|  |  |
| --- | --- |
| For Academic Affairs and Research Use Only | |
| CIP Code: |  |
| Degree Code: |  |

**Letter of Notifications**

### [X] Undergraduate Curriculum Council

**[ ] Graduate Council**

#### Signed paper copies of proposals submitted for consideration are no longer required. Please type approver name and enter date of approval.

Email completed proposals to [curriculum@astate.edu](mailto:curriculum@astate.edu) for inclusion in curriculum committee agenda.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Rajesh Sharma |  | 12/10/19 |

|  |  |  |
| --- | --- | --- |
|  |  | ENTER DATE |

**Department Curriculum Committee Chair**

|  |  |
| --- | --- |
| Rajesh Sharma | 12/10/19 |

**Department Chair:**

|  |  |
| --- | --- |
| Jason Stewart | 12/20/2019 |

**College Curriculum Committee Chair**

|  |  |
| --- | --- |
| 1. Bhattacharyya | 12/20/19 |

**College Dean**

|  |  |
| --- | --- |
|  | ENTER DATE |

**General Education Committee Chair (If applicable)**

**COPE Chair (if applicable)**

|  |  |  |
| --- | --- | --- |
|  |  | ENTER DATE |

**Head of Unit (If applicable)**

|  |  |  |
| --- | --- | --- |
|  |  | ENTER DATE |

**Undergraduate Curriculum Council Chair**

|  |  |  |
| --- | --- | --- |
|  |  | ENTER DATE |

**Graduate Curriculum Committee Chair**

|  |  |  |
| --- | --- | --- |
|  |  | ENTER DATE |

**Vice Chancellor for Academic Affairs**

**If you require to fill out a Letter of Notification, please email** [**curriculum@astate.edu**](mailto:curriculum@astate.edu) **or contact Academic Affairs and Research at (870) 972-2030 for guidance PRIOR TO submitting these through the curricular process.**

**1.Contact Person** (Name, Email Address, Phone Number) Rajesh Sharma, rsharma@astate.edu,870-972-2270

**Guide to ADHE Letter of Notifications**

All documentation to be sent to ADHE must be submitted by the Office of Academic Affairs and Research (AAR), and must go through regular curriculum process. Please see the following specific curriculum forms created for changes requiring:

|  |  |
| --- | --- |
|  | Established form |
| LON 3 - NEW OPTION, CONCENTRATION, EMPHASIS | New\_Emphasis\_Concentration\_or\_Option\_Proposal\_Form |
| LON 5 - DELETION  (Certificate, Degree, Option/Emphasis/Concentration, Organizational Unit) | Program\_Emphasis\_or\_Minor\_Deletion\_Proposal\_Form |
| LON 11 - RECONFIGURATION OF EXISTING DEGREE PROGRAMS  (Consolidation or Separation of Degrees to Create New Degree) | Reconfig\_Program\_Proposal\_Form |
| For all other LONs, please utilize this form. All other LONs are included in the following pages. A guide for LON selection is available below. Please select the one you require and delete the others, and submit this form through the regular curriculum process. | |

