

SCHOOL OF COMMUNITY EDUCATION AND PROFESSIONAL DEVELOPMENT

Dr. Mary Ann Rollans, Dean
Dean Hall, Room 110
(479) 968-0318
MaryAnn.Rollans@mail.atu.edu
Fax: (479) 968-0205

Assistant Professor:
Rhone

The School of Community Education and Professional Development offers programs of study leading to baccalaureate and associate degrees and certificates of proficiency as listed below:

Bachelor of Science

Emergency Administration and Management

Associate of Science

Early Childhood Education

Associate of Applied Science

Industrial Electronic Technology

Industrial Plant Maintenance

Industrial Systems

Certificate of Proficiency

Industrial Electronic Technology

Industrial Plant Maintenance

Emergency Administration and Management

The bachelor of science degree in emergency administration and management was developed with the cooperation and support of the Federal Emergency Management Agency (FEMA). The program is designed to educate students and inservice emergency management providers about the human and physical consequences of natural and technological disasters and how to mitigate them. The program addresses competencies required of emergency management professionals in careers in federal, state, or local government, with specific emphasis on emergency response agencies, i.e., fire, law enforcement, emergency medical services, offices of emergency services, and specific agencies such as the Red Cross and other groups providing on-site emergency response and support. The degree is also designed for aspiring emergency professionals seeking a broad-based education in the procedures for coping with emergencies and major disasters.

Emphasis in this program will be placed on the awarding of credit for completed training, and/or certification based on knowledge, skills, and abilities. Up to 15 hours of credit may be awarded upon presentation of approved documentation. Equivalencies will be determined by the head of the department based on recommendations provided by the Non-Collegiate Sponsored Instruction Program of the American Council on Education and the International Association of Emergency Managers (IAEM), formerly known as the National Coordinating Council on Emergency Management (NCCEM), and FEMA's training arm, the Emergency Management Institute.

The curriculum provides a broad interdisciplinary program of study to support the technical specialty courses with two options available. The sociology option is designed for those individuals who want to work with the psychological and human elements of disaster and mitigation; whereas, those individuals who want to be involved in the front-line intervention and prevention of disasters should consider the environmental option. All majors will be required to complete 15 hours of administrative/management courses

The minor in Emergency Administration and Management is designed to provide additional breadth for students majoring in related programs in the field of crisis and disaster management. The minor will require 21 hours of coursework emphasizing content in areas of human and physical consequences of natural and technological disasters and procedures for mitigation. The minor will be open to students from any department having studies relevant to the field of emergency planning, mitigation, and response. Specific departments with an interest in the minor are those which offer courses included in the two EAM options: Sociology and Environmental.

Curriculum in Emergency Administration and Management

Freshman Year	Hours
English Composition (ENGL 1013, 1023) ¹	6
Social Sciences ¹	6
Biological Sciences ¹	4
Technical Specialty Course ²	6
Mathematics (MATH 1113 or 1103) ¹	3
Physical Science ¹	4
Administrative ⁴	3
Total	32
Sophomore Year	
Social Sciences ¹	6
Fine Arts/Humanities ¹	6
Physical Activity ¹	2
Technical Specialty Course ²	3
Option ³	9
Administrative ⁴	3
Electives	3
Total	32
Junior Year	
Technical Specialty Course ²	9
Option ³	9
Administrative ⁴	6
Electives	6
Total	30
Senior Year	
Technical Specialty Course ²	3
Option ³	3
Administrative ⁴	3
Internship ⁵	6
Externship ⁶	15
Total	30

¹See appropriate alternatives or substitutions in "General Education Requirements" on page 72.

²With advisor recommendation.

³See selected courses available in Sociology or Environmental Option.

⁴See selected courses available in Professional/Administrative Core.

⁵Arranged through advisor.

⁶Equivalency credit awarded with appropriate documentation; otherwise coursework must be selected from the Technical Specialty or interdisciplinary core areas.

