INFORMATION TECHNOLOGY - B.S.I.T.

College of Applied and Technical Studies
www.kent.edu/cats

About This Program
Join the fast-growing field of IT with Kent State’s B.S.I.T. program. This program equips you with the skills needed to succeed in a range of IT roles, from software engineering to data analytics. With hands-on experience and expert faculty, you’ll be well-prepared for a successful career. Read more...

Contact Information
• Lead Faculty: Shelley Marshall | skmarsha@kent.edu
• Speak with an Advisor
  • Ashtabula Campus
  • East Liverpool Campus
  • Geauga Campus
  • Salem Campus
  • Stark Campus
  • Trumbull Campus
  • Tuscarawas Campus
  • Twinsburg Academic Center
  • Online (any campus above)
• Chat with an Admissions Counselor

Program Delivery
• Delivery:
  • Fully online
  • Mostly online
• Location:
  • Ashtabula Campus
  • East Liverpool Campus
  • Geauga Campus
  • Salem Campus
  • Stark Campus
  • Trumbull Campus
  • Tuscarawas Campus
  • Twinsburg Academic Center

Examples of Possible Careers and Salaries*
Computer network support specialists
• 6.4% faster than the average
• 195,100 number of jobs
• $65,450 potential earnings

Computer user support specialists
• 8.0% much faster than the average
• 687,200 number of jobs
• $52,690 potential earnings

Computer and information systems managers
• 10.4% much faster than the average
• 461,000 number of jobs
• $151,150 potential earnings

Information security analysts
• 31.2% much faster than the average
• 131,000 number of jobs
• $103,590 potential earnings

Database administrators and architects
• 9.7% much faster than the average
• 132,500 number of jobs
• $98,860 potential earnings

Computer programmers
• -9.4% decline
• 213,900 number of jobs
• $89,190 potential earnings

Computer network support specialists
• 6.4% faster than the average
• 195,100 number of jobs
• $65,450 potential earnings

Software developers and software quality assurance analysts and testers
• 21.5% much faster than the average
• 1,469,200 number of jobs
• $110,140 potential earnings

Additional Careers
• Computer network systems administrators

* Source of occupation titles and labor data comes from the U.S. Bureau of Labor Statistics’ Occupational Outlook Handbook. Data comprises projected percent change in employment over the next 10 years; nation-wide employment numbers; and the yearly median wage at which half of the workers in the occupation earned more than that amount and half earned less.

Admission Requirements
The university affirmatively strives to provide educational opportunities and access to students with varied backgrounds, those with special talents and adult students who graduated from high school three or more years ago.

First-Year Students on the Kent Campus: First-year admission policy on the Kent Campus is selective. Admission decisions are based upon cumulative grade point average, strength of high school college preparatory curriculum and grade trends. Students not admissible to the Kent Campus may be administratively referred to one of the
seven regional campuses to begin their college coursework. For more information, visit the admissions website for first-year students.

First-Year Students on the Regional Campuses: First-year admission to Kent State’s campuses at Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull and Tuscarawas, as well as the Twinsburg Academic Center, is open to anyone with a high school diploma or its equivalent. For more information on admissions, contact the Regional Campuses admissions offices.

International Students: All international students must provide proof of English language proficiency unless they meet specific exceptions. For more information, visit the admissions website for international students.

Transfer Students: Students who have attended any other educational institution after graduating from high school must apply as undergraduate transfer students. For more information, visit the admissions website for transfer students.

Former Students: Former Kent State students or graduates who have not attended another college or university since Kent State may complete the reenrollment or reinstatement form on the University Registrar’s website.

Admission policies for undergraduate students may be found in the University Catalog.

Some programs may require that students meet certain requirements before progressing through the program. For programs with progression requirements, the information is shown on the Coursework tab.

