Code # AG23 (2015)

**New Emphasis, Concentration or Option Proposal Form**

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

**Graduate Council** - Print 1 copy for signatures and send 1 electronic copy to [pheath@astate.edu](mailto:pheath@astate.edu)

|  |  |
| --- | --- |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 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** |
| Dr. Timothy Burcham Enter date… **College Dean** | \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Enter date…  **Graduate Curriculum Committee Chair** |
|  | Dr. Lynita Cooksey Enter date…  **Vice Chancellor for Academic Affairs** |

**i. Proposed Program Title**

Bachelor of Applied Science with Emphasis in Technology

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

Dr. Rajesh Sharma, [rsharma@astate.edu](mailto:rsharma@astate.edu), 870-972-2270

**iii. Proposed Starting Date**

Fall 2016

**Bulletin Changes**

|  |
| --- |
| **Instructions** |
| **Please visit** [**http://www.astate.edu/a/registrar/students/bulletins/index.dot**](http://www.astate.edu/a/registrar/students/bulletins/index.dot) **and select the most recent version of the bulletin. Copy and paste all bulletin pages this proposal affects below. Follow the following guidelines for indicating necessary changes.**  **\*Please note: Courses are often listed in multiple sections of the bulletin. To ensure that all affected sections have been located, please search the bulletin (ctrl+F) for the appropriate courses before submission of this form.**  - Deleted courses/credit hours should be marked with a red strike-through (~~red strikethrough~~)  - New credit hours and text changes should be listed in blue using enlarged font (blue using enlarged font).  - Any new courses should be listed in blue bold italics using enlarged font (***blue bold italics using enlarged font***)  *You can easily apply any of these changes by selecting the example text in the instructions above, double-clicking the ‘format painter’ icon 🡪 , and selecting the text you would like to apply the change to.*  *Please visit* [*https://youtu.be/yjdL2n4lZm4*](https://youtu.be/yjdL2n4lZm4) *for more detailed instructions.* |

**Bachelor of Applied Science (B.A.S.)**

Bachelor of Applied Science

Bachelor of Applied Science - Renewable

Energy Technology

Bachelor of Applied Science - Technology

**The below will need to be added to the Bulletin**

**Bachelor of Applied Science\***

**Emphasis in** Technology

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

|  |  |
| --- | --- |
| **University Requirements:** |  |
| Students interested in pursuing a Bachelor of Applied Science degree must schedule a personal in- terview with a BAS advisor. During this interview, the advisor will outline in detail the requirements for the BAS program. The advisor and the student will analyze the appropriateness of the degree given the student’s goals and career objectives, the degree’s requirements and the student’s academic progress to date.  **The BAS program requires completion of the following program prerequisites:**  1. Associate of Applied Science (AAS) or other recognized technical-professional associate  degree from an accredited institution.  2. Minimum GPA of 2.00 on all transfer work.  3. Completion of the ASU admission application process with acceptance.  4. Completion of the State Minimum General Education Core.  5. Completion of a total of 120 hours of which 45 hours are upper-level (3000-4000)  6. Minimum GPA of 2.00 on all coursework at ASU and a 2.00 average on all coursework pre-  sented for graduation.  ***\* The Bachelor of Applied Science with emphasis in Renewable Energy Technology degree program does not have a major.*** |  |
| **General Education Requirements:** | **Sem. Hrs.** |
| **Communication (9 hrs required)** COMS 1203, Oral Communications ENG 1003, Composition I (C or Better) ENG 1013, Composition II (C or Better) | 9 |
| **Math (3 hours required)**  MATH 1023, College Algebra (or any MATH course that requires MATH 1023 as a prerequisite) | 3 |
| **Science (8 hours required)**  **Select one of the following combinations:**  BIO 2013 **AND** 1021, Biology of the Cell and Laboratory  BIO 2103 **AND** 2101, Microbiology for Nursing and Laboratory  BIO 2203 **AND** 2201, Human Anatomy and Physiology I and Laboratory  BIOL 1003 **AND** 1001, Biological Science and Laboratory  BIOL 1033 **AND** 1001, Biology of Sex and Laboratory  BIOL 1063 **AND** 1001, People and the Environment and Laboratory  **Select one of the following combinations:**  CHEM 1013 **AND** 1011, General Chemistry I and Laboratory  CHEM 1043 **AND** 1041, Fundamental Concepts of Chemistry and Laboratory  GEOL 1003 **AND** 1001, Environmental Geology and Laboratory  PHSC 1014, Energy and the Environment  PHSC 1203 **AND** 1201, Physical Science and Laboratory PHYS 1103 **AND** 1101, Intro to Space Science and Laboratory PHYS 2034, University Physics I  PHYS 2054, General Physics I | 8 |
| **Fine Arts and Humanities (6 hrs required)**  **Fine Arts (select one of the following):**  ART 2503, Fine Arts-Visual MUS 2503, Fine Arts-Music THEA 2503, Fine Arts-Theatre  **Humanities (select one of the following):**  ENG 2003, World Literature to 1660  ENG 2013, World Literature Since 1660  PHIL 1103, Introduction to Philosophy | 6 |

