Code # AG16

**Bulletin Change Transmittal Form**

[x]  **Undergraduate Curriculum Council** - Print 1 copy for signatures and save 1 electronic copy.

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| **Bulletin Change**Please attach a copy of all catalogue pages requiring editorial changes. |

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| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Department Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**COPE Chair (if applicable)** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Department Chair:**  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**General Education Committee Chair (If applicable)**   |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**College Curriculum Committee Chair** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Undergraduate Curriculum Council Chair** |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**College Dean** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Graduate Curriculum Committee Chair** |
|  | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…**Vice Chancellor for Academic Affairs** |

**1.Contact Person** (Name, Email Address, Phone Number)

Dr. Keith Morris, kmorris@astate.edu, 870-972-3468

**2.Proposed Change**

Revise Agricultural Technology emphasis (Agricultural Studies concentration) for the Bachelor of Science in Agriculture. Revise the emphasis title to Agricultural **Systems** Technology. Revise curriculum to better reflect the needs of modern agricultural enterprises. Revision requires no new courses, no new faculty resources, and no new facility resources.

**3.Effective Date**

Fall 2014

**4.Justification**

This revision updates the existing curriculum for the Agricultural Technology emphasis in Agricultural Studies to meet the ever changing needs of agriculture, particularly from a technological standpoint. The emphasis title is being changed from ~~Agricultural Technology~~ to Agricultural Systems Technology to better reflect the “systems” approach that is prevalent in modern agriculture, e.g., machinery systems, guidance systems, sensor and control systems, etc. Foundationally the curriculum mirrors agricultural mechanization curriculums that are found at many Land Grant institutions today. These are applied agricultural engineering programs that are typically housed in Colleges of Agriculture. Notably, this curriculum revision increases science and mathematics requirements (General Physics I and II, Algebra, and Trigonometry). It features a balance of Technology (TECH) courses (24 hours) and Agriculture (AGRI, AGEC, AGED, PSSC) courses (24 hours), while maintaining Agriculture Core courses. There are 51 hours of upper division content.

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**Major in Agricultural Studies Bachelor of Science in Agriculture Emphasis in Agricultural Systems Technology**

A [complete 8-semester degree plan is available at http://registrar.astate.edu/.](http://registrar.astate.edu/)

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| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 40) |  |
| **First Year Making Connections Course** | **Sem. Hrs.** |
| AGRI 1213, Making Connections in Agriculture | 3 |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Baccalaureate Degrees (p. 82)**Students with this major must take the following:***MATH 1023, College Algebra**~~CHEM 1043 AND CHEM 1041, Fundamental Concepts of Chemistry and Laboratory~~*PHYS 2504, General Physics I*BIOL 1003* ***AND*** *BIOL 1001, Biological Science and Laboratory**COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | 35 |
| **College of Agriculture Core Courses:** | **Sem. Hrs.** |
| (See Beginning of Agriculture Section)PSSC 3503, Agriculture Spatial Technologies I required. | 21 |
| **Major Requirements:** | **Sem. Hrs.** |
| See emphasis area below. |  |

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| **Emphasis Area (Agricultural Systems Technology):** | **Sem. Hrs** |
| ~~AGED 1403, Basic Ag Mechanics~~AGEC 3003, Agricultural Marketing or AGEC 3013, Agricultural Records or AGEC 3063, Agricultural Sales and Service | 3 |
| ~~AGED 2433, Principles of Agricultural Power: Electricity and Internal Combustion Engines~~AGRI 3543, Fundamentals of GIS | 3 |
| ~~AGED 2453, Application of Welding Technologies to Agriculture~~AGRI 4223, Agriculture and the Environment | 3 |
| AGED 3433, Agricultural Equipment Hydraulic Systems | 3 |
| ~~AGEC 4073, Agricultural Business Management~~CHEM 1043, Fundamental Concepts of Chemistry | 3 |
| ~~MET 2003, Introduction to Metallurgy~~MATH 1033, Plane Trigonometry | 3 |
| ~~PSSC 3503, Agriculture Spatial Technologies I~~PHYS 2064. General Physics II | ~~3~~4 |
| ~~PSSC 3513, Agriculture Spatial Technologies II OR~~AGRI 4773, Remote Sensing | 3 |
| TECH 2453, Solid Works I | 3 |
| ~~TECH 4003, AutoCAD 2-D~~TECH 2453 Solidworks I | 3 |
| ~~TECH 3823, Mechanics I~~PSSC 3513, Agricultural Spatial Technologies II | 3 |
| ~~TECH 3843, Manufacturing Materials & Processes~~PSSC 4543, Advanced GIS for Agriculture and Natural Resources | 3 |
| ~~TECH 3883, Machine Design OR~~~~TECH 3873, Tool Design~~PSSC 4713, Soil Quality Assessment and Interpretation or PSSC 4853, Soil and Water Conservation | 3 |
| ~~TECH 3813, Programmable Logic Control~~TECH 2863, Principles of Technology | 3 |
| TECH 4813, Operations Systems Research | 3 |
| ~~TECH 4823, Quality~~ ~~Assurance OR~~~~FDST 3203, Food Quality Assurance~~ TECH 3803, Electrical Systems | 3 |
| ~~TECH 4873, Motion and Time Study~~TECH 3863, Industrial Safety | 3 |
| ~~TECH 4883, Work Center Management~~PSSC 3323, Weeds and Weed Control | 3 |
| Upper level elective in PSSC | 3 |
| Upper level elective in TECH | 3 |
| **Sub-total** | **61** |
| **Total Required Hours:** | **120** |

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