

DEPARTMENT OF TECHNOLOGY

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Faculty

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The Department of Technology offers Bachelor of Science degree programs in six areas: Aviation, Computer Electronic Networking, Construction Management, Industrial Technology, Graphic Communications Management, and Career and Technical Education.

DEPARTMENT GOALS

The Department of Technology seeks to prepare professionals for careers in Aviation, Computer Electronic Networking, Construction Management, Industrial Technology, and Graphic Communications Management through the Bachelor of Science degree programs; prepare technicians for careers in Computer Aided Drafting, Computer Electronics Technology, Digital Imaging Design and Quality Assurance Technology through the Associate of Applied Science degree programs; prepare professionals for careers in Career and Technical Education through certification, Associate of Applied Science, Bachelor of Science and Master of Science degree programs; to prepare selected professionals for advanced career opportunities in Industrial Technology through the Master of Science degree program; and to provide programs of quality instruction and professional services to the University and to the community.

AVIATION

Graduates of the Aviation program are prepared for professional careers in the aviation and aerospace fields.

The Professional Flight Option (PFO) prepares graduates for professional pilot careers. Graduates will be able to perform pilot duties of an aircraft carrying persons or property, plan and implement flight instruction, and will be qualified to fly an airplane solely by reference to instruments under instrument flight conditions (IMC).

The Aerospace Management (AM) option prepares graduates for management careers in the aviation and aerospace industry. Graduates of the AM option will be able to solve management and operational problems related to airline operations, demonstrate knowledge of corporate aviation, and demonstrate knowledge of how air transportation affects business, personal, and pleasure travel.

COMPUTER ELECTRONIC NETWORKING

Graduates of the Computer Electronic Networking program are prepared for a career in the high-tech electronics industry with skills in analysis, installation/maintenance of digital electronic devices and actuators, programmable logic controllers, computer network systems, laser/fiber optics and communication equipment.

Graduates of this program will demonstrate proficiency in basic networking skills relevant to small office/home (SOHO)

environments, demonstrate proficiency in basic computing skills, demonstrate fundamental knowledge in electricity/electronics, and demonstrate effective communication skills while conveying information to technical and non-technical audiences. The Computer Electronic Networking program is accredited by the National Association of Industrial Technology.

CONSTRUCTION MANAGEMENT

Graduates of the Construction Management program are prepared for careers with general contracting firms, starting in a variety of management positions. Typical entry-level positions include: assistant project manager, estimator, superintendent, project scheduler, cost engineer, and field engineer. The Construction Management program is accredited by the American Council for Construction Education. Graduates of this program will have oral, written and graphic communication skills for successful performance in a construction environment; possess functional computer skills including the utilization of general and construction application software; apply mathematical and scientific skills in the management and execution of construction projects; apply the concepts of management, accounting, economics and ethics in the management and execution of construction projects; possess a basic understanding of the science of materials and the methods by which they are placed into service; possess the essential plan reading, quantity takeoff and pricing skills to function as a junior estimator; be able to prepare a project budget, analyze cost reports and make cash flow projections for a project, be able to prepare a project schedule, monitor progress toward completion, and update the schedule as needed; possess a basic knowledge of OSHA standards and be able to set up and enforce a safety plan on a job site, be able to interpret site plans, establish horizontal and vertical control on a site, and perform layout for buildings and utilities; be able to administer situations on a project site, including evaluation of subcontractor pay requests, writing of purchase orders, and recording change orders, subcontracts, shop drawings, and daily reports; perform in an acceptable manner in cooperative work assignments.

INDUSTRIAL TECHNOLOGY

Graduates of the Industrial Technology Program are prepared for professional careers in manufacturing industries and businesses. The Manufacturing Option prepares graduates for entry-level positions that include: manufacturing engineer, production engineer, industrial supervisor, industrial engineer, industrial technician, and quality engineer. The Industrial Distribution Option, that includes a Business minor, prepares graduates for positions in all aspects of industrial distribution including: manufacturing, warehouse management, sales and marketing, logistics, inventory and profit management and supply chains/distribution operations.

Graduates of the Industrial Distribution Option in Industrial Technology will have oral, written and graphic communication skills for successful performance in a global supply chain environment; possess functional computer skills including the utilization of general and distribution specific supporting software to generate professional reports; be able to apply mathematical and scientific knowledge in the management and execution of global distribution problem solving; apply the concepts of accounting, economics, marketing and ethics in the management of a global distribution system; be able to apply technical knowledge through hands-on experiences to solve distribution problems; apply the knowledge of information-based inventory management to create competitive advantage; and integrate elements of distribution and

logistic systems to identify and solve problems related to global customer needs.

Graduates of the Manufacturing Option in Industrial Technology will be able to relate terminology, techniques and methodology to applied technical managerial concepts; demonstrate the ability to formulate and apply technical problem solving and managerial concepts; be able to apply the concepts of mathematics and the physical sciences to solve technical problems. The BS degree program in Industrial Technology is accredited by the National Association of Industrial Technology.