Bachelor of Applied Science (cont.)

**Emphasis in** Technology

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

|  |  |
| --- | --- |
| **Social Sciences (9 hours required)**  **Select one of the following:**  HIST 2763, The United States To 1876  HIST 2773, The United States Since 1876  POSC 2103, Introduction to United States Government  **Select two of the following:**  ANTH 2233, Introduction to Cultural Anthropology  CMAC 1003, Mass Communication  ECON 2313 Principles of Macroeconomics ECON 2333, Economic Issues and Concepts GEOG 2613, Introduction to Geography  HIST 1013, World Civilization to 1660  HIST 1023, World Civilization since 1660  POSC 1003, Introduction to Politics PSY 2013, Introduction to Psychology SOC 2213, Introduction to Sociology | 9 |
| **Sub-total** | **35** |
| **Degree Requirements:** | **Sem. Hrs.** |
| CIT 3013, Management Information Systems | 3 |
| ENG 3043, Technical Writing | 3 |
| MGMT 3153, Organizational Behavior **OR**  Psychology (PSY) elective **OR**  Sociology (SOC) elective | 3 |
| RET 3113, Fund. Applications of Renewable Energy | 3 |
| TECH 3773, Statistics **~~OR~~**  ~~STAT 3233, Applied Statistics I~~ **~~OR~~**  ~~AGRI 3233, Applied Agricultural Statistics~~ | 3 |
| ~~TECH 3863, Industrial Safety~~ ***IDS 4013, Seminar in Professional Development*** | 3 |
| ~~TECH 4813, Operations Systems Research~~ ***IDS 4023, Leadership in the Profession*** | 3 |
| ~~TECH 4823, Quality Assurance~~ ***IDS 3013, Critical Thinking in the Profession*** | 3 |
| ~~TECH 4853, Lean 6 Sigma for Manufacturing~~ ***COMS 4263, Organizational Communication*** | 3 |
| ~~TECH 4883, Work Center Management~~ ***UC 480V, Special Problems*** | 3 |
| **Sub-total** | **30** |
| **AAS Career Block:** | **Sem. Hrs.** |
| AAS Technical Professional Courses  *(Students with less than 40 hours must complete additional coursework to meet the 120 hours degree requirement. (PLA credit may be applicable))* | 40 |
| **Emphasis Area (Technology):** | **Sem. Hrs.** |
| ***TECH 3863, Industrial Safety*** | 3 |
| ***TECH 4813, Operations Systems Research*** | 3 |
| ***TECH 4823, Quality Assurance*** | 3 |
| ***TECH 4853, Lean 6 Sigma for Manufacturing*** | 3 |
| ***TECH 4883, Work Center Management*** | 3 |
| **Sub-total** | **15** |
| **Total Required Hours:** | **120** |

**EMPHASIS ASSESSMENT**

**University Goals**

1. Please indicate the university-level student learning outcomes for which this new emphasis will contribute. Check all that apply.

|  |  |  |
| --- | --- | --- |
| 1. Global Awareness | 1. Thinking Critically | 1. Information Literacy |

**Emphasis Goals**

2. Justification for the introduction of the new emphasis. Must include:

1. Academic rationale (how will this emphasis fit into the mission established by the department for the curriculum?)  
   To meet the demand of individuals who wish to graduate with a technical degree and have already graduated with a 2-year AAS degree. Students may wish to start their own business or pursue leadership roles
2. List emphasis goals (faculty or curricular goals, specific to the emphasis.)