|  |  |  |
| --- | --- | --- |
|  | **Guide to LON Selection** | IMPORTANT NOTES |
| LON 1 | NAME CHANGE OF EXISTING CERTIFICATE, DEGREE, MAJOR, OPTION OR ORGANIZATIONAL UNIT  (No change in program curriculum, option/emphasis/concentration or organizational structure) |  |
| LON 1-C | CIP CODE CHANGE REQUEST  (No change in program curriculum) | Contact AAR prior to completing this paperwork. |
| LON 2 | ESTABLISHMENT OF ADMINISTRATIVE UNIT  (Center, Division or Institute not offering primary faculty appointments or certificate/degree programs) | Contact AAR prior to completing this paperwork. |
| LON 3 | NEW OPTION, EMPHASIS or CONCENTRATION | Please fill out the appropriate Curriculum Proposal Form as outlined above. The LON is  attached to this form. |
| LON 4 | ESTABLISHMENT OF NEW ADMINISTRATIVE UNIT  (Instruction, Research or Service Institute/Center fully supported by non-state funds) | Contact AAR prior to completing this paperwork. |
| LON 5 | DELETION  (Certificate, Degree, Option/Emphasis/Concentration, Organizational Unit) | Please fill out the appropriate Curriculum Proposal Form as outlined above. The LON is  attached to this form. |
| LON 6 | Inactive/Reactivate Program | Contact AAR prior to completing this paperwork. |
| LON 7 | REORGANIZATION OF EXISTING ORGANIZATIONAL UNITS | Contact AAR prior to completing  this paperwork. |
| LON 8 | UNDERGRADUATE CERTIFICATE PROGRAM  (6-21 semester credit hours) |  |
| LON 9 | UNDERGRADUATE CERTIFICATE PROGRAM  (21-45 semester credit hours)  (75 percent of the coursework currently offered in existing associate or bachelor’s degree program) |  |
| LON 10 | GRADUATE CERTIFICATE PROGRAM  (12-21 semester credit hours) |  |
| LON 11 | RECONFIGURATION OF EXISTING DEGREE PROGRAMS | Please fill out the appropriate Curriculum Proposal Form as |

|  |  |  |
| --- | --- | --- |
|  | (Consolidation or Separation of Degrees to Create New Degree) | outlined above. The LON is attached to this form. |
| LON 11A | RECONFIGURATION OF EXISTING ASSOCIATE DEGREE PROGRAM  (Associate of Arts/Associate of Science changed to Associate of Applied Science)  [separate form required for each degree reconfiguration] | Contact AAR prior to completing this paperwork. |
| LON 11C | CURRICULUM REVISION OF EXISTING CERTIFICATE OR DEGREE PROGRAM |  |
| LON 11D | PROGRAM RECONFIGURATION  Existing Certificate/Degree Reconfigured To Create New Certificate/Degree Offered on Campus and/or by Distance Technology |  |
| LON 11M | RECONFIGURATION OF EXISTING DEGREE PROGRAMS  Modification to Create New Degree  (75% of coursework from existing degree) |  |
| LON 11R | REVISION OF EXISTING CERTIFICATE OR DEGREE PROGRAM (Act 747) |  |
| LON 11T | RECONFIGURATION OF EXISTING DEGREE PROGRAMS FOR TRANSFER PURPOSES  Associate of Arts (AA) or Associate of Applied Science (AAS)  Reconfigured to create Associate of Science (AS) in designated field of study [A separate form is required for each degree reconfiguration] | Contact AAR prior to completing this paperwork. |
| LON 12 | EXISTING CERTIFICATE or DEGREE PROGRAM OFFERED AT OFF-CAMPUS  LOCATION |  |
| LON 13 | EXISTING CERTIFICATE or DEGREE OFFERED via DISTANCE TECHNOLOGY |  |

**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.* |

**Table of Contents**

12 •ACADEMIC CALENDAR 2019-2020

1. •ORGANIZATION OF THE UNIVERSITY
2. •OFFICERS OF THE UNIVERSITY 2018-2019

19 •The University

19 •Mission

19 •Core Values

19 •University Learning Outcomes

19 •Vision

19 •Location

1. •History
2. •Library
3. •Heritage Sites
4. •Museum
5. •Delta Studies Center
6. •Admission

31 •Fees and Expenses

34 •Academic Regulations

54 •Services for Students

61 •Academic Programs

73 •Graduate Degree Programs

77 •The General Education Program

81 •Colleges and Departments

83 •The Honors College

86 •Undergraduate Studies

100 •College of Agriculture

100 •Agriculture Program

117 •Engineering Technology Program

#### 124 •Neil Griffin College of Business

126 •Department of Accounting

130 •Department of Computer and Information Technology

136 •Department of Economics and Finance

147 •Department of Management and Marketing

162 •College of Education and Behavioral Science

166 •Department of Psychology and Counseling

171 •Department of Teacher Education

178 •Department of Education Leadership, Curriculum and Special Education

181 •Department of Health, Physical Education, and Sport Sciences

|  |  |
| --- | --- |
| 189 | •College of Engineering and Computer Science |
| 190 | •Department of Computer Science |
| 195 | •Engineering Programs |
| 197 | •Civil Engineering Program |
| 201 | •Electrical Engineering Program |

**Academic Programs**

**DEGREE PROGRAMS AND MAJORS**

The undergraduate degrees Arkansas State University offers are listed below with majors available in each degree program.