The student will select with the advisor's recommendation 21 hours of credit from the following technical specialty courses. EAM 1003, EAM 1013, and EAM 4033 are required courses for all students. EAM 4106 and EAM 4201-15 are required for all students, and are in addition to the 21 hours of technical courses required.

- EAM 1003 Living in a Hazardous Environment
- EAM 1013 Aim and Scope of Emergency Management
- EAM 1023 Disaster Planning
- EAM 2023 Disaster Response Operations and Management
- EAM 2033 Citizen/Community Disaster Preparedness
- EAM 2043 The Economics of Hazards and Disaster
- EAM 3003 Developing Emergency Management Skills
- EAM 3013 Public Administration/Policy and Emergency Management
- EAM 3033 The Social Dimensions of Disaster
- EAM 3043 The Politics of Disaster
- EAM 3123 Public Information Skills for Emergency Managers

Technical Specialty Courses¹

EAM 4003 Disaster Relief and Recovery
 EAM 4013 Business/Industry Crisis Management
 EAM 4023 Information Technology and Emergency Management
 EAM 4033 Emergency Management Research Methods/Analysis
 EAM 4043 Disaster and Emergency Management Ethics
 EAM 4053 Community Management of Hazardous Materials
 EAM 4106 Internship
 EAM 4201-15 Externship
 EAM 4991-3 Special Problems and Topics

¹ With advisor recommendation

**Interdisciplinary Core
 Sociology Option¹**

The student will select with the advisor's recommendation 21 hours of credit from the following courses which are currently offered within each departmental area.

SOC 2053 Statistics for the Behavioral Sciences **OR**

BUAD 2053 Business Statistics **OR**

MATH 2163 Introduction to Statistical Methods

SOC 1003 Introductory Sociology

SOC 3063 Communities

SOC 3163 Introduction to Social Research

SOC 4063 Social Stratification

PSY 2003 General Psychology

PSY 2023 Consumer Psychology

PSY 2033 Psychology of Adjustment

PSY 3003 Abnormal Psychology

PSY 3043 Environmental Psychology

PSY 3093 Industrial Psychology

PSY 3153 Theories of Personality

PSY/SOC 3013 Psychosocial Aspects of Death & Dying

PSY/SOC 4043 Social Psychology

CJ 2003 Introduction to Criminal Justice

CJ 2013 Introduction to Security

CJ/POLS 3023 Judicial Process

CJ/PSY 3033 The Criminal Mind

CJ/SOC 3043 Crime and Delinquency

CJ/RS 3063 Probation and Parole

CJ/SOC 3103 The Juvenile Justice System

CJ 3153 Prison & Corrections

CJ 3206 The Law in Action

CJ 4023 Law & the Legal System

CJ 4053 Criminal Law & the Constitution

POLS 2013 Introduction to Political Science

POLS 3033 American State & Local Government

POLS 3053 Introduction to Public Administration

POLS 3093 American Municipal Government

POLS 3403 Comparative Government

POLS 3413 International Relations

POLS 3473 National Security Policy

POLS 4103 Environmental Politics

GEOG 4833 Geographic Information Systems **OR**

FW 4034 GIS in Natural Resources

¹ See selected courses available in Sociology Option

The student will select with the advisor's recommendation 21 hours of credit from the following courses which are currently offered within each departmental area.

PHYS 3033 (MCEG 3523) Radiation Health Physics
RP 1002 Wilderness Experience & Backpacking
RP 1992 Basic Forest Fighting
RP 2992 Wildland Fire Suppression- Water Use
RP 3993 Advanced Fire Fighting
(Any level) Chemistry
HA 1013 Sanitation Safety
MATH 2163 Introduction to Statistical Methods **OR**
BUAD 2053 Business Statistics **OR**
SOC 2053 Statistics for the Behavioral Sciences
HLED 3203 Consumer Health Programs
GEOG 2033 Physical Geography
GEOG 4023 Economic Geography
GEOG 4833 Geographic Information Systems **OR**
FW 4034 GIS in Natural Resources
GEOL 3153 Environmental Geology
MCEG 3512 Radiation Detection Laboratory
PE 2513 First Aid

¹See selected courses available in Environmental Option

Interdisciplinary Core Environmental Option¹

The student will select with the advisor's recommendation 15 hours of credit from the following courses which are currently offered within each departmental area.

