

# CYBER SYSTEMS TECHNOLOGY, BACHELOR OF SCIENCE WITH A CONCENTRATION IN TECH SYSTEMS (B.S.)

The Cyber Systems Technology degree program has an articulation agreement for transfer of credit and cooperation with Bluegrass Community and Technical College's Associate in Applied Science Degree in Engineering Technology with Electrical Specialization.

Prerequisites may be required for some course selections.

Students must take at least one computer systems, networking, security, electronics, or telecommunications technology certification or license exam approved by the advisor.

Students must take a Cyber Systems Technology exit examination before graduation. Graduates must have an overall GPA of 2.25 in major requirements.

The Cyber Systems Technology program is accredited by the Association of Technology, Management, and Applied Engineering (ATMAE).

## Program Requirements

CIP Code: 15.1299

### Summary Checklist for General Education

| Code             | Title  | Hours |
|------------------|--|-------|
| <b>Element 1</b> |  |       |
| A:               | Written Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )  | 3     |
| B:               | Written Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )  | 3     |
| C:               | Oral Communication ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/</a> )     | 3     |
| <b>Element 2</b> |  |       |
|                  | Quantitative Reasoning ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/</a> ) | 3     |
| <b>Element 3</b> |  |       |
| A:               | Arts ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/</a> )                   | 3     |
| B:               | Humanities ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/</a> )             | 3     |
| <b>Element 4</b> |  |       |
|                  | Natural Sciences ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/</a> )       | 6     |
| <b>Element 5</b> |  |       |

|                    |   |           |
|--------------------|---|-----------|
| A:                 | Historical Science ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/</a> )                    | 3         |
| B:                 | Social Behavioral Science ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/</a> )             | 3         |
| <b>Element 6</b>   |   |           |
|                    | Diversity of Perspectives Experiences ( <a href="http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/">http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/</a> ) | 6         |
| <b>Total Hours</b> |   | <b>36</b> |

Students are expected to complete Elements 1 and 2 within their first 60 hours of college credit.

### Major

| Code   | Title   | Hours |
|--|---|-------|
| <b>University Graduation Requirements</b>  |   |       |
| General Education  |   | 36    |
| <i>Student Success Seminar</i>   |   |       |
| SCO 100  | Student Success Seminar (waived for transfers with 30+ hrs.)        | 1     |
| Upper division courses (42 hrs. distributed throughout Major/ Supporting/Gen Ed/Free Electives categories) |   |       |
| <b>Major Requirements</b>  |   |       |
| <i>Core Courses</i>  |   |       |
| AEM 202  | Introduction to Quality   | 3     |
| AEM 310W   | Technical Communication   | 3     |
| AEM 408  | Human Resource Development  | 3     |
| EET 252  | Digital Electronics   | 3     |
| NET 302  | PC Troubleshooting & Construction                                   | 3     |
| NET 303  | LANs & PC Communications  | 3     |
| NET 343  | Network Switches & Routers  | 3     |
| NET 349  | Applied Learning in NET   | 1     |
| NET 354  | Microcomputer & Network Security                                    | 3     |
| NET 403  | Advanced LANSs and PC Communication                                 | 3     |
| NET 361  | Cloud Technology Foundations  | 3     |
| NET 499  | Senior Capstone   | 3     |
| <i>Major Electives</i>   |   |       |
| AEM 407  | Fundamentals of Project Management                                  | 3     |
| or CIS 410   | Project Management and Practice                                     |       |
| AEM 352  | Robotics and Automated Systems                                      | 3     |
| or EET 253   | Microprocessor Control Systems                                      |       |
| or EET 351   | Programmable Logic Controllers                                      |       |
| or NET 440   | Wired/Wireless Communications                                       |       |
| TEC 161  | Computer Applications in Technology                                 | 3     |
| or INF 104   | Computer Literacy with Software Applications                        |       |
| <b>Concentrations</b>  |   |       |
| Students must select one of the following Concentrations:  |   | 24    |
| Network Security & Electronics   |   |       |
| Tech Systems   |   |       |
| <i>Supporting Course Requirements</i>  |   |       |
| ECO 120  | Economic Reasoning and Issues (or higher) (Element 5B) <sup>G</sup> |       |

|  |   |            |
|--|---|------------|
| MAT 112A & MAT 112B  | Algebra: Polynomials and Algebra: Functions & Matrices (or higher) (Element 2) <sup>G</sup> |            |
| PHY 101  | Conceptual Physics (or higher) (Element 4) <sup>G</sup>                                     |            |
| STA 215 or STA 270   | Introduction to Statistical Reasoning<br>Applied Statistics                                 | 3-4        |
| Choose from three hours of ACC, AEM, CCT, CIS, FIN, MGT, MKT, or RMI electives as approved by major advisor  |   | 3          |
| <i>Free Electives</i>  |   |            |
| Choose from 9-10 hours of free electives   |   | 9-10       |
| (Up to five semester hours of Upper Division courses, including Cooperative Education, may be needed for meeting the 42 hour requirement. Students with an ACT Math sub-score of 19-21 may consider taking CSC 101 (The World of Code) to build computing competencies early in the degree program.) |   |            |
| <i>Exit Requirements</i>   |   |            |
| NET 467  | Exit Exam for BS in NET (CR only, no hours)   | 0          |
| <b>Total Hours</b>   |   | <b>120</b> |

**G**  
 Course also satisfies a General Education element. Hours are included within the 36 hr. General Education requirement above.

**Concentration**

| Code  | Title | Hours     |
|---|-------|-----------|
| <b>Concentration Courses</b>  |       |           |
| Choose from 24 hours of computer systems, electricity & electronics, and networking related technical electives as approved by major adviser. This is the recommended option for transfer students. |       | 24        |
| <b>Total Hours</b>  |       | <b>24</b> |