###### Associate of Arts (A.A.)

|  |
| --- |
| En Route Associate of Arts (A.A.) - General Education |

**Associate of Applied Science (A.A.S.)**

|  |
| --- |
| Clinical Laboratory Science |
| \*Crime Scene Investigation |
| Disaster Preparedness/Emergency Mgmt.  —EMT-Basic |
| Law Enforcement |
| \*Law Enforcement Administration |
| Occupational Therapist Assistant |
| Paramedic |
| Physical Therapist Assistant |

*\*Programs offered in cooperation with the Criminal Justice Institute of the University of Arkansas.*

###### Associate of Applied Science in Nursing (A.A.S.N.)

|  |
| --- |
| Nursing  —LPN to AASN  —LPN to AASN (Online) |

**Associate of General Studies (A.G.S.) Associate of Science (A.S.)**

|  |
| --- |
| Accounting |
| Computer and Information Technology |
| Engineering Technology |
| En RouteAssociate of Science(A.S.)- General Education |

|  |
| --- |
| Mathematics |
| Multimedia Journalism |
| Physics |
| Psychology |
| Sport Management: |
| Strategic Communication (emphasis in):  —Advertising  —Public Relations  —Social Media Management |
| Engineering Technology (emphasis  in):  —Computer Aided Drafting and Design  —Computer Systems  —Technical Studies  —Technology Management |
| Wildlife, Fisheries and Conservation (em- phasis in):  —Fisheries  —Wildlife |

**Bachelor of Science in Agriculture (B.S.A.)**

|  |
| --- |
| Agricultural Business:  —Agricultural Economics and Finance  —Agricultural Marketing and Management |
| Agricultural Studies (emphasis in):  —Agricultural Communications  —Agricultural Education  —Agricultural Science  —Agricultural Systems Technology |
| Animal Science (emphasis in):  —Equine Management  —Pre-Veterinary  —Production and Management |
| Plant and Soil Science (emphasis in):  —Agronomy  —Environmental Horticulture |

**Bachelor of Science in Civil Engineering (B.S.C.E.)**

|  |
| --- |
| Civil Engineering |

**Bachelor of Science in Education (B.S.E.)**

|  |
| --- |
| Business Technology |
| Elementary Education |
| English |
| General Sciences (emphasis in):  —Biology  —Chemistry  —Physics |
| Mathematics |
| Middle Level Education |
| Physical Education |
| Social Science |

**Colleges and Departments**

The faculty and curricula of Arkansas State University are organized into colleges, Graduate Programs, and independent departments. All undergraduate programs are included by college, department, and major in this bulletin. Graduate programs are described in the Graduate Bulletin**.**

**THE HONORS COLLEGE UNDERGRADUATE STUDIES**

**COLLEGE OF AGRICULTURE**

Agriculture Program

Engineering

Technology Program

##### NEIL GRIFFIN COLLEGE OF BUSINESS

Department of Accounting

Department of Computer and Information Technology Department of Economics and Finance

Department of Management and Marketing

##### COLLEGE OF EDUCATION AND BEHAVIORAL SCIENCE

ASU Childhood Services

Center for Excellence in Education

Department of Health, Physical Education, and Sport Sciences Department of Psychology and Counseling

Department of Teacher Education and Leadership Professional Education Programs

##### COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

Department of Computer Science Program for Civil Engineering Program for Electrical Engineering Program for Mechanical Engineering

Engineering **Technology Program**

**Associate Professors:** *Sharma*

**Instructors:** *Ren, White*

##### MISSION STATEMENT

The Engineering Technology Program at Arkansas State University strives to provide a quality technical edu- cation necessary for a successful career in various industries. This program prepares students for a wide range of technical careers ranging from manufacturing, management, operations and upcoming renewable energy sector. Graduates of this program are expected to possess technology fundamen- tals and hands-on technical skills. This program has two intertwined objectives: serving the needs of quality technical education in the region, and supporting the local industry and economy by providing a qualified workforce.