Program Requirements

**Major Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 11002</td>
<td>VISUAL BASIC PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>IT 11004</td>
<td>SURVEY OF INFORMATION TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>IT 11005</td>
<td>INTRODUCTION TO OPERATING SYSTEMS AND NETWORKING TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>IT 11006</td>
<td>INTRODUCTION TO WEB SITE TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>IT 11009</td>
<td>COMPUTER ASSEMBLY AND CONFIGURATION</td>
<td>4</td>
</tr>
<tr>
<td>IT 12000</td>
<td>INTERMEDIATE OFFICE PRODUCTIVITY APPS</td>
<td>3</td>
</tr>
<tr>
<td>IT 21002</td>
<td>NETWORK SETUP AND CONFIGURATION</td>
<td>4</td>
</tr>
<tr>
<td>IT 21007</td>
<td>CYBER ETHICS IN INFORMATION TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>IT 21009</td>
<td>SEMINAR IN INFORMATION TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>IT 21010</td>
<td>WORKGROUP PRODUCTIVITY SOFTWARE</td>
<td>3</td>
</tr>
<tr>
<td>IT 36308</td>
<td>ERGONOMICS IN COMPUTER SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>IT 36314</td>
<td>SEMINAR IN EMERGING COMPUTER AND INFORMATION TECHNOLOGIES</td>
<td>3</td>
</tr>
<tr>
<td>IT 36318</td>
<td>SURVEY OF INFORMATION SECURITY, INTERNET FRAUD AND COMPUTER FORENSICS (WIC)</td>
<td>3</td>
</tr>
<tr>
<td>IT 36339</td>
<td>CLOUD AND VIRTUALIZATION TECHNOLOGIES IN INFORMATION TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>IT 36340</td>
<td>HELP DESK SUPPORT</td>
<td>3</td>
</tr>
<tr>
<td>IT 42000</td>
<td>SOCIAL MEDIA SECURITY</td>
<td>3</td>
</tr>
<tr>
<td>TAS 37900</td>
<td>TECHNICAL AND APPLIED STUDIES CORNERSTONE</td>
<td>3</td>
</tr>
</tbody>
</table>

**Concentration Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 46308</td>
<td>ADVANCED VISUAL BASIC PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>IT 46340</td>
<td>DATA DESIGN AND IMPLEMENTATION</td>
<td>3</td>
</tr>
</tbody>
</table>

**Additional Program Requirements (courses do not count in major GPA)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>UC 10001</td>
<td>FLASHERS 101</td>
<td>1</td>
</tr>
<tr>
<td>Kent Core Composition</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Kent Core Mathematics and Critical Reasoning</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Kent Core Humanities and Fine Arts (minimum one course from each)</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Kent Core Social Sciences (must be from two disciplines)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Kent Core Basic Sciences (must include one laboratory)</td>
<td>6-7</td>
<td></td>
</tr>
<tr>
<td>Kent Core Additional</td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

General Electives (total credit hours depends on earning 120 credits hour, including 39 upper-division credit hours)

**Concentrations**

Choose from the following: 18-19

- Application Development
- Cloud and Virtualization Technologies
- Cybersecurity and Forensics
- Database Design and Administration
- Health Information Technology
- Integrated Information Technology
- Internet/Multimedia
- Networking

Minimum Total Credit Hours: 120

1 Minimum C grade required to satisfy the writing-intensive requirement.

**Application Development Concentration Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 36301</td>
<td>ADVANCED C++ PROGRAMMING</td>
<td>4</td>
</tr>
<tr>
<td>or IT 36311</td>
<td>ADVANCED JAVA PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>IT 36302</td>
<td>ADVANCED C# PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>IT 36309</td>
<td>PROGRAMMING MOBILE APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>IT 36350</td>
<td>PROGRAMMING OFFICE PRODUCTIVITY APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>or IT 46309</td>
<td>ASP.NET WEB PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>IT 46308</td>
<td>ADVANCED VISUAL BASIC PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>IT 46340</td>
<td>DATA DESIGN AND IMPLEMENTATION</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours: 19

