emphasis on teamwork.	8-11
ВЕ	411	Revise	` '	[T] Bioengineering Capstone Project II 3 (2-2) Prereq senior status; B E 410 or permission of instructor. Detailed design and business case for a biological engineering-related process, machine, structure, or system.	8-11
СE	465	Revise	[M] Integrated Civil Engineering Design 3 (1-6) Prereq senior in C E; taken final semester. Civil engineering applications to planning and design; problem synthesis, data analysis, decision making and reporting; design of complete projects that include local and world wide problems through interdisciplinary teams.	[T,M] Integrated Civil Engineering Design 3 (1-6) Prereq senior in C E; taken final semester. Civil engineering applications to planning and design; problem synthesis, data analysis, decision making and reporting; design of complete projects that include local and world wide problems through interdisciplinary teams.	8-11
Ch E	451	Revise	[M] Chemical Process Analysis and Design II 3 Prereq Ch E 450. Development, design, and economic evaluation of chemical and	[T,M] Chemical Process Analysis and Design II 3 Prereq Ch E 450. Development, design, and economic evaluation of chemical and related	8-11

			related processes as practiced in industry.	processes as practiced in industry.	
Cpt S	423	Revise	Software Design Project II 3 (1-6) Prereq Cpt S 421; Cpt S 422 or c//. Laboratory/group design project for large-scale software development, requirements analysis, estimation, design, verification techniques.	[T] Software Design Project II 3 (1-6) Prereq Cpt S 421; Cpt S 422 or c//. Laboratory/group design project for large-scale software development, requirements analysis, estimation, design, verification techniques.	8-11
CS	420	Revise	[M] Software Engineering in Practice 3 Prereq CS 320 with a C or better; senior standing. Development of software in a team environment; project management; unit and integration testing, bug tracking, configuration management, software process models; object-oriented design with UML.	T Software Engineering in Practice 3 Prereq CS 320 with a C or better; senior standing. Development of software in a team environment; project management; unit and integration testing, bug tracking, configuration management, software process models; object-oriented design with UML.	8-11
Cst M	475	Revise	[M] Senior Capstone Project 3 Prereq Cst M 460, MgtOp 301; certified Cst M major. Simulation of real world competition for CM at Risk (CM/GC) format.	[T,M] Senior Capstone Project 3 Prereq Cst M 460, MgtOp 301; certified Cst M major. Simulation of real world competition for CM at Risk (CM/GC) format.	8-11
EЕ	416	Revise	[M] Electrical Engineering Design 3 (1-6) Prereq E E 415; Engl 402 or 403. Electrical engineering design of specific projects including design specification; written and oral presentations and reports.	[T,M] Electrical Engineering Design 3 (1-6) Prereq E E 415; Engl 402 or 403. Electrical engineering design of specific projects including design specification; written and oral presentations and reports.	8-11
ECE	452	Revise	[M] Capstone Design II 3 (1-6) Prereq ECE 451. Execution phase of the senior design project course sequence; independent or team project proposed in ECE 451 is designed and implemented.	[T,M] Capstone Design II 3 (1-6) Prereq ECE 451. Execution phase of the senior design project course sequence; independent or team project proposed in ECE 451 is designed and implemented.	8-11
Engr	421	Revise	[M] Multidisciplinary Engineering Design II 3 (1-4) Prereq senior standing; certified	[ <u>T</u> ,M] Multidisciplinary Engineering Design II 3 (1-4) Prereq senior standing; certified	8-11

			engineering major. Prototype solution developed and evaluated and business plan completed; presentation to stake holders; team development and assessment.	engineering major. Prototype solution developed and evaluated and business plan completed; presentation to stake holders; team development and assessment.	
EntrP	492	Revise	Small Business Policy 3 Prereq Acctg 230, B Law 210, Fin 325, Mgmt 301, Mktg 360. Application of management theory and principles to small firms; applied consulting experience with operating businesses.	[T] Small Business Policy 3 Prereq Acctg 230, B Law 210, Fin 325, Mgmt 301, Mktg 360. Application of management theory and principles to small firms; applied consulting experience with operating businesses.	8-11
НВМ	495	Revise	Case Studies and Research 3 Prereq HBM 358; HBM 491; HBM 494. Use of the case method and computerized statistical programs in the analysis of administrative practices of organizations.	[T] Case Studies and Research 3 Prereq HBM 358; HBM 491; HBM 494. Use of the case method and computerized statistical programs in the analysis of administrative practices of organizations.	8-11
Hort	425	Revise	[M] Future World Trends and Horticultural Impact 3 Prereq junior standing. Scientific, business, government, and popular information used to explore world trends; evaluate information; investigate impact of major trends in horticulture.	[T,M] Future World Trends and Horticultural Impact 3 Prereq junior standing. Scientific, business, government, and popular information used to explore world trends; evaluate information; investigate impact of major trends in horticulture.	8-11
МЕ	416	Revise	Mechanical Systems Design 3 (1-6) Prereq M E 348 or 375; M E 404; M E 414 or c//. Integrative design in mechanical engineering;	[T] Mechanical Systems  Design 3 (1-6) Prereq M E 348 or 375; M E 404; M E 414 or c//. Integrative design in mechanical engineering; multidisciplinary design project considering both technical and non-technical contexts; organizational dynamics and communications.	8-11
Mech	417	Revise	Mechanical Systems Design II 3 Prereq Mech 416. Second term of the year-long capstone design; integrative design in	[T] Mechanical Systems Design II 3 Prereq Mech 416. Second term of the year-long capstone design; integrative	8-11

			mechanical engineering; multidisciplinary design project considering technical and nontechnical contexts.	design in mechanical engineering; multidisciplinary design project considering technical and nontechnical contexts.	
MGMT	491	Revise	(MgtOp) Business Strategy and Policy 3 Prereq Fin 325, MgtOp 340, MGMT 301, MIS 250, Mktg 360. Overall management of the firm; top- level decision-making and planning.	(MgtOp) [T] Business Strategy and Policy 3 Prereq Fin 325, MgtOp 340, MGMT 301, MIS 250, Mktg 360. Overall management of the firm; top-level decision-making and planning.	8-11
NATRS	454	Revise	[M] Restoration Ecology 3 (2-3) Prereq senior standing. Ecological principles used to restore biological communities; ecological processes and species on degraded landscapes. Credit not granted for both NATRS 454 and 554.	[T,M] Restoration Ecology 3 (2-3) Prereq senior standing. Ecological principles used to restore biological communities; ecological processes and species on degraded landscapes. Credit not granted for both NATRS 454 and 554.	8-11
NATRS	464	Revise	[M] Landscape Ecology 3 (2-3) Prereq junior standing. Linkages between spatial patterns and processes in a variety of landscapes and the qualitative tools used in the investigation of these linkages. Credit not granted for both NATRS 464 and 564.	[T,M] Landscape Ecology 3 (2-3) Prereq junior standing. Linkages between spatial patterns and processes in a variety of landscapes and the qualitative tools used in the investigation of these linkages. Credit not granted for both NATRS 464 and 564.	8-11