##### BACHELOR OF SCIENCE DEGREE

The Bachelor of Science degree with a major in Engineering Technology offers four emphasis areas: *Computer Aided Drafting and Design, Computer Systems, Technical Studies, and Technology Management.* Each program will be tailored to meet the needs of the career specifications designated by the student.

The ***Computer Aided Drafting and Design*** option is focused to develop and train qualified personnel in the use of computer aided technology for designing objects, real or virtual. The design of geometrics models using parametric procedures, using driven dimension, and tolerances. These procedures in CAD, will allow students the ability to apply the principles in manufacturing settings. Graduates with this emphasis will serve all manufacturing clients such as Civil, Mechanical, Electrical, and Industrial engineering groups.

The ***Computer Systems*** option is designed to prepare students to manage and troubleshoot com- puter networks in various settings. Students in this emphasis area take computer networking courses at 2+2 partner institutions.

The ***Technical Studies*** option is designed to permit the student to tailor a program in accordance with his/her specific interests for which a traditional baccalaureate degree is not attainable.

Students who have successfully completed some of the degree requirements in an occupational environment may continue their education under this educational umbrella.

The ***Technology Management*** option is designed to prepare a student to apply theories, per- ceptions, and principles established in the humanities and social and behavioral sciences, as well as sound business practices in a technology-oriented environment. Graduates with this emphasis will serve as liaison between manufacturing or industrial production and the administrators of a company. Consequently, a sound understanding of the basic principles of business, personnel management, and management techniques will be mandatory.

Prior Learning Assessment is a program that enables students to earn college credit for learning acquired outside of the traditional college classroom. Seminars are provided to assist students in the development of prior learning portfolios. Upon completion of the assessment process, up to 25 percent of the degree requirements may be awarded using TECH 3721-9, Technical Career Subjects and/or TECH 1891-9, Occupational Studies Credit.

Students who are graduates of two-year occupational programs may be considered as candidates to enroll in the Bachelor of Science - Engineering Technology degree program.

The Bachelor of Science - Engineering Technology degree is accredited by the Higher Learning Commission.

**Major in** Engineering **Technology**

###### Bachelor of Science

**Emphasis in Computer Aided Drafting and Design**

A complete 8-semester degree plan is available a[t https://www.astate.edu/info/academics/degrees/](http://www.astate.edu/info/academics/degrees/)

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 42) |  |
| **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. 78)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | **35** |
| **Major Requirements:**  Grade of “C” or better required for all Major Requirements | **Sem. Hrs.** |
| CIT 3013 Management Information Systems | 3 |
| ENG 3043, Technical Writing | 3 |
| MGMT 3153, Organizational Management **OR**  Sociology Elective **OR**  Psychology 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 | 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** | **30** |
| **Emphasis Area (Computer Aided Drafting and Design):**  Grade of “C” or better required for all Emphasis Area Requirements | **Sem. Hrs.** |
| MATH 1033, Plane Trigonometry | 3 |
| TECH 2703 Technical Graphics and AutoCAD | 3 |
| TECH 2863, Principles of Technology | 3 |
| TECH 3413, AutoCAD / Inventor | 3 |
| TECH 3433, AutoCAD 3-D Modeling | 3 |
| TECH 3453, Advanced Technology Design - Solid Works | 3 |
| TECH 3843, Manufacturing Materials and Processes | 3 |
| TECH 3853, Computer Aided Manufacturing (CAM) | 3 |
| TECH 3873, Tool Design | 3 |
| TECH 4743, Computer Numeric Control | 3 |
| TECH 4873, Motion and Time Study | 3 |
| **Sub-total** | **33** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **19** |
| **Total Required Hours:** | **120** |

