



Department of Applied Engineering and Technology
School of Applied Sciences and Technology
College of Business & Technology (2019-20)

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).



For More Information

Department of Applied Engineering and Technology
307 Whalin Complex
Eastern Kentucky University
521 Lancaster Avenue
Richmond, KY 40475-3102
859-622-3232
www.technology.eku.edu



Suggested Curriculum Guide for AAS in Technology, Computer Electronics Concentration

Freshman (1st 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 (1st 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 (2nd 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 (2nd 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 130** Contemporary Economic Problems 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 (GElement 1A) and 102 (GElement 1B) or 105; MAT (112A and 112B) or higher (GElement 2); humanities (GElement 3B or 3A/B); ECO 230 (GElement 5B); CMS 100 or 210 or EES 250 (GElement 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