Students will demonstrate understanding of technology fundamentals

Students will utilize knowledge of mathematics and science to solve technology problems

Students will exhibit basic skills to analyze and interpret data and will be able to formulate the problems and processes for solutions

Students will develop the ability to organize information and communicate effectively

d. Student population served.

Graduates of 2-year AAS degrees

**Emphasis Student Learning Outcomes**

3. Please fill out the following table to develop a continuous improvement assessment process for this emphasis.

*For further assistance, please see the ‘Expanded Instructions’ document available on the UCC - Forms website for guidance, or contact the Office of Assessment at 870-972-2989.*

***Note: Best practices suggest an emphasis would have 1 to 3 outcomes.***

|  |  |
| --- | --- |
| **Outcome 1** | Students will demonstrate a solid understanding of technology fundamentals. |
| Assessment Procedure Criterion | Final Project in course TECH 3863. Will have rubric to score and assess. |
| Which courses are responsible for this outcome? | TECH 3863 Industrial Safety, TECH 4813 Operations Systems Research, TECH 4823 Quality Assurance, TECH 4853 Lean 6 Sigma for Manufacturing, TECH 4883 Work Center Management |
| Assessment  Timetable | Courses are assessed once per year. However, assessment reporting for this outcome will be in the program’s third year after inception. |
| Who is responsible for assessing and reporting on the results? | Rajesh Sharma assessment leader and Yifeng Ren instructor |

|  |  |
| --- | --- |
| **Outcome 2** | Students will exhibit the basic skills to analyze and interpret data. Will be able to formulate the problems and processes for solutions. |
| Assessment Procedure Criterion | Final Project in course TECH 4813. Will have rubric to score and assess. |
| Which courses are responsible for this outcome? | TECH 3863 Industrial Safety, TECH 4813 Operations Systems Research, TECH 4823 Quality Assurance, TECH 4853 Lean 6 Sigma for Manufacturing, TECH 4883 Work Center Management |
| Assessment  Timetable | Courses are assessed once per year. However, assessment reporting for this outcome will be in the program’s third year after inception. |
| Who is responsible for assessing and reporting on the results? | Rajesh Sharma, assessment leader and Rick White, instructor |

*Please repeat as necessary.*

**LETTER OF NOTIFICATION – 3  
NEW OPTION, CONCENTRATION, EMPHASIS**(Maximum 18 semester credit hours of new theory courses and 6 credit hours of new practicum courses)

1. Institution submitting request:

Arkansas State University

2. Contact person/title:

Dr. Rajesh Sharma, Assistant Professor

3. Phone number/e-mail address:

870-972-2270, rsharma@astate.edu

4. Proposed effective date:

Fall 2016

5. Title of degree program:

Bachelor of Applied Science

6. CIP Code:

30.9999

7. Degree Code:

5877

8. Proposed option/concentration/emphasis name:

Technology

9. Reason for proposed action:

To meet the demand of individuals who wish to graduate with a technical degree. Students may wish to start their own business or pursue leadership roles

10. New option/concentration/emphasis objective

The Technology Emphasis is designed for students who are ready to take on a more technical responsibility. This is a popular option for workforce development and advancement. This degree provides students with an academic training to further their careers.

11. Provide the following:

a. Curriculum outline - List of required courses

|  |  |  |
| --- | --- | --- |
| General Education Requirements | | |
| ENG 1003 | Composition I | 3 |
| ENG 1013 | Composition II | 3 |
| COMS 1203 | Oral Communication | 3 |
| MATH 1023 | College Algebra | 3 |
| *Physical Science (Choose One)* | | |
| CHEM 1013 AND CHEM 1011 | General Chemistry I and Lab | 4 |
| CHEM 1043 AND CHEM 1041 | Fundamental Concepts of Chemistry and Lab |
| GEOL 1003 AND GEOL 1001 | Environmental Geology and Lab |
| PHSC 1014 | Energy and the Environment |
| PHSC 1203 AND PHSC 1201 | Physical Science and Lab |
| PHSC 1103 AND PHSC 1101 | Introduction to Space Science and Lab |
| PHSC 2034 | University Physics I |
| *Life Science (Choose One)* | | |
| BIOL 1003 AND BIOL 1001 | Biological Science and Lab | 4 |
| BIOL 1033 AND BIOL 1001 | Biology of Sex and Lab |
| BIOL 1063 AND BIOL 1001 | People & Environment and Lab |
| BIO 2013 AND BIO 2011 | Biology of the Cell and Lab |
| BIO 2103 AND BIO 2101 | Microbiology for N&AH and Lab |
| BIO 2203 AND BIO 2201 | Anatomy and Physiology I and Lab |
| *Fine Arts (Choose One)* | | |
| ART 2503 | Fine Arts – Visual | 3 |
| MUS 2503 | Fine Arts – Musical |
| THEA 2503 | Fine Arts - Theatre |
| *Humanities (Choose One)* | | |
| ENG 2003 | World Literature to 1660 | 3  3 |
| ENG 2013 | World Literature Since 1660 |
| PHIL 1103 | Intro to Philosophy |
| *Social Science (Choose One)* | | |
| HIST 2763 | The United States to 1876 | 3 |
| HIST 2773 | The United States Since 1876 |
| POSC 2103 | Intro to US Government |
| *Social Science (Choose Two)* | | |
| ANTH 2233 | Intro to Cultural Anthropology | 6 |
| CMAC 1003 | Mass Communications in Modern Society |
| ECON 2313 | Principles of Macroeconomics |
| ECON 2333 | Economic Issues and Concepts |
| GEOG 2613 | Intro to Geography |
| HIST 1013 | World Civilization to 1660 |
| HIST 1023 | World Civilization Since 1660 |
| Degree Requirements | | |
| CIT 3013 | Management Information Systems | 3 |
| ENG 3043 | Technical Writing | 3 |
| MGMT 3153 | Org. Behavior | 3 |
| RET 3113 | Fund. Applications of Renewable Energy | 3 |
| TECH 3773 | Statistics | 3 |
| IDS 4013 | Seminar in Professional Development | 3 |
| IDS 4023 | Leadership in the Profession | 3 |
| IDS 3013 | Critical Thinking in the Profession | 3 |
| COMS 4263 | Organizational Communication | 3 |
| UC 480V | Special Problems | 3 |
| Emphases | | |
| *Technology Emphasis* | | |
| TECH 3863 | Industrial Safety | 3 |
| TECH 4813 | Operations Systems Research | 3 |
| TECH 4823 | Quality Assurance | 3 |
| TECH 4853 | Lean 6 Sigma for Manufacturing | 3 |
| TECH 4883 | Work Center Management | 3 |
| AAS Career Block | | |
| Associate of Applied Science |  | 40 |

b. New course descriptions

No new courses

c. Program goals and objectives

The Bachelor of Applied Science degree in Technology is designed to provide a four-year degree in a true 2+2 manner for students who already have an Associate of Applied Science degree and are ready to take on more technical responsibility. This is a popular option for workforce development and advancement. This degree provides students with an academic training to further their careers.

d. Expected student learning outcomes

Students will demonstrate a solid understanding of technology fundamentals while utilizing knowledge of mathematics and science to solve technology problems.

12. Will the new option be offered via distance delivery?

Yes

13. Mode of delivery to be used:

Blackboard Learn

14. Explain in detail the distance delivery procedures to be used:

Blackboard Learn Platform

15. Is the degree approved for distance delivery?

Yes

16. List courses in option/concentration/emphasis. Include course descriptions for new courses.

|  |  |  |
| --- | --- | --- |
| *Technology Emphasis* | | |
| TECH 3863 | Industrial Safety | 3 |
| TECH 4813 | Operations Systems Research | 3 |
| TECH 4823 | Quality Assurance | 3 |
| TECH 4853 | Lean 6 Sigma for Manufacturing | 3 |
| TECH 4883 | Work Center Management | 3 |

17. Specify the amount of the additional costs required, the source of funds, and how funds will be used.

None

President/Chancellor Approval Date: Click here to enter a date.

Board of Trustees Notification Date: Click here to enter a date.

Chief Academic officer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: Enter date.

Name (printed): Click here to enter text.