**Major in** Engineering **Technology**

###### Bachelor of Science Emphasis in Computer Systems

A complete 8-semester degree plan is available a[t https://www.astate.edu/info/academics/degrees/](http://www.astate.edu/info/academics/degrees/)

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 42) |  |
| **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. 78)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | **35** |
| **Major Requirements:**  Grade of “C” or better required for all Major Requirements | **Sem. Hrs.** |
| CIT 3013 Management Information Systems | 3 |
| ENG 3043, Technical Writing | 3 |
| MGMT 3153, Organizational Management **OR**  Sociology Elective **OR**  Psychology 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 | 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** | **30** |
| **Emphasis Area (Computer Systems):**  Grade of “C” or better required for all Emphasis Area Requirements  Courses denoted below with an asterisk (\*) cannot be taken on the A-State campus; they are taught only at the 2+2 program institutions. | **Sem. Hrs.** |
| RET 4123, Energy Conservation and Efficiency | 3 |
| \* TECH 1013, Networking Essentials - Cisco I | 3 |
| \* TECH 1023, Router Technologies - Cisco II | 3 |
| \* TECH 2033, Advanced Routing and Switching - Cisco III | 3 |
| \* TECH 2043, WAN Technologies and Design - Cisco IV | 3 |
| TECH 2863, Principles of Technology | 3 |
| Engineering Technology and Renewable Energy  Technology Electives (TECH, RET) | 15 |
| Sub-total | 33 |
| **Electives:** | **Sem. Hrs.** |
| Electives | **19** |
| **Total Required Hours:** | **120** |

**Major in** Engineering **Technology**

###### Bachelor of Science Emphasis in Technical Studies

A complete 8-semester degree plan is available a[t https://www.astate.edu/info/academics/degrees/](http://www.astate.edu/info/academics/degrees/)

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 42) |  |
| **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. 78)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | **35** |
| **Major Requirements:**  Grade of “C” or better required for all Major Requirements | **Sem. Hrs.** |
| CIT 3013 Management Information Systems | 3 |
| ENG 3043, Technical Writing | 3 |
| MGMT 3153, Organizational Management **OR**  Sociology Elective **OR**  Psychology 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 | 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** | **30** |
| **Emphasis Area (Technical Studies):**  Grade of “C” or better required for all Emphasis Area Requirements | **Sem. Hrs.** |
| RET 4123, Energy Conservation and Efficiency | 3 |
| TECH 2863, Principles of Technology | 3 |
| TECH 3843, Manufacturing Materials and Processes | 3 |
| Technical Electives (ENGR, MATH, PHYS, CHEM, RET, CIT) | 12 |
| Engineering Technology and Renewable Energy  Technology Electives (TECH, RET) | 12 |
| **Sub-total** | **33** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **19** |
| **Total Required Hours:** | **120** |

**Major in** Engineering **Technology**

###### Bachelor of Science Emphasis in Technology Management

A complete 8-semester degree plan is available a[t https://www.astate.edu/info/academics/degrees/](http://www.astate.edu/info/academics/degrees/)

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Baccalaureate degrees (p. 42) |  |
| **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. 78)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite COMS 1203, Oral Communication (Required Departmental Gen. Ed. Option)* | **35** |
| **Major Requirements:**  Grade of “C” or better required for all Major Requirements | **Sem. Hrs.** |
| CIT 3013 Management Information Systems | 3 |
| ENG 3043, Technical Writing | 3 |
| MGMT 3153, Organizational Management **OR**  Sociology Elective **OR**  Psychology 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 | 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** | **30** |
| **Emphasis Area (Technology Management):**  Grade of “C” or better required for all Emphasis Area Requirements | **Sem. Hrs.** |
| RET 4123, Energy Conservation and Efficiency | 3 |
| TECH 2863, Principles of Technology | 3 |
| TECH 3713, Fiscal Aspects | 3 |
| TECH 3753, Legal Aspects | 3 |
| TECH 3843, Manufacturing Materials and Processes | 3 |
| Accounting Electives | 3-6 |
| Management Electives | 6-9 |
| Engineering Technology and Renewable Energy  Technology Electives (TECH, RET) | 3-9 |
| **Sub-total** | **33** |
| **Electives:** | **Sem. Hrs.** |
| Electives | **19** |
| **Total Required Hours:** | **120** |