ACCT 2003 Accounting Principles I
ACCT 2013 Accounting Principles II
ACCT 4093 Governmental Accounting
BUAD 1003 Introduction to Business Systems
BUAD 2003 Business Information Systems
BUAD 2033 Legal Environment of Business
BUAD 2043 Principles of Word Processing
BUAD 2053 Business Statistics
BUAD 3023 Business Communications
COMS 1003 Introduction to Computer Based Systems
COMS 2003 Microcomputer Applications
ECON 2003 Principles of Economics I
ECON 2013 Principles of Economics II
ECON 4033 Current Economic Problems
ECON 4093 International Economics & Finance
FIN 4043 Principles of Risk & Insurance
JOUR 2133 Introduction to Mass Communication
JOUR 3173 Public Relations Principles
JOUR 4123 Laws of Communication
ENGL 2053 Technical Writing
MGMT 3003 Management & Organizational Behavior
MGMT 4023 Personnel/Human Resource Management
MGMT 4093 Human Behavior in Organizations
SPH 1003 Introduction to Speech-Communication
SPH 2003 Public Speaking
SPH 2173 Business & Professional Speaking
SPH 3003 Interpersonal Communication
SPH 3033 Interviewing Principles & Practices
SPH 3073 Group Discussion

Required Administrative Professional Core¹

SPH 3223 Nonverbal Communication
 SPH 4153 Persuasive Theory and Audience Analysis

¹See selected courses available in Professional/Administrative Core

**Minor
 Emergency Administration
 and Management**

The minor in Emergency Administration and Management is designed to provide additional breadth for students majoring in related programs in the field of crisis and disaster management. The minor in Emergency Administration and Management requires 21 hours of courses:

- *EAM 1003 Living in a Hazardous Environment
- *EAM 1013 Aim and Scope of Emergency Management
- **EAM 3003 Developing Emergency Management Skills
- **EAM 3013 Public Administration/Policy and Emergency Management
- EAM 4023 Information Technology and Emergency Management
- *EAM 4033 Emergency Management Research Methods/Analysis
- **EAM 4043 Disaster and Emergency Management Ethics
- *Required for the Bachelor's degree in EAM
- **EAM 4993 may be used as a substitute for one of the indicated courses

**Associate Degrees and
 Technical Certificates**

The Associate of Applied Science Degree is designed for employment purposes, and it should not be assumed that the degree or the courses in the degree can be transferred to another institution. While a few institutions have recently begun to accept some courses in A.A.S. programs, the general rule is that courses in the A.A.S. Degrees are not accepted in transfer toward bachelor's degrees. Students to whom transfer is important should get assurance in writing in advance and only from the institution to which they wish to transfer.

**Early Childhood
 Education
 Associate of Science**

The Associate of Science degree in Early Childhood Education is structured to provide a seamless acquisition of academic requirements for various career levels in occupations related to child care and early childhood education in the public and private sectors. The early childhood education courses provide the academic requirements for meeting assessment guidelines for the Child Development Associate (CDA) credential. The general education courses meet the requirements for the Bachelor of Science degree in Early Childhood Education.

Curriculum in Early Childhood Education

Freshman Year	
First Semester	Hours
English Composition I (ENGL 1013) ¹	3
College Algebra (MATH 1113) or Algebra for General Education (MATH 1103)	3
Introduction to Biological Science (BIOL 1014)	4
Introductory Sociology (SOC 1003)	3
Foundations and Theories in Early Childhood Education (ECE 2312)	2
Basic Child Growth and Development I (ECE 2112)	2
Total	17
Second Semester	
English Composition II (ENGL 1023) ¹	3
Introduction to Physical Science (PHSC 1013)	3
Physical Science Laboratory (PHSC 1021)	1
First Aid (PE 2513)	3
Physical Wellness and Fitness (WS 1002) ²	2
Basic Child Growth and Development II (ECE 2212)	2
Regional Geography of the World (GEOG 2013)	3
Total	17

Curriculum in Early Childhood Education

Sophomore Year	
First Semester	
Experiencing Art (ART 2123)	3
US History (HIST 2003 or HIST 2013)	3
Humanities (ENGL 2003 or ENGL 2013 or PHIL 2003)	3
Curriculum for Early Childhood Education (ECE 2513)	3
Methods/Materials Use Developmentally Appropriate Practices/Young Children (ECE 2613)	3
Total	15
Second Semester	
American Government (POLS 2003)	3
Practicum in Early Childhood Education (ECE 2991-9) ³	9
Total	12
¹ See appropriate alternatives or substitutions in "General Education Requirements" on page 72.	
² Satisfies physical activity credit.	
³ Enrollment must be approved by advisor. See "ECE 2991-9 Practicum in Early Childhood Education" on page 241.	

The Industrial Electronic Technology program leads to the Associate of Applied Science degree. This program is designed to prepare students for jobs in the use and maintenance of common electrical and electronic devices and instruments. This career program provides the student with the technological training necessary to work as an electronics technician or engineering aide. The electronics concentration includes practical experience in electronics troubleshooting with the necessary theory of electronic circuits.

Courses in general electronics are combined with general education courses to provide a firm foundation in basic electronics, math, and writing skills. Electronic theory is supported with relevant laboratory experiences. Upon advisor approval, documented competencies acquired through training, certification, or licensure may be substituted as equivalencies for related technical courses. The majority of the technical courses are offered on a flexible schedule at off-site industrial locations.

To be admitted to the program, one must do the following: (1) apply for admission to Arkansas Tech University, (2) send to the university a certified copy of high school transcript, GED certificate, or college transcript(s), and (3) take the ACT or COMPASS. Those who make a score of less than 19 on the ACT in English, Mathematics, or Reading will need to take the appropriate developmental course or courses. Those who make a score of less than 59 in Math, 75 in Writing and 82 in Reading on the COMPASS will also be required to take the appropriate developmental course or courses.

Curriculum in Industrial Electronic Technology Associate of Applied Science Degree

Freshman Year	Hours
Introduction to Computer Based Systems (COMS 1003)	3
Algebra for General Education or College Algebra (MATH 1103 or Math 1113)	3
Composition I (ENGL 1013) ¹	3
Fundamentals of Electricity I (TELT 1014)	4
Fundamentals of Electricity II (TELT 1214)	4
Composition II (ENGL 1023) ¹	3
Industrial Electricity I (TELT 1123)	3
Solid State I (TELT 1224)	4
Digital Electronics I (TELT 1314)	4
Engineering Graphics (MCEG 1002)	2
Total	33

Industrial Electronic Technology Associate of Applied Science

**Curriculum in Industrial Electronic Technology
Associate of Applied Science Degree**

Sophomore Year

Programming in Basic (COMS 1203) ²	3
Programmable Logic Controllers Applications (TELT 2014)	4
Solid State II (TELT 2214)	4
Digital Electronics II (TELT 2424)	4
Advanced PLC Systems (TELT 2233)	3
Industrial Electricity II (TELT 2313)	3
Electronics: Special Topics (TELT 2503)	3
Troubleshooting Electrical and Electronic Systems (TELT 2223)	3
Social Science ¹	3
Total	30

¹See appropriate alternatives or substitutions in "General Education Requirements" on page 72.

²Comparable computer programming course may be substituted upon approval of advisor.

**Industrial Electronic
Technology
Technical Certificate**

The Technical Certificate in Industrial Electronic Technology is designed to enhance the technical skills and job-related knowledge of individuals who are currently employed as electronics technicians as well as other persons seeking careers in industrial electronic technology. Upon advisor approval, documented competencies acquired through training, certification, or licensure may be substituted as equivalencies for related technical courses. The majority of the technical courses are offered on a flexible schedule.

The Technical Certificate provides training in the maintenance of most industrial electronics and electrical systems. Courses taken for the certificate may be applied to the Associate of Applied Science degree in Industrial Electronic Technology.

Certificate Requirements

	Hours
English Composition I (ENGL 1013) ¹	3
Mathematics (MATH 1103 or 1113) ¹	3
Fundamentals of Electricity I (TELT 1014)	4
Fundamentals of Electricity II (TELT 1214)	3
Introduction to Computer Based Systems (COMS 1003)	3
Industrial Electricity I (TELT 1123)	3
Industrial Electricity II (TELT 2313)	3
Solid State I (TELT 1224)	4
Digital Electronics I (TELT 1314)	4
Programmable Logic Controllers Applications (TELT 2014)	4
Total	35

¹See appropriate alternatives or substitutions in "General Education Requirements" on page 72.

**Industrial Plant
Maintenance
Associate of Applied
Science**

The Industrial Plant Maintenance program leads to the Associate of Applied Science degree. This program is designed to enhance the technical skills and job-related knowledge of persons who are currently employed in the field of industrial plant maintenance, and prepare inexperienced persons for entry-level jobs in industrial plant maintenance.

Instruction includes power distribution, programmable logic controllers, fluid power, welding, and machine shop. Emphasis is placed on troubleshooting skills and preventive maintenance techniques. Upon advisor approval, documented competencies acquired through training, certification, or licensure may be substituted as equivalencies for related technical courses. The majority of the technical courses are offered on a flexible schedule.

To be admitted to the program, one must do the following: (1) apply for admission to Arkansas Tech University, (2) send to the University a certified copy of high school transcript, GED certificate, or college transcript(s), and (3) take the ACT or COMPASS. Those who make a score of less than 19 on the ACT in English, Mathematics, or Reading will need to take the appropriate developmental course or courses. Those who make a score of less than 59 in Math, 75 in Writing and 82 in Reading on the COMPASS will also be required to take the appropriate developmental course or courses.

**Curriculum in Industrial Plant Maintenance
Associate of Applied Science Degree**

Freshman Year	Hours
Composition I (ENGL 1013) ¹	3
Technical Mathematics (TMAT 1003)	3
Maintenance of Plumbing Systems (TIPM 1204)	4
Basic Machine Shop (TMAC 1013)	3
Blueprint Reading (TDFT 1013)	3
Introduction to Computer Based Systems (COMS 1003)	3
Hydraulics and Pneumatics (TIPM 1103)	3
Welding Option (TMAC 1135)	5
Machine Set-up and Operations I (TMAC 1025)	5
Total	32
Sophomore Year	
Composition II (ENGL 1023) ¹	3
Mechanical: Special Topics (TMAC 2503)	3
Algebra for General Education or College Algebra (MATH 1103 or Math 1113) ¹	3
Industrial Electricity I (TELT 1123)	3
Social Science ¹	3
Technical Electives ²	14
Total	29

¹See appropriate alternatives or substitutions in "General Education Requirements" on page 72.

²See Technical Elective Options Below.

Each student will be required to complete 14 hours of technical electives. In selecting courses to fulfill the technical elective hours, the student shall work with an advisor to develop a cohesive set of courses to fulfill this requirement.

- Machine Set-Up and Operations II (TMAC 2014)
- Metallurgy (TIPM 2014)
- Machine Processes (TMAC 2115)
- Introduction to Air Conditioning Systems (TACR 2014)
- Ammonia Refrigeration Systems (TACR 2214)
- Introduction to Boiler and Steam Generation (TACR 2213)
- Maintenance of Boiler and Steam Systems (TACR 2212)
- Fundamentals of Electricity I (TELT 1014)
- Fundamentals of Electricity II (TELT 1214)
- Industrial Electricity II (TELT 2313)
- Programmable Logic Controllers Applications (TELT 2014)
- Advanced Problems in IPM(TMAC 2991-5) or INET (TELT 2991-5)

Technical Electives

**Industrial Plant
Maintenance
Technical Certificate**

The Technical Certificate in Industrial Plant Maintenance is designed to enhance the technical skills and job-related knowledge of individuals who are currently employed in an industrial setting as well as other persons seeking careers in industrial plant maintenance. Upon advisor approval, documented competencies acquired through training, certification, or licensure may be substituted as equivalencies for related technical courses. The majority of the technical courses are offered on a flexible schedule.

The Technical Certificate is a planned and coherent program of classroom and laboratory/shop work. It recognizes the completion of a specified level of competency in the field of industrial plant maintenance. The program of study is part of an Associate of Applied Science curriculum in Industrial Plant Maintenance. Courses taken for the Certificate may be applied to the Associate of Applied Science degree in Industrial Plant Maintenance.

Certificate Requirements	Hours
English Composition I (ENGL 1013) ¹	3
Welding Option (TMAC 1135)	5
Blueprint Reading (TDFT 1013)	3
Basic Machine Shop (TMAC 1013)	3
Industrial Electricity I (TELT 1123)	3
Technical Mathematics (TMAT 1003)	3
Hydraulics & Pneumatics (TIPM 1103)	3
Maintenance of Plumbing Systems (TIPM 1204)	4
Introduction to Computer Based Systems (COMS 1003)	3
Introduction to Boiler and Steam Generators (TACR 2213) AND Maintenance of Boiler and Steam Systems (TACR 2212) OR Machine Set-Up and Operations I (TMAC 1025)	5
Total	35

¹See appropriate alternatives or substitutions in "General Education Requirements" on page 72.

**Industrial Systems
Associate of Applied
Science**

This program provides the student with the opportunity to earn college credit for validated competencies acquired through a vocational/technical school, community college, technical college, or industry training. Students seeking to articulate credit for prior learning must satisfy the following requirements:

1. The student must meet all regular admission requirements of Arkansas Tech University.
2. The student who is admitted to degree admission status must meet Freshman Placement Standards and will be required to meet all developmental programs as indicated by these standards.
3. A student pursuing articulated credit must have demonstrated competency by scoring no lower than one standard deviation below the national mean on the teacher/expert worker exam provided by the National Occupational Competency Testing Institute (NOCTI) in the occupational area for which the student is requesting credit.
4. The student must successfully complete 15 semester hours of credit at Arkansas Tech University (excluding developmental hours which earn institutional credit and may not be used to meet any degree requirements) before the 30 semester hours of validated credit can be awarded. The credit awarded for articulated competency will be designated on the transcript but will not count in the calculation of the student's grade point average.

5. Scores from the NOCTI exam completed more than five (5) years prior to application for admission to the program will not be accepted.

**Curriculum in Industrial Systems
Associate of Applied Science Degree**

Freshman Year	Fall	Spring
English Composition ¹	3	3
Social Sciences ¹	3	
Social Sciences (HIST 2003, or HIST 2013, or POLS 2003)		3
Science ¹	4	4
College Algebra (MATH 1113)	3	
Intro to Statistical Methods (MATH 2163)	3	
Statistical Process Control (MATH 2183)		3
Computer Science ²		3
Total	16	16
Sophomore Year		
Computer Science ²	3	
Applied Technical Studies ²	14	16
Total	17	16

¹See appropriate alternatives or substitutions in "General Education Requirements" on page 72.

²Must be approved by academic advisor. NOCTI scores may satisfy equivalences.