GRAPHIC COMMUNICATIONS MANAGEMENT

Graduates of the Graphic Communications Management program are prepared for a balance of technical skills and managerial competence to obtain successful careers in the printing and publishing industries. This four-year degree program provides up-to-date instruction for a high tech future in the 3rd largest of manufacturing industries.

Graduates of the Graphic Communications Management program will demonstrate advanced competencies in printing and publishing processes and procedures; demonstrate technical competence during a cooperative education experience; demonstrate an understanding of printing processes and methods; and demonstrate competence in the common printing process.

CAREER AND TECHNICAL EDUCATION

Engineering/Technology Education Option

Graduates of the Engineering/Technology Education option of the B.S. degree program in Career and Technical Education are prepared for teaching careers at the middle school and high school levels. An Engineering/Technology Education teacher is prepared to enjoy a career that is rewarding in many ways. The opportunity to plan and guide the learning experiences of students in the use of robots, computers and other "high tech" equipment in problem solving and production activities are rewards found in few other professions.

Graduates of the Engineering/Technology Education Option of the Career and Technical Education program will complete a student teaching experience in a professional setting; will be able to prepare a portfolio that includes instructional material development, samples of assessment and a professional growth plan; and will be able to demonstrate technical competence in the areas of 1) basic engineering/technology, 2) civil engineering/technology, 3) electrical engineering/technology, and 4) mechanical/industrial engineering technology.

Industrial Education Option

Graduates of the Industrial Education option of the B.S. degree program in Career and Technical Education are prepared for teaching careers in secondary schools and post-secondary technical colleges in technical areas such as: computer electronics, computer aided drafting (CAD), graphic arts and other technical occupational areas. An option is also offered in Occupational Training Development for those interested in training for business and industry.

Graduates of the Industrial Education Option of the Career and Technical Education program will be able to plan and implement instruction for technical education courses; be able to develop and analyze assessment instruments for technical education courses; be able to develop and apply appropriate teaching strategies for technical education courses; be able

to complete a Practicum in Career and Technical Teaching in a professional setting; and will be able to demonstrate occupational/technical competence by obtaining discipline-specific expertise.

Occupational Training and Development Option

Graduates of the Occupational Training and Development option of the B.S. degree program in Career and Technical Education are prepared to plan and implement instruction for technical courses in a business and industry setting; are able to develop and analyze assessment instruments for technical courses; are able to develop and apply appropriate teaching strategies for technical courses; and are able to complete a Practicum in Career and Technical Teaching.

The BS program in Career and Technical Education is accredited by the National Council for Accreditation of Teacher Education.

ASSOCIATE OF APPLIED SCIENCE

The Department of Technology also offers Associate of Applied Science degree programs (two-year programs) in Technology and Career and Technical Education. The Associate of Applied Science degree in Technology offers the student a choice of technical concentration in four options: Computer Aided Drafting, Computer Electronics, Digital Imaging Design, and Quality Assurance. The AAS degree program in Technology is accredited by the National Association of Industrial Technology.

ASSOCIATE OF APPLIED SCIENCE - TECHNOLOGY

Computer Aided Drafting

Graduates of the Computer Aided Drafting (CAD) program option are prepared for careers as drafters or designers who use computer aided drafting and design systems to generate drawings in manufacturing industries and businesses. Graduates obtain jobs in manufacturing firms in the machinery, plastics and fabricated metals areas.

Graduates of the CAD option of the AAS in Technology program will be able to apply 2D software applications to communicate and solve design problems; apply 3D software applications to communicate and solve design problems; and will be able to convert orthographic and pictorial sketch information into detailed 2D/3D Computer Aided Drafting drawings that meet or exceed current industry standards.

Computer Electronics

Graduates of the Computer Electronics (CE) program option are prepared for a career as a computer electronic technician. Graduates obtain jobs in a wide variety of manufacturing and service industries requiring skilled technicians to install, troubleshoot and maintain microprocessors, system components, programmable logic controllers, computer hardware and software.

Graduates of the CE option of the AAS in Technology program will demonstrate fundamental knowledge in electricity/electronics at the technician's level; demonstrate proficiency in basic computing skills; demonstrate proficiency in basic networking skills relevant to small office/home (SOHO) environments; and demonstrate effective communication skills while conveying information to technical and non-technical audiences.

Digital Imaging Design

Graduates of the Digital Imaging Design (DID) program option are prepared with skills to create well designed images and documents for the printing and publishing industries and for the World Wide Web.

Graduates of the DID option of the AAS in Technology program will demonstrate competency in digital imaging design processes and procedures; be able to create documents for publication using software common to the industry; be able to create documents for the world-wide-web using software common to the industry; and will demonstrate competence in the common printing process.

Quality Assurance

Graduates of the Quality Assurance (QA) program option are prepared for careers in manufacturing industries as quality assurance technicians. Their task is to control the manufacturing process so that a quality product is produced.

Graduates of the QA option of the AAS in Technology will demonstrate proficiency in the fundamentals of practical statistical methods as applied to quality concepts and techniques; apply principles and make calculations in the areas of sampling and reliability; and will be able to anticipate, recognize, and evaluate the impacts of quality assurance efforts.

ASSOCIATE OF APPLIED SCIENCE - CAREER AND TECHNICAL EDUCATION

The Career and Technical Education associate of applied science degree program is designed for in-service technical teachers employed in area technical centers and post-secondary technical schools. Graduates of the Career and Technical Education AAS degree program will be able to plan and implement instruction for technical education courses; develop and analyze assessment instruments for technical education courses; develop and apply appropriate teaching strategies for technical education courses; and complete a Practicum in Career and Technical Teaching.

MINORS

The department also offers minors in Aviation Administration, Aviation (Flight), Computer Electronic Publishing, Computer Electronics Technology, Construction Management, Industrial Technology and Quality Assurance.

ENDORSEMENT/CERTIFICATE

An endorsement in Industrial Computer Technology and a Career and Technical Education Certificate program for in-service technical teachers are also offered by the Department of Technology.

Baccalaureate Degrees

AVIATION (B.S.) AREA MAJOR

CIP Code: 49.0102

University Requirement1 hour
BTO 100.

General Education Requirements30 hours
Standard General Education program, excluding blocks II, IVB, VB, VII (NS), and VIII (6 hours). Refer to Section Four of this *Catalog* for details on the General Education and University requirements.

College Requirement: Professional Skills Seminar
BTS 300 (CR) and BTS 400 (CR).

Supporting Course Requirements40 hours
CSC 104 or CIS 212 or TEC 161; ECO 230; GEO 315; MAT 107, 108, 211 or 261; MGT 300 or 301, MGT 480 or INT 408; PHY 131 (5), 132 (5); PSY 200; and STA 215.

Free Electives 12-16 hours

Major Requirements41-45 hours

Aviation Core15 hours

AVN 150, 315, 350, 410, 460.

Majors must also select an option in professional flight or aerospace management

Options:

Professional Flight26 hours

AVN 192 (5), 194A (1), 205A (1), 206A (1), 220 (4), 220A (1), 229A (1), 230A (1), 300 (2), 300A (1), 325, 400 (1), 400A (1), 425.

Aerospace Management30 hours

AVN 340, 360, 370, 390, 401, 402; and twelve hours*^ from the following prefixes: ACC, AFS, AVN, CIS, ECO, FIN, GBU, INS, MGT, MKT, MSL, PUB, RST.

*Selection of lower division courses may result in a failure to meet university requirement of 43 hours of upper division credits.

^May require prerequisites.

Total Curriculum Requirements128 hours

Students must take an Aviation exit examination before graduation.

**CAREER AND TECHNICAL EDUCATION
(TEACHING) (B.S.) AREA MAJOR**

CIP Code: 13.1320

University Requirement1 hour
BTO 100.

General Education Requirements48 hours
Standard General Education program (MAT 107 or higher). Refer to Section Four of this *Catalog* for details on the General Education and University Requirements.

Major Requirements76-79 hours

Professional Education Core31-34 hours

EDF 103* (1), CTE 261, 361, 363, 463 (12) or ESE 499 (12) and ESE 490, EDF 319, ESE 552, SED 401.

Program Options:

Agriculture Education45 hours

Animal Science AGR 125, 126 and one class from AGR 321, 327, 328 or 380; Agricultural Systems Management AGR 213 and one class from AGR 272, 311, 362 or 383; Soil Science AGR 215 and one class from AGR 315, 317, or 318; Plant Science AGR 130, 131 or OHO 131, 132 and one class from AGR 312, 417 and OHO 384 or 385; Agriculture Business AGR 308 and one class from AGR 310, 350, 409 or 440. AGR 304, 305 plus 45 Agriculture or Horticulture electives to make 45 credit hours selected in consultation with your advisor.

Industrial Education45 hours**

Forty-five semester hours of technical courses to be chosen in consultation with the advisor. A maximum of eighteen semester hours may be allowed by proficiency examination (CTE 204, 205, 206, 304, 305, and 306; TEC 349* (9 hours)).

Occupational Training and Development

.....**45 hours**

Forty-five semester hours of related occupational courses chosen in consultation with advisor.

Engineering/Technology Education+45 hours

CON 121, 201, 250; EET 252, 302, 303⁺⁺; INT 195, 371, 383; TEC 161, 190, 303, 404; select 6 hours from AVN 150, GCM 211, TEC 102, 141, 3 hours approved technical electives.

Free Electives.....0-3 hours

Total Curriculum Requirements128 hours

* In-service teachers and occupational trainers should substitute CTE 463 (4), CTE 164, CTE 364, SED 104, and TEC 161 for CTE 463 (12), EDF 103 (1), SED 401, and ESE 552. Nine hours of which can be selected from CTE 302 and 303 should be substituted for TEC 349 (9 hours).

**Graduates completing this program option must have a minimum of 2000 clock hours of planned and supervised work experience in the occupation in which they will teach or a minimum of three years of approved work experience in the occupation in which they will teach. Students must also take the PRAXIS II Specialty Examination before graduation.

+Those desiring Pre-Engineering eligibility should take the following general education courses: CHE 111, MAT 107, 108, PHY 131.

++Complete an Endorsement for teaching Instructional Computer Technology by completing EET 403, TEC 255, and completing a major computer certification such as A+, Network+, MSCE.

Career and Technical Education options require all pre-service students to meet the general education knowledge for initial teacher preparation requirements (see College of Education section of this *Catalog*).

The BS degree program in Career and Technical Education is accredited by the National Council for Accreditation of Teacher Education.

COMPUTER ELECTRONIC NETWORKING (B.S.)

CIP Code: 15.1201

University Requirement1 hour
BTO 100.

General Education Requirements30 hours
Standard General Education program, excluding blocks II, IVB, VB, VII (NS), and VIII (6 hours). Refer to Section Four of this *Catalog* for details on the General Education and University requirements.

College Requirement: Professional Skills Seminar
BTS 300 (CR) and BTS 400 (CR).

Supporting Courses46 hours
CSC 160 and (CSC 177 or 190); ECO 230, MAT 108 and (211 or 261), INT 202, 310, 406, 408; PHY 131 (5), 132 (5); STA 215 or 270 or QMB 200; TEC 161; and 3 upper division hours of ACC*, CCT*, CIS*, FIN*, GBU*, INS*, INT*, MGT*, MKT*, QMB*, or RST* electives as approved by major advisor.

Free Electives.....9 hours
(A minimum of 4 semester hours must be Upper Division courses including Cooperative Education.)

Major Requirements.....42 hours
EET 251, 252, 253, 254, 257, 302, 303, 343, 351, 403 or 452, 440, 499; Select 6 hours from EET 349, 354, 395.

Total Curriculum Requirements128 hours

The Department of Technology's Computer Electronic Networking degree program has an articulation agreement for transfer of credit and cooperation with Bluegrass Community and Technical College's (formerly Lexington Community College) Associate in Applied Science Degree in Engineering Technology with Electrical Specialization.

*Prerequisite may be required for some course selections.

Students must take a Computer Electronic Networking exit examination before graduation. Graduates must have an overall GPA of 2.25 in major requirements.

The Computer Electronic Networking program is accredited by the National Association of Industrial Technology (NAIT).

CONSTRUCTION MANAGEMENT (B.S.)

CIP Code: 52.2001

University Requirement1 hour
BTO 100.

General Education Requirements30 hours
Standard General Education program, excluding blocks II, IVB, VB, VII (QS), and VIII (6 hours). Refer to Section Four of this *Catalog* for details on the General Education and University requirements.

College Requirement: Professional Skills Seminar
BTS 300 (CR) and BTS 400 (CR).

Supporting Course Requirements39-40 hours
ACC 201, CCT 201, ECO 230, GBU 204, GLY 108, TEC 161; MAT 108 and MAT 261, or six hours of higher level MAT courses; MGT 301 or INT 408, PHY 131 (5), 132 (5) or CHE 101, 107 (1); and three upper division hours of **ACC, CCT, CIS, ECO, FIN, GBU, INS, MGT, MKT, QMB, or RST electives as approved by major advisor.

Free Electives.....0 -1 hours
Major Requirements.....57 hours
CON 121, 201, 202, 221, 294, 303, 307, 320, 322, 323, 324, 349 (6), 420, 421, 423, 425, 426; FSE 361.

Total Curriculum Requirements128 hours

The Department of Technology's Construction Management program has articulation agreements for transfer of credit and cooperation with Bluegrass Community and Technical College's (formerly Lexington Community College) Associate in Applied Science Degree in Architectural Technology and the Associate in Applied Science Degree in Civil Engineering Technology.

Students must take a construction assessment examination before graduation. An exam fee is required.

+Two separate summer enrollments are recommended in order to achieve a total of 6 credit hours.

**Students wishing to pursue the Minor in Business must confer with their major advisor to make substitutions to the supporting course requirements. INS, QMB and RST courses do not apply to the Minor in Business.

The Construction Management program is accredited by the American Council for Construction Education.

GRAPHIC COMMUNICATIONS MANAGEMENT (B.S.)

CIP Code: 10.0302

- University Requirement1 hour**
BTO 100.
- General Education Requirements33 hours**
Standard General Education program, excluding blocks II, IVB, VB, and VIII (6 hours). Refer to Section Four of this *Catalog* for details on the General Education and University requirements.
- College Requirement: Professional Skills Seminar**
BTS 300 (CR) and BTS 400 (CR).
- Supporting Course Requirements28 hours**
ACC 201; CHE 101, 107 (1); CSC 160; ECO 230; GBU 204; MAT 107; ACC 202 or ECO 300 or MGT 301 or MKT 301; PHY 101 and STA 215.
- Free Electives18 hours**
- Major Requirements48 hours**
EET 303, GCM 211, 217, 316, 317, 319, 349 (6 hours), 410, 414; INT 202, 408; TEC 161, 255, 313, and 355.
- Total Curriculum Requirements128 hours**

Students must take a Graphic Communications Management assessment examination before graduation.

INDUSTRIAL TECHNOLOGY (B.S.) AREA MAJOR

CIP Code: 15.0612

Prior to enrolling in the last 60 hours of the Industrial Technology degree program students must complete INT 238, 201, 202, TEC 161, 190, MAT 108, PHY 131, CHE 101, 107 (1) or CHE 111, 115 (1); and STA 270 or QMB 200 and have an overall 2.0 GPA and 2.25 major GPA. Graduates must have an overall GPA of 2.25 in the major with no major grade below a "C-". Transfer students will be treated on an individual basis. The Industrial Technology program is accredited by the National Association of Industrial Technology.

- University Requirement1 hour**
BTO 100.
- General Education Requirements30 hours**
Standard General Education program, excluding blocks II, IVB, VB, VII (3 hours), and VIII (6 hours). Refer to Section Four of this *Catalog* for details on the General Education and University requirements.
- College Requirement: Professional Skills Seminar**
BTS 300 (CR) and BTS 400 (CR).
- Supporting Course Requirements for**
- Industrial Distribution42 hours**
ECO 230, MAT 108, 211 or 261 or 6 hours of higher level MAT courses; STA 215 or 270 or QMB 200; CHE 101, CHE 107 (1) or CHE 111, 115 (1); PHY 131 (5); ACC 201, ACC 202, GBU 201, GBU 204, MKT 300; select two courses from CCT 300, CIS 300, FIN 300, MGT 300.

Supporting Course Requirements for

Manufacturing28 hours
ECO 230, CON 420 or ECO 300; MAT 108, 211 or 261 (or six hours of higher level MAT courses); PHY 131 (5); CHE 101, CHE 107 (1) or CHE 111, CHE 115 (1); STA 215 or 270 or QMB 200; INT 349 (4).

Major Requirements36 hours

Industrial Technology Core:

EET 251, INT 201, 202, 308, 310, 352, 371, 406, 408, 499; TEC 161, 190.

Major must select an option in Industrial Distribution or Manufacturing.

Options:

Industrial Distribution18 hours

INT 200, 320, 400, 506, MKT 312 or 401.

Select 3 hours of U.D. technical electives from:

EET 351, INT 332, 336, 349, TEC 313.

Manufacturing24 hours

INT 238, 301, 330.

Select 3 technical hours from:

EET 252, INT 192, 195; GCM 211.

Select 12 hours of U.D. technical electives from:

EET 350, 351, 440, 452; CON 303; INT 320, 332, 336, 383, 390, 392, 397, 506, 530; TEC 313.

Free Electives (Industrial Distribution Option)1 hour

Free Electives (Manufacturing Option)9 hours

Total Curriculum Requirements128 hours

The Department of Technology's Industrial Technology degree program (Manufacturing Option) has an articulation agreement for transfer of credit and cooperation with Bluegrass Community and Technical College (formerly Lexington Community College) Associate in Applied Science Degree in Engineering Technology with Electrical Specialization. In addition, the Department of Technology's Industrial Technology degree program (Manufacturing Option) has an articulation agreement for transfer of credit and cooperation with Bluegrass Community and Technical College (formerly Central Kentucky Technical College) and Somerset Community and Technical College's Associate of Applied Science in General Occupational/Technical Studies including the areas of Machine Tool Technology, Industrial Maintenance, Industrial Electronics and Computer Aided Drafting.

Students must take an assessment examination before graduation. An exam fee is required.

+Transfer students (Manufacturing Option) with an associate degree in an industrial related field may not need to take these 12 hours of electives if upper division requirement can be completed.

*Industrial Technology majors may apply INT 310 in lieu of CCT 300 toward the minor in Business.

Incorporates a Business Minor into the Industrial Distribution Option.

Associate of Applied Science Degrees

**CAREER AND TECHNICAL EDUCATION
(TEACHING) (A.A.S.)**

CIP Code: 13.1319

Enrollment in this program is restricted to in-service technical teachers and graduates of a Kentucky Vocational/ Technical School post-secondary program.

University Requirement1 hour
BTO 100.

General Education Requirements16 hours
Six hours of English composition, three hours of mathematics (MAT 107 or higher-level mathematics), three hours of general education humanities, three hours of general education social science, and five hours of general education electives. Refer to Section Four of this *Catalog* for details on General Education and University requirements.

Supporting Course Requirements21 hours
CTE 261, 361, 364, 463**(12).

Major Requirements24 hours
TEC 161 and 21 hours chosen from the technical area, or related to the area, in which the individual proposes to teach, as approved by the advisor. Graduates of this program must have a minimum of 4,000 hours of supervised work experience or four years of occupational experience in the area to be taught. Nine hours maximum may be allowed by proficiency examination (CTE 204, 205, and 206). Nine hours may be supervised work experience (TEC 349).

Total Curriculum Requirements66 hours

**In-service teachers should substitute CTE 164, 363, 463 (4), and EDF 319 or SED 104 for CTE 463 (12).

Students must take a professional vocational technical education assessment examination and the Teacher Occupational Competency Test (TOCT) before graduation.

The AAS degree program in Career and Technical Education is accredited by the National Council for Accreditation of Teacher Education.

TECHNOLOGY (A.A.S.)

CIP Code: 15.0612

University Requirement1 hour
BTO 100.

General Education Requirements18 hours
ENG 101 and 102 or 105 (6 hours); MAT 107 or higher (3 hours); humanities (3 hours); ECO 230 (3 hours); CMS 100 (3 hours).

Option Requirements39-44 hours

Computer Aided Drafting (41 hours)
CON 303; INT 192, 195, 201, 330, 383, 390, 392, 397; MAT 108; PHY 131 (5); TEC 161, 190.

Computer Electronics (44 hours)
CSC 160 or 177; EET 251, 252, 253, 254, 257, 302, 303, 343, 351, 399; MAT 108; PHY 131 (5); TEC 161.

Digital Imaging Design (40 hours)
ART 100 or 152; CHE 101, CHE 107 (1); CSC 160; EET 303; GCM 211, 217, 316, 317, 319; TEC 161, 255, 313, 355.

Quality Assurance (39-40 hours)
CHE 101, CHE 107 (1) or CHE 111, CHE 115 (1); EET 251; INT 201, 202, 238, 301, 330, 332, 336; MAT 108; QMB 200 or STA 215 or 270; TEC 161, 190.

Free Electives1-6 hours

Total Curriculum Requirements64 hours

Students must take an assessment examination before graduation.

The AAS degree program in Technology is accredited by the National Association of Industrial Technology.

Minors

**MINOR IN AVIATION (FLIGHT)
Aviation Program**

Requirements23 hours

A student may minor in aviation (flight) by completing a minimum of 23 semester hours as follows: AVN 150, 192, 194A, 205A, 206A, 220, 220A, 300; 315; GEO 215. No more than 12 hours of core courses taken for the aviation (administration option) major may be counted toward the minor in aviation (flight).

**MINOR IN AVIATION ADMINISTRATION
Aviation Program**

Requirements21 hours

A student may minor in aviation administration by completing a minimum of 21 semester hours as follows: AVN 150, 315, 340, 350, 410, 460, and three hours of approved electives. No more than 12 (flight) hours of core courses taken for the aviation major may be counted toward the minor in aviation administration.

MINOR IN COMPUTER ELECTRONIC PUBLISHING

Required Courses12 hours

GCM 211, 217, 317, and TEC 313.

Supporting Courses6 hours

Select six semester hours from GCM 316, 319, TEC 255 and 355.

Total Requirements18 hours

MINOR IN COMPUTER ELECTRONICS TECHNOLOGY

Requirements18 hours

EET 252, 253, 254, 354, 302 and 303. No more than nine hours of courses taken for a major may be counted toward this minor.

MINOR IN CONSTRUCTION MANAGEMENT

Requirements21 hours

CON 121, 201, 202, 323, 324, 421, and CON 294. No more than nine hours of courses taken for a major may be counted toward this minor.

MINOR IN INDUSTRIAL TECHNOLOGY

Requirements21 hours

TEC 190, INT 201, 202⁺, 238*, 308, and six hours of INT upper division electives. No more than nine hours of courses taken for a major may be counted toward this minor.

+STA 215 or 270 (Gen. Ed. VII) or QMB 200 and MAT 107 or higher are prerequisites for INT 202.

*CHE 101, 107 (1) or CHE 111, 115 (1) Gen. Ed. Block IVB is a prerequisite for INT 238.

MINOR IN QUALITY ASSURANCE TECHNOLOGY

Requirements.....18 hours

STA 215 or 270, INT 202, 332, 336, 506, and 530. No more than nine hours of courses taken for a major may be counted toward this minor.

Endorsement

INSTRUCTIONAL COMPUTER TECHNOLOGY

The requirements for an Instructional Computer Technology Endorsement for Career and Technical Education are: EET 252, 302, 303, 403, and TEC 255. Must have completed a major computer certification such as A+, Network +, MSCE, CCNA, CCNP and requirements for the B.S. Degree in Career and Technical Education.

CAREER AND TECHNICAL EDUCATION PROFESSIONAL CERTIFICATION*

Enrollment in this program is restricted to those who are currently employed as technical teachers and required to become certified as teachers of Vocational/Technical Education: Industrial Education.

General Education Requirements20 hours

ENG 101, 102; MAT 107, three hours of General Education humanities, three hours of General Education social science and five hours of General Education electives.

Professional Education Requirements22 hours

CTE 164, 261, 361, 363, 364, 463 (4 hrs.); EDF 319 or SED 104.

Major Requirements.....24 hours

TEC 161 and 21 hours chosen from the technical area, or related to the area, in which the individual is teaching, as approved by the advisor. Eighteen hours may be allowed by proficiency examination (CTE 204, 205, 206, 304, 305, and 306). Nine hours by proficiency examination may be applied to the Associate Degree and 18 hours to the Bachelors Degree in Career and Technical Education.

Total Curriculum Requirements66 hours

*Based on recommendation from ECU, Certificate is awarded by the Education Professional Standards Board.

SECTION SEVEN

Catalog Addendum

College of Business and Technology

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DEPARTMENT OF AGRICULTURE

Chair
Dr. Bruce Pratt
(859) 622-2228
Carter 2

Faculty

**S. Black, C. Hagan, D. Llewellyn, B. Maumbe,
M. McDermott and L. Rincker**

Pre-Professional

PRE-VETERINARY MEDICINE

Effective Spring 2009
CAA Approved: 05/15/08

The Eastern Kentucky University program in pre-veterinary medicine is administered by the Department of Agriculture. Although Kentucky does not have a school of veterinary medicine, the state participates as a member of the Southern Regional Educational Board Plan under which legal Kentucky residents attend Auburn University School of Veterinary Medicine or Tuskegee Institute School of Veterinary Medicine. The program is funded by an appropriation of the General Assembly to the Kentucky Council on Post-Secondary Education.

A limited number of students who are legal residents of Kentucky and have completed pre-veterinary requirements are selected by Auburn (34 positions) or Tuskegee Institute (two positions) each year to enter professional training in veterinary medicine at the respective schools. Students enter the four-year program of the veterinary school at the beginning of the fall term and are approved for succeeding years as long as normal progress is made toward the degree in veterinary medicine. These students are exempt from out-of-state tuition at Auburn. Selection is on a competitive basis with the final selection being made by a committee composed of faculty members from each of the respective schools.

Each of the two veterinary schools have similar entrance requirements and each requires a minimum grade point average of 2.5 on a 4.0 scale. Tuskegee requires the VAT and Auburn

requires the GRE examination. Students should work closely with the pre-vet advisor concerning their program and should have a grade point average of 3.4 to be competitive.

All course work must be completed by June 15 prior to fall admission to the school of veterinary medicine. A grade of "D" in any required course is not accepted. Substitution of courses must be approved by the veterinary school to which application is to be made. All course requirements must be met and courses in organic chemistry and physics must have been completed within six years of entry into the School of Veterinary Medicine.

Application to Auburn under the Kentucky program is made beginning in the fall of the year preceding that of admission. Students may apply through the Pre-Vet advisor or through the Veterinary Medical College Application Service (VMCAS). The application deadline is October 1. Students should follow application instructions regarding updating their transcripts and course work at the school to which they apply. Students should work closely with the pre-veterinary advisor in making certain that all requirements are met. ~~There are some specific alternatives depending on a student's background.~~

A pre-vet student at Eastern Kentucky University has the following alternatives while proceeding through the program of study:

1. Complete the pre-vet curriculum in three years and apply for admission into a school of veterinary medicine. Students may receive a B.S. degree from EKU by transferring credits from the first year of veterinary school back to EKU and by completing all general education/University requirements.
2. Earn a B.S. degree at EKU with an agriculture, biology, chemistry, or other appropriate major during the fourth year while completing the pre-veterinary curriculum.
3. At any time, change from the pre-veterinary curriculum to the above majors and graduate with a B.S. degree with no loss of credit.

Students are expected to gain practical large animal experience during the course of pre-vet study, either on the University farm or with a D.V.M. The pre-vet advisor can assist in arranging for this experience.

Requirements at Auburn for Students without a Bachelors Degree

The following curriculum may be completed in three years after which the student is then eligible to apply for admission to Auburn or Tuskegee.

BTO 100, AGR 125, 126, 321, ~~372A~~, or 421, BIO 141, CHE 361, 362, 366, 367, 531, general education Block I, Block II (MAT 109 or 261), Block IIIA (ART, MUH, or THE), Block IIIB (ENG 211 or 212, Block IVA (BIO 121), Block IVB (CHE 111, 115 (1)), Block VA (HIS), Block VB (ECO 230), Block VC, Block VI, Block VII (AH - 3 credits from arts and humanities), Block VII (NS - CHE 112, 116 (1)), Block VIII (PHY 131 and 132), plus three six additional credit hours of science electives and six hours of social/behavioral science electives. Refer to the General Academic Information section of this *Catalog* for details on the General Education block descriptions and University Requirements.