**ASSOCIATE OF SCIENCE IN** Engineering **TECHNOLOGY**

The Associate of Science degree with a major in Engineering Technology will allow the student to meet the general education requirements, the degree preconditions, and utilize the opportunities to exercise work experience or prior education that may contribute to this degree option.

The program allows students to participate in a two-year program to meet the needs of industry while preserving the option of earning a baccalaureate degree in the future. It permits industry to meet its educational and training requirements when a four-year degree is not warranted.

The student must complete a minimum of 60 credit-hours of work and must adhere to all policies established by the university. Flexibility is provided through counseling and the review of prior experience which may be substituted for formal college credit.

The Associate of Science- Engineering Technology is accredited by The Higher Learning Commission.

**Major in** Engineering **Technology**

###### Associate of Science

|  |  |
| --- | --- |
| **University Requirements:** |  |
| See University General Requirements for Associate degrees (p. 43) |  |
| **General Education Requirements:** | **Sem. Hrs.** |
| See General Education Curriculum for Associate of Science Degrees (p. 79)  **Students with this major must take the following:**  *MATH 1023, College Algebra or MATH course that requires MATH 1023 as a prerequisite* | **35** |
| **Major Requirements:** | **Sem. Hrs.** |
| TECH 2703, Technical Graphics and AutoCAD | 3 |
| TECH 2863, Principles of Technology | 3 |
| TECH 3773, Statistics **OR**  STAT 3233, Applied Statistics I **OR**  AGRI 3233, Applied Agricultural Statistics | 3 |
| Engineering Technology Electives | 9 |
| **Sub-total** | **18** |
| **Electives:** | **Sem. Hrs.** |
| Technical Electives | **7** |
| **Total Required Hours:** | **60** |

Engineering **Technology Program Minors**

**Minor in Renewable Energy Technology**

|  |  |
| --- | --- |
| **Required Courses:** | **Sem. Hrs.** |
| RET3113, Fundamentals andApplications of Renewable Energy | 3 |
| RET 4013, Process Technology for Agricultural Products | 3 |
| RET 4023, Advanced Bioenergy | 3 |
| RET 4113, Advanced Renewable Energy Systems | 3 |
| RET 4123, Energy Conservation and Efficiency | 3 |
| RET 4313, Wind Energy Technology | 3 |
| **Total Required Hours:** | **18** |

**SW 4363. Religion and Spirituality in Social Work Practi**ce Anexaminationofreligious and spiritual beliefs in psychosocial development, the family, social policy, community and society. Demand.

**SW 4373. Social Work and Health Care Services** This course is designed to provide knowledge and understanding of direct social work practice in varied health care settings. Illness, disease, trauma and disability, death and dying are examined from an ecological systems perspective. Is- sues of diversity and bioethics are emphasized. Demand.

**SW 4383. Child Welfare and the Law** Capstone course for the interdisciplinary minor in Chil- dren’s Advocacy Studies: the juvenile justice system as it applies to children as victims, and proper skills for investigating and prosecuting suspected cases of child abuse and neglect. Cross listed with SOC 4383 and CRIM 4383. Restricted to Juniors, Seniors and Post-Degrees with a minor in Children’s Advocacy Studies. Prerequisites, SW 3313, SW 3343 and SW 4323, and 6 additional elective credit hours in the minor, all with a C or better. Spring.

**SW 460V. Special Problems** Individually directed problems in Social Work. Must be ar- ranged with the professor and approved by department chair. Demand.

## Teacher Education (TE)

**TE 2003. Introduction to Education** Introduction to teaching in a pluralistic society and an understanding of thehistorical, multicultural, sociological, philosophical, legal, political, andcurricular dimensions of American education. Students will be assigned a field placement that matches their licensure area. Fall, Spring.

