



Department of Applied Engineering and Technology  
*School of Applied Sciences and Technology*  
College of Business & Technology (2020-21)

## **A.A.S. in Technology**

Computer Electronics Concentration

### **COMPUTER ELECTRONICS AT EKU**

This program prepares technicians to serve as para-professionals in a wide range of companies and organizations where maintenance of computer hardware and/or electronics equipment is required. With the increased use of computers in all phases of human endeavor, the demand for computer technicians with a college degree of this type is projected to increase. Students who successfully complete this degree program may transfer most of the credits earned to the B.S. degree in Network Security and Electronics (NET).

### **COMPUTER ELECTRONICS CAREERS**

Graduates of the computer electronics concentration are prepared for rewarding careers as computer electronic technicians in the public and private sector. Typical job responsibilities include maintaining and installing computers as well as electronics equipment. Students are provided with a sound background in computer electronics by lecture and laboratory coursework that includes electricity, electronics, computer systems and networks. Following successful completion of coursework, students may seek professional certifications in computer hardware, software and networking. On-the-job experience is valued highly by computer electronics employers; therefore, students are encouraged to gain college credit for professional work through cooperative education. A balance of current technical knowledge, co-op experience and appropriate certifications ensures graduates are well prepared to pursue careers in the high-demand area of computer electronics.

### **DEPARTMENT FACILITIES, EQUIPMENT AND INSTRUCTION**

The Department is located in the Ralph W. Whalin Technology Complex which includes approximately 100,000 square feet of classroom and laboratory space. Laboratories housed in the Whalin Complex include aviation, automation, electronics, computer aided drafting (CAD), graphic communications, quality assurance and metrology, materials and metallic processes, construction estimating, fluid power and computer applications. The facilities are located in the central portion of campus, close to the library, classroom buildings and dormitories. Faculty in the department have diversified academic and experience backgrounds. They are experienced, enthusiastic and devoted to providing students the skills necessary to succeed.

The primary organization for students in the Computer Electronics Technology degree program is the Eastern Student Computer Association (ESCA). ESCA is a student-led organization that holds lunch meetings many times per month with presentations on current computing topics such as: operating systems, motherboards, displays, gaming, memory, wireless computing, studying for certification and other topics identified by students or the faculty advisor. The AAS degree program is accredited by the Association of Technology, Management and Applied Engineering (ATMAE).



The Association of Technology,  
Management, and Applied Engineering

### **For More Information**

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Eastern Kentucky University  
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**Suggested Curriculum Guide for AAS in Technology, Computer Electronics Concentration**

**Freshman (1<sup>st</sup> Semester) 16 hrs**

- BTO 100\*** Academic Orientation (1 hr)
- EET 252\*** Digital Electronics
- EET 251\*** Electricity and Electronics
- TEC 161** Computer Applications in Technology
- E-2 MAT 112A&B** Algebra **or** higher (MAT 114, 120, 122, 211, 234)
- E-1A ENG 101** English Composition I **or** **ENG 105** Honors English

**Sophomore (1<sup>st</sup> Semester) 13 hrs**

- Select** from **EET 253** Microprocessor Control Systems **or** **EET 351** Programmable Logic Controllers **or** **AEM 352** Automated Technology Devices **or** **NET 354** Microcomputer & Network Security
- Select** from **NET 395** Special Topics in NET **or** **NET 403** Advanced LANs & PC Communications
- E-1C** **Select** from **CMS 100** Intro. to Human Communication **or** **CMS 210** Public Speaking **or** **EES 250** Basic Social Intelligence Skills
- Free Elective** (1 hr)

**Freshman (2<sup>nd</sup> Semester) 15 hrs**

- NET 302^** PC Troubleshooting & Construction
- NET 303^** LANs & PC Communications
- EET 257** Electronic Devices and Circuits
- Select** from (**CSC 160** Intro to Programming or higher) **or** (**CIS 215** Intro to Business Programming) **or** (**INF** course above 130)
- E-1B ENG 102** English Composition II

**Sophomore (2<sup>nd</sup> Semester) 16 hrs**

- NET 343** Network Switches & Routers
- NET 349** Co-operative (Co-op) Education (1)
- NET 399** Associate Capstone Project\*\* **or** **NET 499** Senior Capstone
- E-4 PHY 101** Concepts of the Physical World **or** higher
- E-5B ECO 120** Economic Reasoning and Issues **or** higher
- E-3B** Humanities **or** **3A/B** Integrated Arts and Humanities
- Exit Exam** Departmental (0 hrs)

\* These courses should be taken during the first semester of the program.  
 \*\* This course should be taken during the last semester of the program.  
 ^Some courses may have pre-requisites.

**University Requirements**

Student Success Seminar (BTO 100)..... 1 hr

**General Education Requirements** ..... 18 hrs  
 ENG 101 (**Element 1A**) and 102 (**Element 1B**) or 105; MAT (112A and 112B) or higher (**Element 2**); humanities (**Element 3B or 3A/B**); ECO 120 or 230 (**Element 5B**); CMS 100 or 210 or EES 250 (**Element 1C**).

**Concentration Requirements** ..... 39 hrs  
 Computer Electronics Concentration  
 (AEM 352 or EET 253 or 351); (CSC 160 or higher; or CIS 215 or higher); EET 251, 252, 257; NET 302, 303, 343, 349(1), 354, 395 or 403, 399 or 499; PHY 101 or higher in GenEd E-4; TEC 161.

**Free Electives** ..... 1 hr

**Total Curriculum Requirements**..... **60 hrs**