**Cloud and Virtualization Technologies Concentration Requirements**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 36330</td>
<td>LOCAL AREA NETWORK SECURITY FUNDAMENTALS</td>
<td>3</td>
</tr>
<tr>
<td>IT 36355</td>
<td>COMMAND LINE UTILITIES</td>
<td>3</td>
</tr>
<tr>
<td>IT 41002</td>
<td>CLOUD TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>IT 46311</td>
<td>TECHNOLOGY OF NETWORKING</td>
<td>3</td>
</tr>
<tr>
<td>IT 46313</td>
<td>VIRTUAL MACHINE CONFIGURATION AND ADMINISTRATION</td>
<td>3</td>
</tr>
<tr>
<td>IT 46331</td>
<td>LOCAL AREA NETWORK SECURITY AND FIREWALLS</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours: 18
## Cybersecurity and Forensics Concentration Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 21200</td>
<td>ETHICAL HACKING</td>
<td>3</td>
</tr>
<tr>
<td>IT 36320</td>
<td>COMPUTER FORENSICS</td>
<td>3</td>
</tr>
<tr>
<td>IT 36321</td>
<td>NETWORK FORENSICS</td>
<td>3</td>
</tr>
<tr>
<td>IT 36330</td>
<td>LOCAL AREA NETWORK SECURITY FUNDAMENTALS</td>
<td>3</td>
</tr>
<tr>
<td>IT 46331</td>
<td>LOCAL AREA NETWORK SECURITY AND FIREWALLS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Concentration Elective, choose from the following:</td>
<td>3</td>
</tr>
<tr>
<td>IT 32002</td>
<td>LINUX NETWORKING</td>
<td></td>
</tr>
<tr>
<td>IT 36322</td>
<td>SOCIAL MEDIA AND MOBILE DEVICE FORENSICS</td>
<td></td>
</tr>
<tr>
<td>IT 40000</td>
<td>CYBERSECURITY</td>
<td></td>
</tr>
<tr>
<td>IT 42002</td>
<td>WIRELESS AND MOBILE DEVICE SECURITY</td>
<td></td>
</tr>
<tr>
<td>IT 46300</td>
<td>ADVANCED COMPUTER ASSEMBLY AND CONFIGURATION</td>
<td></td>
</tr>
<tr>
<td>IT 46313</td>
<td>VIRTUAL MACHINE CONFIGURATION AND ADMINISTRATION</td>
<td></td>
</tr>
<tr>
<td>IT 46320</td>
<td>CLOUD FORENSICS</td>
<td></td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours: 18

## Database Design and Administration Concentration Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 21005</td>
<td>VISUAL BASIC DATABASE PROGRAMMING</td>
<td>4</td>
</tr>
<tr>
<td>IT 36350</td>
<td>PROGRAMMING OFFICE PRODUCTIVITY APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>IT 46315</td>
<td>SQL WITH ORACLE</td>
<td>3</td>
</tr>
<tr>
<td>IT 46340</td>
<td>DATABASE DESIGN AND IMPLEMENTATION</td>
<td>3</td>
</tr>
<tr>
<td>IT 46350</td>
<td>DATABASE ADMINISTRATION AND REPORTING TOOLS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Concentration Elective, choose from the following:</td>
<td>3</td>
</tr>
<tr>
<td>IT 36330</td>
<td>LOCAL AREA NETWORK SECURITY FUNDAMENTALS</td>
<td></td>
</tr>
<tr>
<td>IT 41010</td>
<td>MOBILE APPLICATIONS FOR INFORMATION TECHNOLOGY</td>
<td></td>
</tr>
<tr>
<td>IT 41002</td>
<td>CLOUD TECHNOLOGY</td>
<td></td>
</tr>
<tr>
<td>IT 43000</td>
<td>HEALTHCARE INFORMATION SYSTEMS</td>
<td></td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours: 19

## Health Information Technology Concentration Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 31002</td>
<td>HEALTH INFORMATION TECHNOLOGY SUPPORT</td>
<td>3</td>
</tr>
<tr>
<td>IT 36330</td>
<td>LOCAL AREA NETWORK SECURITY FUNDAMENTALS</td>
<td>3</td>
</tr>
<tr>
<td>IT 41010</td>
<td>MOBILE APPLICATIONS FOR INFORMATION TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Concentration Elective, choose from the following:</td>
<td>3</td>
</tr>
<tr>
<td>IT 36355</td>
<td>COMMAND LINE UTILITIES</td>
<td>3</td>
</tr>
<tr>
<td>IT 41002</td>
<td>CLOUD TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>IT 46300</td>
<td>ADVANCED COMPUTER ASSEMBLY AND CONFIGURATION</td>
<td>3</td>
</tr>
<tr>
<td>IT 46310</td>
<td>TECHNOLOGY OF OPERATING SYSTEMS</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours: 19

## Integrated Information Concentration Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 41010</td>
<td>MOBILE APPLICATIONS FOR INFORMATION TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Concentration Electives, choose from the following:</td>
<td>6</td>
</tr>
<tr>
<td>IT 36311</td>
<td>ADVANCED JAVA PROGRAMMING</td>
<td></td>
</tr>
<tr>
<td>IT 36336</td>
<td>WEB SCRIPTING II</td>
<td></td>
</tr>
<tr>
<td>IT 46309</td>
<td>ASPNET WEB PROGRAMMING</td>
<td></td>
</tr>
<tr>
<td>IT 46315</td>
<td>SQL WITH ORACLE</td>
<td></td>
</tr>
<tr>
<td>IT 46321</td>
<td>WEB DATABASE INTEGRATION</td>
<td></td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours: 18

## Internet/Multimedia Concentration Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 36303</td>
<td>DIGITAL IMAGE MANIPULATION</td>
<td>3</td>
</tr>
<tr>
<td>IT 36309</td>
<td>PROGRAMMING MOBILE APPLICATIONS</td>
<td>3</td>
</tr>
<tr>
<td>IT 36310</td>
<td>MULTIMEDIA DEVELOPMENT TOOLS</td>
<td>3</td>
</tr>
<tr>
<td>IT 46303</td>
<td>DIGITAL VIDEO EDITING</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Concentration Electives, choose from the following:</td>
<td>6</td>
</tr>
<tr>
<td>IT 36311</td>
<td>ADVANCED JAVA PROGRAMMING</td>
<td></td>
</tr>
<tr>
<td>IT 46336</td>
<td>WEB SCRIPTING II</td>
<td></td>
</tr>
<tr>
<td>IT 46309</td>
<td>ASPNET WEB PROGRAMMING</td>
<td></td>
</tr>
<tr>
<td>IT 46315</td>
<td>SQL WITH ORACLE</td>
<td></td>
</tr>
<tr>
<td>IT 46321</td>
<td>WEB DATABASE INTEGRATION</td>
<td></td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours: 18

## Networking Concentration Requirements

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 36330</td>
<td>LOCAL AREA NETWORK SECURITY FUNDAMENTALS</td>
<td>3</td>
</tr>
<tr>
<td>IT 36355</td>
<td>COMMAND LINE UTILITIES</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or IT 46312 Scripting for Network Administrators</td>
<td></td>
</tr>
<tr>
<td>IT 41002</td>
<td>CLOUD TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or IT 46314 Advanced Server Configuration</td>
<td></td>
</tr>
<tr>
<td>IT 46300</td>
<td>ADVANCED COMPUTER ASSEMBLY AND CONFIGURATION</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>or IT 46313 Virtual Machine Configuration and Administration</td>
<td></td>
</tr>
<tr>
<td>IT 46310</td>
<td>TECHNOLOGY OF OPERATING SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Concentration Elective, choose from the following:</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours: 18
Minimum Total Credit Hours: 18

Graduation Requirements
Minimum Major GPA 2.000
Minimum Overall GPA 2.000

- Students may declare more than one concentration in the Information Technology major, provided that they complete minimum 12 credit hours of coursework unique to each concentration.

Roadmap
This roadmap is a recommended semester-by-semester plan of study for this major. However, courses designated as critical (!) must be completed in the semester listed to ensure a timely graduation.

Semester One
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 11002</td>
<td>VISUAL BASIC PROGRAMMING</td>
<td>3</td>
</tr>
<tr>
<td>or IT 13000</td>
<td>or APPLIED SECURITY ESSENTIALS</td>
<td></td>
</tr>
<tr>
<td>IT 11004</td>
<td>SURVEY OF INFORMATION TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>IT 11005</td>
<td>INTRODUCTION TO OPERATING SYSTEMS AND NETWORKING TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>UC 10001</td>
<td>FLASHES 101</td>
<td>1</td>
</tr>
<tr>
<td>Kent Core Requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Kent Core Requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Semester Two
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 11006</td>
<td>INTRODUCTION TO WEB SITE TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>IT 11009</td>
<td>COMPUTER ASSEMBLY AND CONFIGURATION</td>
<td>4</td>
</tr>
<tr>
<td>IT 12000</td>
<td>INTERMEDIATE OFFICE PRODUCTIVITY APPS</td>
<td>3</td>
</tr>
<tr>
<td>Kent Core Requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Kent Core Requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Semester Three
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 21002</td>
<td>NETWORK SETUP AND CONFIGURATION</td>
<td>4</td>
</tr>
<tr>
<td>IT 21010</td>
<td>WORKGROUP PRODUCTIVITY SOFTWARE</td>
<td>3</td>
</tr>
<tr>
<td>Kent Core Requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Kent Core Requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Kent Core Requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credit Hours</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

Semester Four
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 21007</td>
<td>CYBER ETHICS IN INFORMATION TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>IT 21009</td>
<td>SEMINAR IN INFORMATION TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td>Kent Core Requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Kent Core Requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Semester Five
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 36308</td>
<td>ERGONOMICS IN COMPUTER SYSTEMS</td>
<td>3</td>
</tr>
<tr>
<td>IT 36318</td>
<td>SURVEY OF INFORMATION SECURITY, INTERNET FRAUD AND COMPUTER FORENSICS (WIC)</td>
<td>3</td>
</tr>
<tr>
<td>TAS 37900</td>
<td>TECHNICAL AND APPLIED STUDIES CORNERSTONE</td>
<td>3</td>
</tr>
<tr>
<td>Kent Core Requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Kent Core Requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Semester Six
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 36339</td>
<td>CLOUD AND VIRTUALIZATION TECHNOLOGIES IN INFORMATION TECHNOLOGY</td>
<td>3</td>
</tr>
<tr>
<td><strong>Concentration Requirements</strong></td>
<td></td>
<td><strong>12-13</strong></td>
</tr>
<tr>
<td><strong>Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Semester Seven
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 36340</td>
<td>HELP DESK SUPPORT</td>
<td>3</td>
</tr>
<tr>
<td>IT 42000</td>
<td>SOCIAL MEDIA SECURITY</td>
<td>3</td>
</tr>
<tr>
<td>Concentration Requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td><strong>Credit Hours</strong></td>
<td></td>
<td><strong>15</strong></td>
</tr>
</tbody>
</table>

Semester Eight
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IT 36314</td>
<td>SEMINAR IN EMERGING COMPUTER AND INFORMATION TECHNOLOGIES</td>
<td>3</td>
</tr>
<tr>
<td>TAS 47999</td>
<td>TECHNICAL AND APPLIED STUDIES CAPSTONE (ELR) (WIC)</td>
<td>3</td>
</tr>
<tr>
<td>Concentration Requirement</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Credit Hours</strong></td>
<td></td>
<td><strong>12</strong></td>
</tr>
</tbody>
</table>

Minimum Total Credit Hours: 120

University Requirements
All students in a bachelor's degree program at Kent State University must complete the following university requirements for graduation.

NOTE: University requirements may be fulfilled in this program by specific course requirements. Please see Program Requirements for details.

- **Flashes 101 (UC 10001)** 1 credit hour
  - Course is not required for students with 30+ transfer credits (excluding College Credit Plus) or age 21+ at time of admission.
- **Diversity Domestic/Global (DIVD/DIVG)** 2 courses
  - Students must successfully complete one domestic and one global course, of which one must be from the Kent Core.
- **Experiential Learning Requirement (ELR)** varies
  - Students must successfully complete one course or approved experience.
- **Kent Core (see table below)** 36-37 credit hours
  - Students must earn a minimum C grade in the course.
The Information Technology major comprises the following manufacturing, healthcare, non-profit and government. network or database administrator in all sectors of business, education, network or IT project manager; security or forensic analyst; and systems, technician or engineer; IT support specialist or consultant; help desk, as web or software developer; hardware, network, cloud, virtualization of individuals and organizations; write programs necessary to help them apply professional ethics in IT solutions. Work in diverse project teams to develop and/or implement IT-based applications to a wide range of audiences. Explain implementation, integration and maintenance for IT solutions to user requests. Perform end-user support, including identifying and implementing tools. Engage in continuous learning, as well as research and assess new ideas and information to provide the capabilities for lifelong learning.

Program Learning Outcomes

Graduates of this program will be able to:

1. Identify and evaluate current technologies and assess their applicability to address individual and organizational needs.
2. Develop a product, process or solution by applying knowledge of programming, scripting, web, digital media, database, human computer interaction, networking, cloud, virtualization and security tools.
3. Perform end-user support, including identifying and implementing solutions to user requests.
4. Explain implementation, integration and maintenance for IT applications to a wide range of audiences.
5. Work in diverse project teams to develop and/or implement IT-based solutions.
6. Apply professional ethics in IT solutions.
7. Engage in continuous learning, as well as research and assess new ideas and information to provide the capabilities for lifelong learning.

Full Description

The Bachelor of Science in Information Technology degree in Information Technology provides students with an applied approach that focuses on supporting end-users in a variety of workplace settings by utilizing a range of computing technologies. The degree program gives students the tools to support computing and network infrastructures and the needs of individuals and organizations; write programs necessary to help them render their tasks more efficiently on their desktop or mobile devices; utilize databases and write the web-based interfaces to pull the data; and code and deploy applications across the cloud.

Graduates are qualified to work in a wide range of computer and network infrastructures in small- to large-sized enterprises in such positions as web or software developer; hardware, network, cloud, virtualization technician or engineer; IT support specialist or consultant; help desk, network or IT project manager; security or forensic analyst; and systems, network or database administrator in all sectors of business, education, manufacturing, healthcare, non-profit and government.

The Information Technology major comprises the following concentrations:

- **The Application Development** concentration provides students with the ability to program in languages typically utilized in contemporary business environments. Students code in applications such as Visual Basic, C++, Java, C# and other industry-standard applications to develop programs employing event-driven and object-oriented techniques.
- **The Cloud and Virtualization Technologies** concentration gives students hands-on practice and competency in virtualization and cloud computing. In addition to gaining core IT skills, students focus on cloud technologies, virtual computer hardware platforms, networking, storage devices, security, scripting, emerging technologies, server administration and storage and infrastructure services. This concentration is for students who want to pursue a professional career in virtualization and cloud computing and prepare for industry-recognized certificates in the IT field.
- **The Cybersecurity and Forensics** concentration places an emphasis on security of computer and network systems, including forensic work to prevent and/or determine and correct security issues utilizing cybersecurity devices, procedures, tools and solutions.
- **The Database Design and Administration** concentration focuses on skills needed to become a database manager. Topics include relational database design; working with database servers, users and permissions; SQL statements used for queries and reports; and incorporating databases into programming used in web-based and desktop forms.
- **The Health Information Technology** concentration provides students with the tools to install, manage, troubleshoot and secure hardware and software systems in healthcare environments. The course of study includes health IT privacy, security, EHR Implementation and support, mobile device management, technology and application life-cycle management, organizational behavior, medical business operations and regulatory requirements.
- **The Integrated Information Technology** concentration is ideal for students who want a flexible course of study for positions that require IT staff to perform a wide range of technical duties.
- **The Internet/Multimedia** concentration focuses on scripting, server-side form handling, web database integration, and interactive and dynamic multimedia Internet development.
- **The Networking** concentration focuses on configuring and maintaining network information systems and components in various network operating system and cloud computing environments that are prevalent in today's businesses. The emphasis is on network administration (i.e. managing Active Directory and network services), servers, workstations, virtualization, security, troubleshooting, installation and maintenance.