Total Curriculum Requirements.....~~83-85~~ 87-90 hours

Requirements at Auburn for Students with a Bachelors Degree

AGR <u>321 or</u> 421.....	3
AGR 372A	1
BIO 121.....	4
BIO 141.....	4
CHE 111/115.....	4
CHE 112/116.....	4
CHE 361.....	3
CHE 366.....	1
CHE 362.....	3
CHE 367.....	1
<u>CHE 531</u>	<u>3</u>
PHY 131.....	5
PHY 132.....	5
Science Electives	6

****Recommended Science Electives for Auburn (6 hours):**

AGR 321.....	3
<u>AGR 373</u>	<u>3</u>
AGR 374.....	3
AGR 375.....	3
AGR 376.....	3
BIO 315.....	4
BIO 320.....	4
<u>BIO 331</u>	<u>3</u>
BIO 342.....	4
BIO 348.....	4
BIO 371.....	4
<u>BIO 546</u>	<u>4</u>

Students not accepted at Auburn after their junior year may continue for a Bachelors Degree. Because of the courses in the Pre-Vet Curriculum most students continue their studies in either Agriculture, Biology or Chemistry, although a degree in any major is possible. Students who do not get into Auburn after their junior year may reapply.

Because of the large number of applications and limited number of acceptances, the student should choose a secondary career goal.

EKUBUSINESS

**BACHELOR OF BUSINESS ADMINISTRATION AND
BACHELOR OF SCIENCE IN INSURANCE
DEGREE REQUIREMENTS**

Effective Spring 2009
CAA Approved: 05/15/08

General University requirements, as well as specific course requirements set forth in the description of curricula, must be met by students completing associate and baccalaureate business programs administered by the College of Business and Technology. See programs under each department for major requirements. Academic Orientation course (BTO 100) is required in all Business programs. The requirements for the Bachelor of Business Administration (BBA) and the Bachelor of Science in Insurance degrees are as follows:

1. A cumulative 2.0 GPA must be maintained in all work taken in the BBA and BS Insurance programs.
2. Hours earned by correspondence study are accepted upon written approval of the Dean. However, not more than 25 percent of the total hours applied toward a degree may be earned via correspondence or telecourse instruction, military credit, or credit by examination.
3. To ensure the integrity of business programs to provide a sound overall educational experience, not more than 50 percent of undergraduate course work shall be completed in the *EKU*Business programs. However, up to nine semester hours of economics and up to six semester hours of mathematics/statistics will not be included in this 50 percent. Decisions to allow students to take more than 50% of undergraduate course work within *EKU*Business will be made judiciously.
4. At least 50 percent of the business course credit hours required for the BBA and BS Insurance degrees must be completed at *EKU*.
5. The BBA and BS Insurance degrees will only accept credits for business courses at the upper division level transferred from other colleges and universities accredited by the Association to Advance Collegiate Schools of Business International (AACSB). As completely as possible, it will apply these credits to the student's degree program. To ensure that they earn appropriate credits, students are strongly advised to see the College of Business and Technology Advising Office and also obtain the Dean's approval prior to enrolling in any course work they plan to transfer. The University will not take responsibility for courses transferred without prior approval.
6. A "C" or better is required for the BBA programs in the following courses: (See specific degree requirements for each major)

BACHELOR OF BUSINESS ADMINISTRATION

BBA Supporting Courses: MAT 107 and/or 211, QMB 240 (if required by major), SOC 131, ECO 230 and 231.

BBA Pre-Business Core: ACC 201, 202, GBU 204, and QMB 200.

BBA Core: CCT 300, CIS 300, FIN 300, MGT 300, 370, MKT 300, and GBU 480.

BACHELOR OF SCIENCE IN INSURANCE

BS Supporting Courses: MAT 211 (or MAT 107 combined with QMB 240) and ECO 230;

BS Pre-Business Core: ACC 201, 202, GBU 204, and QMB 200.

BS Insurance Core: CCT 300, CIS 300, FIN 300, MGT 300, MKT 300, INS 370, and INS 374.

CCT 300 should be taken in first six hours of upper division course work. BBA students must complete all business core courses prior to taking GBU 480. Students are urged to review carefully all course prerequisites, including the 60-hour rule before scheduling 300-level business courses. Failure to satisfy prerequisites may result in the student being administratively withdrawn from courses.

7. At least 12 hours in the major must be earned at ECU. A grade of "~~C-~~" "C" or better is required for each course in the major.
8. Students must choose a major field at the time they enter an *ECUBusiness* program. Students must meet with and have schedules approved by the academic advisor.
9. A second major can be completed in *ECUBusiness* or in another program of the University. A third business major is not permitted. Because business students take the business core, they are limited to selected minors offered by *ECUBusiness*. Free elective requirements for bachelor's degree programs in *ECUBusiness* cannot be met by choosing courses taught in Business. (See No. 4, BBA and BS Insurance under degree requirements.)
10. Students choosing to double-major must declare the BBA or BS Insurance degree as the first major.