**TE 3003. Differentiation for Culturally and Linguistically Diverse Learners** Examination and application of research-based pedagogical methods for diverse learners, including English language learners. Focus on scaffolding success in inclusive classrooms using response to inter- vention (RTI) and sheltered content instruction. Prerequisites, ELSE 3643, Admission to Teacher Education Program. Fall, Summer.

**Engineering Technology (TECH)**

**TECH 2703. Technical Graphics and AutoCAD** Create and read technical drawings using basic graphics techniques. Topics covers include technical graphics, transition from traditional drawings to computer graphics, fundamentals of AutoCAD. Prerequisite, MATH 1023, Fall.

**TECH 2863. Principles of Technolog**y The role and function of technology development in human resources. Course provides an introduction to the concepts and philosophies of the technical work place and the use of technologies. Fall.

**TECH 3413. AutoCAD Inventor** This is a beginning level 1 course in CAD. This course is designed to demonstrate how AutoCAD is used in model parametric space. This course will only deal with 2d mechanical, electrical and civil aspects of CAD. Fall.

**TECH 3433. AutoCAD 3D Modeling** This is an Advance level II course in CAD. This course is designed to demonstrate how to manage 3D space, how to make 3D sire frame, surface, and solid models, how to modify them, and how to display them. Prerequisite, TECH 3413. Spring.

**TECH 3453. Advanced Technology Design Solid Works** Advanced concepts of parametric modeling using SolidWorks software, approaches for designing mechanical parts, assemblies, and drawings. Fall.

**TECH 3713. Fiscal Aspects** An introduction to fiscal structures and problems encountered in the technically oriented enterprise. Fall.

**TECH 372V. Technical Career Subjects** Throughthis coursestudentshavingwork experience and company sponsored training will undergo portfolio assessment to determine credit hour award. Course may be repeated. No more than 25% of the degree may be satisfied with this course and TECH 189V. 1 to 9 hours. Fall, Spring.

# LETTER OF NOTIFICATION – 1

## NAME CHANGE OF EXISTING CERTIFICATE, DEGREE, MAJOR, OPTION OR ORGANIZATIONAL UNIT

(No change in program curriculum, option/emphasis/concentration or organizational structure**)**

1. Institution submitting request: Arkansas State University
2. Contact person/title: Rajesh Sharma, Associate Professor
3. Phone number/e-mail address: 870-972-2270; [rsharma@astate.edu](mailto:rsharma@astate.edu)
4. Proposed effective date: Fall 2020
5. Current title of degree/certificate program: Technology
6. Current title of major or option/emphasis/concentration: Technology
7. Current title of organizational unit: Technology
8. Proposed name of certificate/degree: Engineering Technology
9. Proposed name of major or option/emphasis/concentration: Engineering Technology
10. Proposed name of organizational unit: Engineering Technology
11. Program CIP Code: 15.9999
12. Degree/Department Code: 15.9999
13. Reason for proposed action: The current degree/major title – “Technology” is very broad and often creates ambiguity. This concern has long been voiced by students, alumni and employers. Industrial Advisory Committee of the program also suggested to pursue this name change of major during a recent meeting on October 25th.

The new name will reflect the curriculum and degree more accurately than the old name. This change of name of this major also aligns with recent move of this unit to the College of Engineering and Computer Science.

This name change also addresses one of the recommendations of the external program review. Here is the first recommendation from the report submitted by the external self-study committee.

**“Examine and assess the *identity* of the Technology program, and develop a strong plan to build a program that is well understood by all constituents, including ASU administration and faculty, industrial and corporate entities, secondary schools and community colleges, and especially students and their parents”.**

1. Semester credit hours for proposed major or option/emphasis/concentration: 120
2. Provide the curriculum/credit hours for the certificate/degree/major/option/emphasis/concentration listed above:120
3. Provide additional program information if requested by ADHE staff.

President/Chancellor Approval Date:

Board of Trustees Notification Date:

Chief Academic Officer: Date: