KENT STATE UNIVERSITY
CERTIFICATION OF CURRICULUM PROPOSAL

Preparation Date **19-May-17** Curriculum Bulletin ________

Effective Date **Fall 2018** Approved by EPC ________

Department	
College	**RE - Regional College**
Degree	**BS - Bachelor of Science**
Program Name	**Information Technology** Program Banner Code
Concentration(s)	Concentration(s) Banner Code(s)
Proposal	**Establish program**

Description of proposal:

Establish a Bachelor of Science in Information Technology (B.S.I.T.) degree. The proposed Information Technology major will include five optional concentrations: (1) Application Development, (2) Applied Computer Security and Forensics, (3) Health Information Technology, (4) Internet/Multimedia and (5) Networking.

Does proposed revision change program's total credit hours? ☐ Yes ☒ No

Current total credit hours: **120** Proposed total credit hours **120**

Describe impact on other programs, policies or procedures (e.g., duplication issues; enrollment and staffing considerations; need; audience; prerequisites; teacher education licensure):

No impact. The existing Computer Technology concentrations within the Bachelor of Technical and Applied Studies degree are elevated to stand-alone degree in BSIT; new HIT concentration added.

Units consulted (other departments, programs or campuses affected by this proposal):

CS, M&IS, DSCI, Nursing, Public Health, Regional College Curriculum, COMT, Regional Campus Faculty Councils.

REQUIRED ENDORSEMENTS

Ruth A Watson [signature] — 10 / 3 / 17

Department Chair / School Director

[signature] — 10 / 12 / 17

Campus Dean (for Regional Campuses proposals)

[signature] — 10 / 27 / 17

College Dean (or designee)

________ ___/___/___

Dean of Graduate Studies (for graduate proposals)

________ ___/___/___

Senior Vice President for Academic Affairs and Provost (or designee)

HIGHER LEARNING COMMISSION

FORM

New Programs

Substantive Change Application

Institution: Kent State University City, State: Kent, Ohio

Name of person completing this application: Therese E. Tillett

Title: Executive Director, Curriculum Services Phone: 330-672-8558 Email: ttillet1@kent.edu

Date Submitted:

The questions are designed to elicit brief, succinct, detailed information, rather than a narrative or references to extensive supporting documents. Do not attach other documents unless they are specifically requested in the questions and are germane to the request. The total submission should be no more than 10–12 pages on a single classification of change. (The page limit excludes attachments. However, the overall length, including attachments, should not exceed 200 pages.)

If the person completing this application is not the CEO, CAO or the ALO of the institution, it is understood that the person completing and submitting this application has consulted with and informed those individuals.

Please note: HLC plans to update the change forms annually, on or about September 1 of each year. However, if a change application form was accessed more than 90 days prior to filing, it is recommended that the institution visit http://www.hlcommission.org/change to ensure that there have been no changes to the application form in the intervening time.

Submit the completed application as a single PDF file on the following webpage: http://www.hlcommission.org/document_upload/.

Part 1: General Questions

1. **Requested Change(s).** Concisely describe the change for which the institution is seeking approval.

   Kent State University proposes establishing a Bachelor of Science in Information Technology (BSIT) degree, to be offered fully online and hybrid online/on-ground at all the university's seven regional campuses in Northeast Ohio—Ashtabula, East Liverpool, Geauga, Salem, Stark, Trumbull and Tuscarawas—and at Kent State's Regional Academic Center in Twinsburg, Ohio. The Trumbull Campus will be the admitting campus for first-time Kent State University applicants who are declaring the fully online program.

The proposed Information Technology major will include six concentrations: (1) Application Development, (2) Applied Computer Security and Forensics, (3) Health Information Technology, (4) Integrated Information Technology, (5) Internet/Multimedia and (6) Networking.

Since 2011, Kent State has offered this program as computer technology concentrations within the Technical and Applied Studies major (with the exception of the proposed Health Information Technology concentration, which is new). The concentrations have been approved to be offered fully online since 2014. This proposal is to capitalize on the success of the program and elevate those concentrations to a separate degree program. Once the BSIT degree is approved, the existing computer technology concentrations will be inactivated.

Marketing efforts for the program prove challenging as it is hidden, currently, as concentrations within another major; prospective students cannot find the program easily on the university's website or on the admission application. These students are seeking an information technology program, not a technical and applied studies one. Elevation from concentrations to major will resolve the lack of visibility for prospective students and provide more clarity to graduates and employers on the program's objectives and outcomes. The changes also will provide an environment to allow the program area to continue to grow with applied technical options targeting contemporary information technology needs in a variety of organizations.

Revising the name of the program from computer technology to information technology will align the proposed degree program with similar programs at other institutions in the state and nationwide. Information technology is a recognized sub-discipline of computing that prepares graduates as IT support for a variety of workplace settings, including schools, businesses, healthcare and any other organizations that require technical support for computer systems and computer-related problems.

In addition, Kent State has offered an associate degree in computer technology for more than four decades on it regional campuses (and fully online since 2011). The proposed BSIT degree will serve as a 2+2 articulation for that associate degree as well as similar associate degrees.

2. **Is this application being submitted in conjunction with another application?**

☐ Yes ☒ No

3. **Classification of Change Request.**
Note: not every institutional change requires prior review and approval. Review the "Overview of HLC Policies and Procedures for Institutional Changes Requiring HLC Notification or Approval" to make certain that current HLC policy requires the institution to seek approval.

New academic program(s):

☐ Certificate ☒ Bachelor's ☐ Diploma ☐ Master's/specialist

☐ Associate's ☐ Doctorate ☐ *Check if program is at a new degree level*

An institution submitting more than one change request should complete multiple applications, one for each type of change. The types of change requests include:

- Change in mission
- Change in student body
- Competency-based education (credit-based; direct assessment; hybrid) programs
- Consortial arrangement
- Contractual arrangement
- Substantially changing the clock or credit hours required for a program
- Change in academic calendar (e.g., quarters to semester) or change in credit allocation

- Teach-out plan if closing location provides total degree programs
- Distance or correspondence education
- New programs
- Certificate programs
- Branch campuses and additional locations

4. **Special conditions.** Indicate whether any of the conditions identified below fit the institution (Yes or No). If Yes, explain the situation in the space provided.

a) Is the institution, in its relations with other regional, specialized, or national accrediting agencies, currently under or recommended for a negative status or action (e.g., withdrawal, probation, sanction, warning, show-cause, etc.)?

No.

b) Is the institution now undergoing or facing substantial monitoring, special review, or financial restrictions from the U.S. Deptartment of Education or other federal or state government agencies?

No.

c) Has the institution's senior leadership or board membership experienced substantial resignations or removals in the past year?

No.

d) Is the institution experiencing financial difficulty through such conditions as a currently declared state of exigency, a deficit of 10% or more, a default or failure to make payroll during the past year, or consecutive deficits in the two most recent years?

No.

e) Is the institution experiencing other pressures that might affect its ability to carry out the proposal (e.g., a collective bargaining dispute or a significant lawsuit)?

No.

5. **Approvals.** Mark whether each type of approval is required prior to implementing the proposed change. If "Yes," attach documentation of the approval to the request. If "No," attach evidence that approval is not needed.

Internal (faculty, board) approvals	☒ Yes	☐ No	
System approvals	☐ Yes	☐ No	☒ Not Applicable
State approval	☒ Yes	☐ No	
Foreign country(ies) approvals	☐ Yes	☐ No	☒ Not Applicable
For Distance or Correspondence Education only: Process in place to ascertain and secure state approval(s) as required	☒ Yes	☐ No	

6. **Specialized Accreditation.** Complete this section only if specialized accreditation is required for licensure or practice in program(s) covered by this change application.

☐ The institution has already obtained the appropriate specialized accreditation. Attach a copy of the letter from the agency granting accreditation.

☐ The institution has begun the process of seeking or plans to seek specialized accreditation. Specify the name of the agency and the timeline for completing the process in the space below. (If approval is a multi-stage process, the institution should contact the HLC staff liaison to discuss the timeline before submitting this change application form.)

☐ The institution does not plan to seek specialized accreditation. Provide a rationale for not seeking this accreditation in the space below.

7. **Changes Requiring Visits.** This section is not for HLC-mandated visits such as additional location confirmation visits or campus evaluation visits.

Note: Complete this section only if the institution is already aware that the proposed change will need to be reviewed through a visit. The institution may submit Part 1 of the change request application to begin the process of scheduling a Change Visit or adding the proposed change to an already scheduled visit. The full application must be submitted at a later date. (If the institution is unsure whether a visit is required, leave this section blank and submit the full change application. HLC will advise the institution based on the information provided.)

a) Select the type of visit the institution is requesting:

☐ Request to schedule a Change Visit.

Change Visits typically are scheduled approximately four months from the date an institution submits its change request. The full change application and other required materials will be due to HLC and the peer review team eight weeks before the visit date. See http://www.hlcommission.org/change-visit for more information.

☐ Request to add a proposed change to an already scheduled visit. **Note:** Such requests must be submitted at least six months before the visit date.

Specify type of visit and date scheduled:

The institution's full change application should be submitted along with other materials required for the visit.

b) Provide URLs to the institution's Faculty/Staff Handbook and Catalog below. If the URLs are not available, please provide PDF versions of these documents when submitting other required materials prior to the visit.

Faculty/Staff Handbook URL:

Catalog URL:

Part 2: Topic-Specific Questions

An institution should submit a separate application for each requested program (unless the programs represent closely related disciplines). If more than one program is being requested in this application, please be sure to sufficiently address each program when answering the following questions, particularly in Sections A, D, E and F. Each proposed new program should be identified by using the *Classification of Instructional Programs* terminology (CIP codes). CIP codes are established by the U.S. Department of Education's National Center for Education Statistics as a taxonomic scheme that supports the accurate tracking and reporting of fields of study and program completions activity. More information is available at http://nces.ed.gov/ipeds/cipcode/.

Attach the "Substantive Change Application, Part 1: General Questions" as page one of your application. That completed form and your answers to the questions below will constitute your request for approval of a substantive change. This form will be the basis for review of this application.

Section A. Characteristics of the Change Requested

1. Identify the basic characteristics of the proposed educational program as indicated below:

a) The full name of the proposed program, the specific degree (if applicable) or the instructional level (if not a degree program), and the six-digit CIP code XX.XXXX of the program (CIP codes, program name, and additional description [optional])

The name of the program will be the Information Technology major within the Bachelor of Science in Information Technology degree. The CIP most aligned with the program's outcomes is the following:

CIP 11.1006 Computer Support Specialist: A program that prepares individuals to provide technical assistance, support, and advice to computer users to help troubleshoot software and hardware problems. Includes instruction in computer concepts, information systems, networking, operating systems, computer hardware, the Internet, software applications, help desk concepts and problem solving, and principles of customer service. Examples: technical support specialist, help desk specialist, IT support specialist.

b) Total credit hours (indicate whether semester or quarter) for completion of the program

The BSIT degree is 120 semester credit hours, comprising 56 credit hours of major requirements, 46 credit hours of general education/general elective requirements and 18 credit hours of concentration requirements. Transfer students with appropriate information technology backgrounds will be able to apply their transfer courses toward the major requirements.

c) Normal or typical length of time for students to complete the program

Full-time new students will be able to complete the program in four years (eight semesters).

d) Proposed initial date for implementation of the program

Fall 2018 Semester.

e) Primary target audience for the program (e.g., full-time, part-time, traditional college age, working adults, transfer students, military personnel, or particular ethnic group)

Targeted audiences for the BSIT degree will be both full-time and part-time students, and include traditional freshmen, students with associate degrees, transfer students, working adults and students with computer programming backgrounds. Students may complete the entire degree at Kent State University or transfer in technical courses from accredited institutions. The program utilizes online or on-ground course delivery methods in full and half-semester formats. In addition, students with advanced computer experience but no college-level credit will able to be placed into higher level major courses, with faculty approval, to earn college credit for lower level major coursework (through Kent State's retroactive credit policy). The goals of the program are to accommodate varied educational backgrounds, develop competencies needed for success in a variety of work settings and offer major courses in schedules attractive to traditional students and to time- and place-bound adults.

f) Projected life of the program (single cohort or ongoing)

The program will have ongoing admission.

g) Whether the program will be part of contractual or consortial arrangement

Not applicable.

2. Identify if the institution is requesting new stipulations for the proposed program and provide a rationale for this request.

Not applicable.

3. If the institution is planning any involvement by external organizations (other than accredited higher education institutions) in key operations as identified below, provide the information requested below and complete the Contractual Screening Form for each planned involvement. (Note that such involvement by a parent company or by one of its subsidiaries external to the institution in any of these operations should be reported.) If the screening form indicates contractual approval is required, complete the full contractual application and submit it in conjunction with the program application. If the screening form indicates no further action is required, attach the confirmation email from HLC.

Type of Involvement	Name(s) of External Organization(s)	Percent of Involvement
A. Recruitment and admission of students	Not applicable	Not applicable
B. Course placement and advising of students	Not applicable	Not applicable
C. Design and oversight of curriculum	Not applicable	Not applicable
D. Direct instruction and oversight	Not applicable	Not applicable
E. Other support for delivery of instruction	Not applicable	Not applicable

Section B. Institution's History With Programs

4. Does the institution currently offer a program at the same instructional level and with the same 4-digit CIP code (XX.XX) as the proposed program? If so, identify the program currently offered and whether it is a degree program. Will the proposed program replace the program currently offered?

   Currently, Kent State does not offer a bachelor's degree program in the same four-digit CIP series (11.10 Computer/Information Technology Administration and Management). Kent State does offer a post-secondary certificate in the 11.10 series (11.1003 for certificate Computer Forensics and Information Security, which utilizes the coursework in the associate and bachelor's degrees). The proposed degree will not replace the certificate.

5. Does the institution currently offer two or more programs at the same instructional level with the same 2-digit CIP code (XX.) as the proposed program? If so, identify the two such programs with the highest numbers of graduates during the past year, along with their numbers of graduates.

   Kent State offers three bachelor's degree and four post-secondary certificate programs with the same two-digit series (11 Computer and Information Sciences and Support Services).

   The programs with the highest number of graduates for the fiscal year 2017 are the following:

   - Computer Science major: 59 graduates
   - Digital Sciences major: 55 graduates

   In the same year, 78 students graduated with one of the computer technology concentrations within the Technical and Applied Studies major on which the Information Technology major is based. (The Technical and Applied Studies major is assigned the CIP 24.0199 due to its nature as a multi-disciplinary, individualized and completion program.)

Section C. Institutional Planning for Program Change

6. What impact might the proposed program have on challenges identified as part of or subsequent to the last HLC review and how has the institution addressed the challenges?

   There are no identified challenges.

7. Briefly describe the planning process for determining the need for this new program, including the role of faculty in the planning and approval process.

   The decision to propose this program was reached after extensive consultations with appropriate faculty and curricular and administrative bodies on the university's regional campuses, in the Regional College and at Kent State University overall. The proposed degree program was approved by the Computer Technology Curriculum Committee. The committee is composed of all full-time faculty in in the discipline in the regional campus system. In addition, the university conducted an external review of the existing computer technology associate degree and the proposed BSIT degree.

   Since all but one of the concentrations within the proposed major exist and considered viable, no specific business or industry groups were consulted for the proposed degree. Both Kent State's College of Nursing and College of Public Health support the proposed degree concentration.

   In addition to be approved by the Computer Technology Curriculum Committee, the proposal was approved by Regional College Curriculum Committee, comprising faculty across the regional campuses; the Educational Policies Council, a subcommittee of the Faculty Senate; and the Faculty Senate.

8. What are the physical facilities and equipment needed to support the program? Indicate the impact that the proposed change will have on the physical resources and laboratories that currently accommodate existing programs and services, or identify new laboratory and preceptor needs.

No additional resources are needed to support the proposed degree as the faculty, courses, physical facilities and technology for the program are already in place to support the concentrations in the Technical and Applied Studies major. No new courses were created with the exception of several courses last year to support the Health Information Technology concentration.

9. What is the evidence that a market for the new program(s) exists? How has estimated program demand been factored into realistic enrollment projections? How has this evidence been used in planning and budgeting processes to develop a quality program that can be sustained?

Enrollment projections factor in the current program enrollment, which has shown strong growth:

Enrollment in the BTAS Degree, Computer Technology Concentrations

Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	Fall 2017
55	158	239	253	284	294	261

The need for technology support and secure environments in all areas has been confirmed by the current evidence of program enrollment and letters of support received specific to the proposed Health Information Technology concentration, both internally and by healthcare professionals working in the field. The Bureau of Labor Statics projects employment for computer support specialists to grow 12 percent between 2014 and 2024, faster than the average for all occupations (www.bls.gov/ooh/computer-and-information-technology/computer-support-specialists.htm). More support services will be needed as organizations upgrade their computer equipment and software. The State of Ohio is fifth in the nation for highest employment for computer network support specialists (www.bls.gov/oes/current/oes151152.htm).

10. If the program request is approved, what future growth do you anticipate (e.g., in the next six months, three years) and how do you plan to manage this growth?

It is anticipated that positioning the program as a separate major with a new name that is more commonly recognized in the industry will increase program visibility and assist with program growth. Kent State expects that enrollment will moderately increase each year for the next five years, with enrollment divided between full-time and part-time students. Any potential future program faculty hires will be dependent upon student enrollment.

11. How does this program fit into the current and expected financial picture of the institution? In particular, will the program be financially self-sufficient within three years? If not, when do you expect the program to be financially self-sufficient and how do you expect the program to operate until then?

Kent State University operates under a Responsibility Center Management-based (RCM) financial model, where business-type strategies are used to manage and evaluate new and existing programs. Under this model, costs and revenues are taken into consideration when making decisions about the viability of programs. The proposed BSIT degree will be no exception, and will undergo the same scrutiny as other.

As this program is already sustainable at the bachelor's degree level (albeit, currently as concentrations within another major), the program has been self-sufficient for several years.

12. What controls are in place to ensure that the information presented to all constituencies in advertising, brochures, and other communications will be accurate?

The Office of the Provost ensures that only faculty- and university-approved program information is included in the University Catalog, degree audit, Explore Programs and Degrees website and student information system (for program admission and graduation). The Regional Campus system employs marketing staff who are responsible for ensuring consistency and accuracy of messages in promotional communications. In addition, Kent State's Division of University Communications and Marketing coordinates branding and consistency of all of the university's promotional materials.

Section D. Curriculum and Instructional Design

13. Please list all the courses that comprise the program and identify if the program will include any new courses. Include course descriptions and number of credit hours for each.

All of the courses comprising the curriculum are approved and exist to support the associate degree in computer technology, the Bachelor of Technical and Applied Studies degree and other programs within the university. Courses offered under the COMT (Computer Technology) course subject are revised to be offered under the IT (Information Technology) course subject, effective for fall 2018. Courses that were established in fall 2017 are noted as such.

IT 11002 VISUAL BASIC PROGRAMMING 3 Credit Hours
Visual Basic.NET language introducing concepts of object-oriented, event-driven program design and implementation.

IT 11004 SURVEY OF INFORMATION TECHNOLOGY 3 Credit Hours
This overview course will provide an introduction to information technologies, career paths and professional certifications available.

IT 11005 INTRODUCTION TO OPERATING SYSTEMS AND NETWORKING TECHNOLOGY 3 Credit Hours
Survey of desktop and network OS essentials, including file and disk management, system tools utilization, resource sharing and introductory network concepts.

IT 11006 INTRODUCTION TO WEB SITE TECHNOLOGY 3 Credit Hours
Focuses on web site technologies including HTML. Students learn the history of the Internet and effective search techniques.

IT 11009 COMPUTER ASSEMBLY AND CONFIGURATION 4 Credit Hours
Covers disk operating system functions and features; hardware/software installation procedures; file and directories management; system configuration/optimization; backup procedures.

IT 12000 INTERMEDIATE OFFICE PRODUCTIVITY APPS 3 Credit Hours
Covers intermediate concepts and integration of computer applications. Emphasis on software suites, specifically word processing, electronic spreadsheets, database and presentation applications.

IT 21002 NETWORK SETUP AND CONFIGURATION 4 Credit Hours
Introduces networking in LAN and WAN environments. Topics include network protocol, configuration, operation, setup, installation, administration, management and security.

IT 21007 INTERNET ETHICS AND POLICIES 3 Credit Hours
Covers the ethics, issues and policies regarding the Internet. It includes discussion/research on intellectual property/freedom, hacking, pornography, privacy, etc.

IT 21009 SEMINAR IN COMPUTER TECHNOLOGY 3 Credit Hours
Capstone course for IT students encompassing critical reading, writing and discussion applying the current theories of computer technologies to on-the-job experiences. Students will develop a portfolio to confirm their level of knowledge.

IT 21010 WORKGROUP PRODUCTIVITY SOFTWARE 3 Credit Hours
Research project-oriented course emphasizing workgroup methodologies for group project management, problem definition, data retrieval and analysis, conclusions and recommendations.

IT 21100 LOCAL AREA NETWORK TROUBLESHOOTING 3 Credit Hours
Covers local area network troubleshooting techniques. Topics include identifying the scope of the problem, systematic troubleshooting approaches, problem resolution and ongoing maintenance.

IT 21110 INTRODUCTION TO ROUTING AND SWITCHING 3 Credit Hours
Introduces internetworking concepts. Topics include networking standards, cabling, TCPIP, router configuration, LAN and WAN segments and other related topics.

IT 21200 ETHICAL HACKING 3 Credit Hours
Tools and techniques ethical hackers and security testers use to discover vulnerabilities and solutions to protect computer networks.

IT 31002 HEALTH IT SUPPORT 3 Credit Hours ***NEW FALL 2017***
Course covers skills and knowledge required to implement and support healthcare IT systems including regulatory and compliance issues; organizational behavior, IT and medical business operations; best practices and security.

IT 32002 LINUX NETWORKING 4 Credit Hours ***NEW FALL 2017***
Course covers network administration topics with the Linux operating system. Topics include distributions, storage solutions, network services, and current security practices.

IT 36301 ADVANCED C++ PROGRAMMING 4 Credit Hours
Course using C++: classes and data abstraction, stream IO, inheritance, standard template library, Microsoft Foundation Classes, system programming concepts using Unified Modeling Language.

IT 36302 ADVANCED C SHARP PROGRAMMING 3 Credit Hours
Advanced concepts of C Sharp including classes and objects, inheritance, polymorphism, arrays, exception handling, files and streams and XAML.

IT 36303 DIGITAL IMAGE MANIPULATION 3 Credit Hours
Course covers various concepts involved in creation and manipulation of digital images.

IT 36308 ERGONOMICS IN COMPUTER SYSTEMS 3 Credit Hours
Introduction to ergonomics, usability design, and assessment methods for the development of computer hardware, software, and systems.

IT 36309 PROGRAMMING MOBILE APPLICATIONS 3 Credit Hours
Introduces the unique program design considerations required by mobile device platforms such as PDAs and Smartphones. Practical programming examples will utilize Visual Basic and the .NET Compact Framework.

IT 36310 MULTIMEDIA DEVELOPMENT TOOLS 3 Credit Hours
Course focuses on advanced technologies for Web development, including DHTML, plug-ins, etc. Students will learn to create more interactive and dynamic web sites.

IT 36311 ADVANCED JAVA PROGRAMMING 4 Credit Hours
Course using Java abstract data types and objects, object-oriented, event-driven design, file organization and access, and systems programming concepts.

IT 36314 SEMINAR IN EMERGING COMPUTER AND INFORMATION TECHNOLOGIES 3 Credit Hours
Survey of new and emerging technologies in computer and information technology.

IT 36315 CERTIFICATION PREPARATION IN COMPUTER TECHNOLOGY 3 Credit Hours
(Repeatable for a maximum of 6 credit hours) Certification preparation course to help students prepare for professional certification attempts in Computer Technology. Certification is not guaranteed; and certification fees may apply.

IT 36318 SURVEY OF INFORMATION SECURITY, INTERNET FRAUD, COMPUTER FORENSIC 3 Credit Hours
This lecture-based, survey course provides a non-technical introduction to contemporary issues in information security, Internet fraud and computer forensics.

IT 36320 COMPUTER FORENSICS 3 Credit Hours
Hands-on skills in incident response, forensic preparation, and data recovery, and analysis.

IT 36321 NETWORK FORENSICS 3 Credit Hours
Emphasizing hands-on skills in live incident response, the proper use of network forensic tools, network monitoring, live data capture, evidence analysis, data integrity and other related topics.

IT 36322 SOCIAL MEDIA AND MOBILE DEVICE FORENSICS 3 Credit Hours ***NEW FALL 2017***
Course covers data collection and analysis techniques for social media and mobile devices.

IT 36330 LOCAL AREA NETWORK SECURITY FUNDAMENTALS 3 Credit Hours
Examines the primary issues involved in securing resources in a LAN, including threat assessment, countermeasures, best practices, security protocols, cryptography and management-related issues.

IT 36331 ADVANCED ROUTING AND SWITCHING 3 Credit Hours
Reinforcing Internetworking concepts. Topics include network standards, LAN switching, VLANs, network designs, routing protocols and configuration, LAN and WAN segments and other related topics.

IT 36336 WEB SCRIPTING II 3 Credit Hours
Focuses on server-side scripting needed to create interactive and dynamic web sites.

IT 36340 HELP DESK SUPPORT 3 Credit Hours
Examination of help desks that exist, importance within organizations, the roles and skills required, and methods and technologies commonly employed.

IT 36350 PROGRAMMING OFFICE PRODUCTIVITY APPLICATIONS 3 Credit Hours
Introduces the use of Visual Basic for Applications (VBA) as a tool to create customized programs that automate repetitive and/or complex tasks performed using office suite applications.

IT 36355 COMMAND LINE UTILITIES 3 Credit Hours
Preparing students to perform effectively in Windows, Linux and various server command line environments. Command syntax, batch files, script files, internal and external commands and other related topics are covered.

IT 40000 CYBERSECURITY 3 Credit Hours
Builds on a background in networking and focuses on cybersecurity best practices, standard models and regulatory requirements.

IT 41002 CLOUD TECHNOLOGY 3 Credit Hours
Concepts of cloud computing, including storage; services; technology; and management.

IT 41010 MOBILE APPLICATIONS FOR INFORMATION TECHNOLOGY 3 Credit Hours ***NEW FALL 2017***
Covers enterprise mobility technical concepts, strategies, and solutions across various domains and industries. Includes topics such as organizational issues, IT and business operations; and best practices and security.

IT 42000 SOCIAL MEDIA SECURITY 3 Credit Hours
Personal and corporate social media presence, security risks, intellectual property and ethical issues.

IT 42002 WIRELESS AND MOBILE DEVICE SECURITY 3 Credit Hours ***NEW FALL 2017***
Course covers wireless and mobile device security. Topics include risk assessments, threats, vulnerabilities and current security practices.

IT 43000 HEALTHCARE INFORMATION SYSTEMS 3 Credit Hours ***NEW FALL 2017***
Course focuses on the roles and responsibilities of the health IT professional including the technology, legal and ethical responsibilities, and complex systems and environment.

IT 46300 ADVANCED COMPUTER ASSEMBLY AND CONFIGURATION 3 Credit Hours
Focus is on advanced system components, streamlined operating system installation procedures, and current technology in LAN connectivity.

IT 46303 DIGITAL VIDEO EDITING 3 Credit Hours
Utilizes digital imaging technologies to produce videos. Includes timelines; filming, importing/exporting video; audio; effects, transitions, and captions.

IT 46308 ADVANCED VISUAL BASIC PROGRAMMING 3 Credit Hours
Advanced concepts of Visual Basic: Classes and Objects, Inheritance, Polymorphism, Arrays, Exception Handling, Files and Streams, DLLs.

IT 46309 VISUAL BASIC WEB PROGRAMMING 3 Credit Hours
Using Visual Basic to develop secure, data-aware web applications. Topics covered include HTML and CSS, testing and debugging, master pages, state management, security and authentication, SQL and object data sources, AJAX, and WCF services.

IT 46310 TECHNOLOGY OF OPERATING SYSTEMS 3 Credit Hours
Course covers installation, configuration, tuning, and communication among state of the art desktop operating systems, using available system tools, utilities and files.

IT 46311 TECHNOLOGY OF NETWORKING 3 Credit Hours
Advanced topics of enterprise network management, including DNS, WINS, IP addressing, routing basics, subnet masking, firewalls, storage redundancy techniques, and general tuning, optimizing, troubleshooting, recovery strategies.

IT 46312 SCRIPTING FOR NETWORK ADMINISTRATORS 3 Credit Hours
Covers scripting technologies to configure and manage resources and services of LAN servers and workstations.

IT 46313 VIRTUAL MACHINE CONFIGURATION AND ADMINISTRATION 3 Credit Hours
Focus on configuring and administering virtual machine software.

IT 46314 ADVANCED SERVER CONFIGURATION 3 Credit Hours
Core service roles provided by application services including configuration, maintenance and security.

IT 46315 SQL WITH ORACLE 3 Credit Hours
Focus is on SQL and relational databases using Oracle.

IT 46320 CLOUD FORENSICS 3 Credit Hours
Concepts of cloud forensics, including legal consideration and software tools involved with cloud discovery.

IT 46321 WEB DATABASE INTEGRATION 3 Credit Hours
Focus is on integrating data sources into web sites. Current topics include advanced concepts in server-side processing principles, web forms, database programming objects and Structured Query Language.

IT 46331 LOCAL AREA NETWORK SECURITY AND FIREWALLS 3 Credit Hours
Examines primary issues involved in defining and configuring a local area network defense perimeter including LAN security analysis, implementing firewalls, and intrusion detection systems.

IT 46340 DATA DESIGN AND IMPLEMENTATION 3 Credit Hours
Explores the role and design of databases in organizations, with emphasis on the technologies used in their implementation. Emphasis on SQL.

TAS 37900 TECHNICAL AND APPLIED STUDIES CORNERSTONE 3 Credit Hours
Cornerstone course instructs students about how the work role in industrial and information societies has evolved to its current organization. Students personalize the information by reflecting on the role of work in their own lives by reviewing theory and application of their own career management; examine the stages of career development; job stress; entrepreneurial careers; and organization.

TAS 47900 TECHNICAL AND APPLIED STUDIES CAPSTONE 3 Credit Hours
Designed to help students articulate and integrate the competencies that are part of their bachelor's degree program. In part, an electronic portfolio is used to help describe familiarity with the competencies.

14. What are the requirements students must fulfill to complete the program successfully (including specific courses, course options, and any other requirements)?

Major Requirements		
IT 11002	Visual Basic Programming	3
IT 11004	Survey of Information Technology	3
IT 11005	Introduction to Operating Systems and Networking Technology	3
IT 11006	Introduction to Web Site Technology	3
IT 11009	Computer Assembly and Configuration	4
IT 12000	Intermediate Office Productivity Apps	3
IT 21002	Network Setup and Configuration	4
IT 21009	Seminar in Computer Technology	3
IT 21010	Workgroup Productivity Software	3
IT 21007	Internet Ethics and Policies	3
IT 36308	Ergonomics in Computer Systems	3
IT 36314	Seminar in Emerging Computer and Information Technologies	3
IT 36318	Survey of Information Security, Internet Fraud and Computer Forensics	3
IT 36340	Help Desk Support	3
IT 42000	Social Media Security	3
TAS 37900	Technical and Applied Studies Cornerstone	3
TAS 47900	Technical and Applied Studies Capstone	3
Information Technology (IT) Electives		3
Additional Requirements		
UC 10097	Destination Kent State: First Year Experience	1
Kent Core Composition		6
Kent Core Mathematics and Critical Reasoning		3
Kent Core Humanities and Fine Arts (minimum one course from each)		9
Kent Core Social Sciences (must be from two disciplines)		6
Kent Core Basic Sciences (must include one laboratory)		6
Kent Core Additional		6-7
General Electives		9
Concentrations Requirements		
Choose from the following: Application Development Applied Computer Security and Forensics Health Information Technology Integrated Information Technology Internet/Multimedia Networking		18-19
	Minimum Total Credit Hours:	**120**

Application Development Concentration Requirements (19 credit hours)		
IT 36301 or IT 36311	Advanced C++ Programming Advanced Java Programming	4
IT 36302	Advanced C Sharp Programming	3
IT 36309	Programming Mobile Applications	3
IT 36350 or IT 46309	Programming Office Productivity Applications Visual Basic Web Programming	3
IT 46308	Advanced Visual Basic Programming	3
IT 46340	Data Design and Implementation	3
Applied Computer Security and Forensics Concentration Requirements (18 credit hours)		
IT 21200 or IT 46313	Ethical Hacking Virtual Machine Configuration and Administration	3
IT 36320	Computer Forensics	3
IT 36321	Network Forensics	3

IT 36330	Local Area Network Security Fundamentals	3
IT 46331	Local Area Network Security and Firewalls	3
Concentration Elective, choose from the following:		3
IT 32002	Linux Networking	
IT 36322	Social Media and Mobile Device Forensics	
IT 40000	Cybersecurity	
IT 42002	Wireless and Mobile Device Security	
IT 46300	Advanced Computer Assembly and Configuration	
IT 46313	Virtual Machine Configuration and Administration	
IT 46320	Cloud Forensics	
Health Information Technology Concentration Requirements (18 credit hours)		
IT 31002	Health Information Technology Support	3
IT 36330	Local Area Network Security Fundamentals	3
IT 41010	Mobile Applications for Information Technology	3
IT 43000	Healthcare Information Systems	3
IT 46331	Local Area Network Security and Firewalls	3
Concentration Elective, choose from the following:		3
IT 36315	Certification Preparation in Computer Technology	
IT 36350	Programming Office Productivity Applications	
IT 41002	Cloud Technology	
IT 46311	Technology of Networking	
IT 46313	Virtual Machine Configuration and Administration	
IT 46314	Advanced Server Configuration	
IT 46340	Data Design and Implementation	
Integrated Information Technology Concentration Requirements		
IT 41010	Mobile Applications for Information Technology	3
Information Technology (IT) Electives		15
Internet/Multimedia Concentration Requirements (18 credit hours)		
IT 36303	Digital Image Manipulation	3
IT 36309	Programming Mobile Applications	3
IT 36310	Multimedia Development Tools	3
IT 46303	Digital Video Editing	3
Concentration Electives, choose from the following:		6
IT 36311	Advanced Java Programming	
IT 36336	Web Scripting II	
IT 46309	Visual Basic Web Programming	
IT 46315	SQL with Oracle	
IT 46321	Web Database Integration	
Networking Concentration Requirements (18 credit hours)		
IT 36330	Local Area Network Security Fundamentals	3
IT 36355 or IT 46312	Command Line Utilities Scripting for Network Administrators	3
IT 41002 or IT 46314	Cloud Technology Advanced Server Configuration	3
IT 46300 or IT 46313	Advanced Computer Assembly and Configuration Virtual Machine Configuration and Administration	3
IT 46310 or IT 46311	Technology of Operating Systems Technology of Networking	3
Concentration Elective, choose from the following:		3
IT 21100	Local Area Network Troubleshooting	
IT 21110	Introduction to Routing and Switching	
IT 32002	Linux Networking	
IT 36315	Certification Preparation in Computer Technology	
IT 36331	Advanced Routing and Switching	
IT 36355	Command Line Utilities	
IT 41002	Cloud Technology	

IT 46300	Advanced Computer Assembly and Configuration
IT 46310	Technology of Operating Systems
IT 46311	Technology of Networking
IT 46312	Scripting for Network Administrators
IT 46313	Virtual Machine Configuration and Administration
IT 46314	Advanced Server Configuration
IT 46331	Local Area Network Security and Firewalls

15. For programs using prior learning credit, compressed time frames, online delivery, accelerated formats, or other approaches to learning, explain how the institution will ensure that student work and the levels of knowledge and competencies comparable to those required in traditional formats have been achieved.

Lead computer technology faculty assess and evaluate the program overall for both online and on-ground students following existing practices. Various outcomes such as writing and communication effectiveness, technical skills and ethical decision-making are used to assess the program's goals and objectives. The data on these metrics are summarized in a program assessment report each year and submitted to Kent State's Office of Accreditation, Assessment and Learning. Data from the program assessment are shared with the Computer Technology Curriculum Committee during the yearly reporting cycle. The curriculum committee is composed of all full-time computer technology faculty. The program's two capstone courses—IT 21009 Seminar in Computer Technology in the second year and TAS 47900 Technical and Applied Studies Capstone in the fourth year—allow faculty to assess if the students are able to demonstrate the required information technology competencies for the program.

Section E. Institutional Staffing, Faculty, and Student Support

16. How many and what types of faculty (full-time or part-time) will be employed in the program? Why is the number and type of faculty sufficient to support the program? How many, if any, new faculty will be hired for the program?

There are 11 full-time faculty supporting the existing program on all regional campuses, who teach both on-ground and online courses (this number does not include two full-time faculty who teach major courses but are attached to other programs). The number of part-time faculty (adjuncts) varies each semester depending on need. Presently, there are approximately 15 adjuncts teaching on the seven campuses and Regional Academic Center. No full-time hires are currently planned as the ratio of faculty to students in the program is sufficient, with one full-time faculty member for every 16 full-time-equivalent (FTE) students.

17. What will the impact of the new initiative be on faculty workload?

The new initiative will have no impact on faculty workload as the program is existing, and current faculty workloads are adequate.

18. Provide a brief attachment that inventories each faculty member employed to teach in the program, including names of existing personnel, a description of each faculty member's academic qualifications, their prior instructional responsibility and other experiences relevant to the courses they will teach in the program in question, each faculty member's course load in the new program, and the course work each teaches in other programs currently offered. (Note: Do not attach full CVs for each faculty member; rather, the requested information should be summarized in one paragraph for each faculty member.)

See Appendix A.

19. For graduate programs, document scholarship and research capability of each faculty member; for doctoral programs, document faculty experience in directing student research.

Not applicable.

20. What library and information resources—general as well as specific to the program(s)—and staffing and services are in place to support the initiative? If the proposed new program is at the graduate level, document discipline-specific refereed journals and primary source materials.

As the bachelor's level program in computer technology has been offered for the past six years, existing resources are sufficient. Each Kent State campus has a full-time librarian on staff. The Kent State University Libraries provide on-ground and online access to thousands of journals, books and databases to students across all eight campuses, as well as access to OhioLink, which provides students access to library materials and electronic research databases from 120 academic libraries in Ohio. In addition, Kent State also maintains a license with Safari Books, a digital library of more than 30,000 online technical texts.

Section F. Evaluation

21. Describe the process for monitoring, evaluating and improving the overall effectiveness and quality of the program, and articulate program-level learning outcomes and objectives.

Lead computer technology lead faculty assess and evaluate the program following the existing practices. Various outcomes such as writing and communication effectiveness, technical skills and ethical decision-making are used to assess the goals and objectives listed below. The data on these metrics are summarized in a program assessment report each year and submitted to Kent State's Office of Accreditation, Assessment and Learning. The program's two capstone courses—IT 21009 Seminar in Computer Technology in the second year and TAS 47900 Technical and Applied Studies Capstone in the fourth year—allow faculty to assess if the students are able to demonstrate the required information technology competencies for the program.

The characteristics of graduates from a bachelor's degree in IT are defined by the Association of Computing Machinery (ACM):

- Apply knowledge of computing and mathematics appropriate to the discipline
- Analyze a problem, and identify and define the computing requirements appropriate to its solution
- Design, implement and evaluate a computer-based system, process, component or program to meet desired needs
- Function effectively on teams to accomplish a common goal
- Understand professional, ethical, legal, security and social issues and responsibilities
- Communicate effectively with a range of audiences
- Analyze the local and global impact of computing on individuals, organizations and society
- Recognize the need for and an ability to engage in continuing professional development
- Use current techniques, skills, and tools necessary for computing practice

- Use and apply current technical concepts and practices in the core information technologies
- Identify and analyze user needs and take them into account in the selection, creation, evaluation and administration of computer-based systems
- Effectively integrate IT-based solutions into the user environment
- Understand best practices and standards and their application
- Assist in the creation of an effective project plan

These learning outcomes provide the framework for the courses in the major. The program's curriculum committee has the general oversight of the curriculum in the major. The curriculum committee is composed of all full-time computer technology faculty.

22. Describe the process for assessing and improving student learning, including student persistence and completion, in the new program.

Kent State University offers many support services to students through a variety of offices, including advising, tutoring, career, counseling, accessibility and technical support. Students meet with professional academic advisors to review progress using the university's degree audit (Graduate Planning System), and with faculty advisors to discuss research and career goals. Faculty issue evaluation grades for first- and second-year courses between weeks four to seven in the semester to provide feedback to students and allow them time to make adjustments in their studies.

ADDENDUM TO HIGHER LEARNING COMMISSION SUBSTANTIVE CHANGE APPLICATION TO ESTABLISH A NEW UNDERGRADUATE DEGREE PROGRAM

Proposed Major: Information Technology, with six concentrations in
- Application Development
- Applied Computer Security and Forensics
- Health Information Technology
- Integrated Information Technology
- Internet/Multimedia
- Networking

Proposed Degree: Bachelor of Science in Information Technology

Administrating College: Regional College

Administrating Department: N/A

Provide the title of the lead administrator for the proposed program and a brief description of the individual's duties and responsibilities.

Associate Professors William C. Ward III and Ruth A. Watson (Trumbull Campus) will be co-lead faculty for the Bachelor of Science in Information Technology degree in the Regional College. Both have a minimum of 25 years of higher education experience. They have served as co-lead for many years for the program at the associate and bachelor's degree level; both have developed online courses and teach online courses every semester. Responsibilities for co-leads include, but are not limited to, deciding curricular actions; developing and implementing program requirements; conducting meetings with program faculty; and undertaking program reviews, reporting, credit by exams, adjunct teaching approvals and course substitutions.

Indicate whether any public institutions of higher education offer the proposed program within a 30-mile radius of the campus(es) at which the proposed program will be offered. If so, list the institutions that offer the proposed program and provide a rationale for offering an additional program at this campus.

All computing majors share common elements including the goal to produce the number of graduates necessary to fill the great demand for high tech skills in the multiple sub-disciplines of computing. These programs are typically designed by program faculty based on input from local advisory boards, business partners, and others resulting in unique and viable programs across institutions. The Information Technology sub-discipline focuses on supporting end users in a variety of settings for a wide spectrum of computing needs including software and hardware. Some are offered fully online appealing to an audience who may be place bound or have the additional obligations of work and family. At the baccalaureate level, in addition to the existing Information Technology program offered at Kent State University through the Bachelor of Technical and Applied Studies (BTAS) Computer Technology concentrations, Youngstown State University and University of Akron also have existing degrees. The programs at these three institutions have a long history of serving the unique needs within their communities.

Youngstown State University (20 miles from Kent State's Trumbull Campus) offers a Bachelor of Science in Applied Science degree in Information Technology. This primarily on-ground degree has a core that includes foundation courses in operating systems, programming, Cisco Academy, and multimedia. The program's learning outcomes are to write and produce interactive programs, design a 3NF database and extract information using QBE and SQL, and communicate effectively with written reports.

The University of Akron (18 miles from the Stark Campus and 22 miles from the Regional Academic Center) offers a Bachelor of Science degree in Computer Information Systems with concentrations in applications, networking, programming and web development. This primarily on-ground degree states that it introduces "students to basic computing concepts while allowing them to develop the basic skills required to begin a career." The networking concentration is listed in the IT discipline; the others are cross discipline.

The enrollment for the existing Computer Technology concentrations in the BTAS degree at Kent State University has been strong since its inception in 2011. The proposed Information Technology major will offer greater visibility and accessibility to a wider audience with both online and on-ground options.

CATALOG COPY

DESCRIPTION OF PROGRAM:

The Bachelor of Science in Information Technology degree 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 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 primarily in small to mid-size installations with local area networks, and are employed in all types of organizations using computing systems, working in such positions as network technicians, technical support specialist, help desk manager, LAN manager, project manager and database administrator.

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 will 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 **Applied Computer Security and Forensics** concentration places an emphasis on security of desktops and local area networks, which often includes forensic work to prevent and/or determine and correct security issues.
- 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, 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 local area networks in various network operating system environments. The emphasis is on entry-level network administration (i.e. managing active directory and network services), desktops, troubleshooting, installation and maintenance.

Fully Offered At:

- Online
- Ashtabula Campus
- East Liverpool Campus
- Geauga Campus
- Salem Campus
- Stark Campus
- Trumbull Campus
- Tuscarawas Campus
- Regional Academic Center in Twinsburg

ADMISSION REQUIREMENTS:

Standard admission criteria for the bachelor's degree.

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 or process by applying knowledge of programming, web, digital media, database, human computer interaction, networking 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

PROGRAM REQUIREMENTS:

MAJOR REQUIREMENTS

Major Requirements (courses count in major GPA)		
IT 11002	Visual Basic Programming	3
IT 11004	Survey of Information Technology	3
IT 11005	Introduction to Operating Systems and Networking Technology	3
IT 11006	Introduction to Web Site Technology	3
IT 11009	Computer Assembly and Configuration	4
IT 12000	Intermediate Office Productivity Apps	3
IT 21002	Network Setup and Configuration	4
IT 21009	Seminar in Computer Technology	3
IT 21010	Workgroup Productivity Software	3
IT 21007	Internet Ethics and Policies	3
IT 36308	Ergonomics in Computer Systems	3
IT 36314	Seminar in Emerging Computer and Information Technologies	3
IT 36318	Survey of Information Security, Internet Fraud and Computer Forensics (WIC)[1]	3
IT 36340	Help Desk Support	3
IT 42000	Social Media Security	3
TAS 37900	Technical and Applied Studies Cornerstone	3
TAS 47900	Technical and Applied Studies Capstone (ELR)	3
Information Technology (IT) Elective		3
Additional Requirements (courses do not count in major GPA)		
UC 10097	Destination Kent State: First Year Experience	1
Kent Core Composition		6
Kent Core Mathematics and Critical Reasoning		3
Kent Core Humanities and Fine Arts (minimum one course from each)		9
Kent Core Social Sciences (must be from two disciplines)		6
Kent Core Basic Sciences (must include one laboratory)		6
Kent Core Additional		6-7
General Electives (total credit hours depends on earning 120 credit hours, including 39 upper-division credit hours)		9
Concentrations Requirements		
Choose from the following:		18-19
Additional Requirements for Students Not Declaring a Concentration		
Application Development		
Applied Computer Security and Forensics		
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

Concentration Requirements (courses count in major GPA)		
IT 36301	Advanced C++ Programming	4
or IT 36311	Advanced Java Programming	
IT 36302	Advanced C Sharp Programming	3
IT 36309	Programming Mobile Applications	3
IT 36350	Programming Office Productivity Applications	3
or IT 46309	Visual Basic Web Programming	
IT 46308	Advanced Visual Basic Programming	3
IT 46340	Data Design and Implementation	3
	Minimum Total Credit Hours:	**19**

APPLIED COMPUTER SECURITY AND FORENSICS CONCENTRATION REQUIREMENTS

Concentration Requirements (courses count in major GPA)		
IT 21200	Ethical Hacking	3
or IT 46313	Virtual Machine Configuration and Administration	
IT 36320	Computer Forensics	3
IT 36321	Network Forensics	3
IT 36330	Local Area Network Security Fundamentals	3
IT 46331	Local Area Network Security and Firewalls	3
Concentration Elective, choose from the following:		3
IT 32002	Linux Networking	
IT 36322	Social Media and Mobile Device Forensics	
IT 40000	Cybersecurity	
IT 42002	Wireless and Mobile Device Security	
IT 46300	Advanced Computer Assembly and Configuration	
IT 46313	Virtual Machine Configuration and Administration	
IT 46320	Cloud Forensics	
	Minimum Total Credit Hours:	**18**

HEALTH INFORMATION TECHNOLOGY CONCENTRATION REQUIREMENTS

Concentration Requirements (courses count in major GPA)		
IT 31002	Health Information Technology Support	3
IT 36330	Local Area Network Security Fundamentals	3
IT 41010	Mobile Applications for Information Technology	3
IT 43000	Healthcare Information Systems	3
IT 46331	Local Area Network Security and Firewalls	3
Concentration Elective, choose from the following:		3
IT 36315	Certification Preparation in Computer Technology	
IT 36350	Programming Office Productivity Applications	
IT 41002	Cloud Technology	
IT 46311	Technology of Networking	
IT 46313	Virtual Machine Configuration and Administration	
IT 46314	Advanced Server Configuration	
IT 46340	Data Design and Implementation	
	Minimum Total Credit Hours:	**18**

INTEGRATED INFORMATION TECHNOLOGY CONCENTRATION REQUIREMENTS

Concentration Requirements (courses count in major GPA)		
IT 41010	Mobile Applications for Information Technology	3
Information Technology (IT) Electives		15
	Minimum Total Credit Hours:	**18**

INTERNET/MULTIMEDIA CONCENTRATION REQUIREMENTS

Concentration Requirements (courses count in major GPA)		
IT 36303	Digital Image Manipulation	3
IT 36309	Programming Mobile Applications	3
IT 36310	Multimedia Development Tools	3
IT 46303	Digital Video Editing	3
Concentration Electives, choose from the following:		6
IT 36311	Advanced Java Programming	
IT 36336	Web Scripting II	
IT 46309	Visual Basic Web Programming	
IT 46315	SQL with Oracle	
IT 46321	Web Database Integration	
	Minimum Total Credit Hours:	**18**

NETWORKING CONCENTRATION REQUIREMENTS

Concentration Requirements (courses count in major GPA)		
IT 36330	Local Area Network Security Fundamentals	3
IT 36355 or IT 46312	Command Line Utilities Scripting for Network Administrators	3
IT 41002 or IT 46314	Cloud Technology Advanced Server Configuration	3
IT 46300 or IT 46313	Advanced Computer Assembly and Configuration Virtual Machine Configuration and Administration	3
IT 46310 or IT 46311	Technology of Operating Systems Technology of Networking	3
Concentration Elective, choose from the following:		3
IT 21100	Local Area Network Troubleshooting	
IT 21110	Introduction to Routing and Switching	
IT 32002	Linux Networking	
IT 36315	Certification Preparation in Computer Technology	
IT 36331	Advanced Routing and Switching	
IT 36355	Command Line Utilities	
IT 41002	Cloud Technology	
IT 46300	Advanced Computer Assembly and Configuration	
IT 46310	Technology of Operating Systems	
IT 46311	Technology of Networking	
IT 46312	Scripting for Network Administrators	
IT 46313	Virtual Machine Configuration and Administration	
IT 46314	Advanced Server Configuration	
IT 46331	Local Area Network Security and Firewalls	
	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 there are minimum 12 credit hours of coursework unique to each concentration.

ROADMAP

Semester One		
IT 11004	Survey of Information Technology	3
IT 11005	Introduction to Operating Systems and Networking Technology	3
UC 10097	Destination Kent State: First Year Experience	1
Kent Core Requirement		3
Kent Core Requirement		3
Kent Core Requirement		3
	Credit Hours	**16**
Semester Two		
IT 11006	Introduction to Web Site Technology	3
IT 11009	Computer Assembly and Configuration	4
IT 12000	Intermediate Office Productivity Apps	3
Kent Core Requirement		3
Kent Core Requirement		3
	Credit Hours	**16**
Semester Three		
IT 11002	Visual Basic Programming	3
IT 21002	Network Setup and Configuration	4
IT 21010	Workgroup Productivity Software	3
Kent Core Requirement		3
Kent Core Requirement		3
	Credit Hours	**16**
Semester Four		
IT 21007	Internet Ethics and Policies	3
IT 21009	Seminar in Computer Technology	3
Kent Core Requirement		3
Kent Core Requirement		3
Kent Core Requirement		3
	Credit Hours	**15**
Semester Five		
IT 36308	Ergonomics in Computer Systems	3
IT 36318	Survey of Information Security, Internet Fraud and Computer Forensics (WIC)	3
TAS 37900	Technical and Applied Studies Cornerstone	3
Kent Core Requirement		3
Kent Core Requirement		3
	Credit Hours	**15**
Semester Six		
Concentration Requirements		12
Information Technology (IT) Elective		3
	Credit Hours	**15**
Semester Seven		
IT 36340	Help Desk Support	3
IT 42000	Social Media Security	3
Concentration Requirement		3
General Electives		6
	Credit Hours	**15**
Semester Eight		
IT 36314	Seminar in Emerging Computer and Information Technologies	3
TAS 47900	Technical and Applied Studies Capstone (ELR)	3
Concentration Requirement		3
General Elective		3
	Credit Hours	**12**

Minimum Total Credit Hours: 120

Reply all | Delete Junk |

proposed Computer Technology major within BTAS degree

WR WALKER, ROBERT

Reply all |

To: ☐ FROEHLICH, LARRY; ☐ WARD, WILLIAM III; ☐ WATSON, RUTH;

1:25 PM

Larry, Will, and Ruth,

On behalf of the School of Digital Sciences, please accept this email as a preliminary statement of support for your proposed Computer Technology major within BTAS degree.

As you note in your Initial Inquiry to OBR, enrollment in your five computer technology concentrations is growing but those concentrations are hidden under the "Technical and Applied Studies" major. I would agree that pulling them out into a new "Computer Technology" major will increase their visibility and it will allow you to develop a strong set of core courses for the major that supports all five concentrations.

I am supportive of your plans as outlined, but note that the details are still missing at this point. Assuming your Initial Inquiry is approved by OBR, I would like to see the final proposal, including basic data sheets for the proposed new courses. Then I will consult with our Interdisciplinary Curriculum Committee before sending a final statement of support.

- bob

==========

Robert A. Walker Director, School of Digital Sciences
rawalke1@kent.edu http://www.kent.edu/dsci
walker@cs.kent.edu Professor, Computer Science Department
236 Math & CS Building http://www.cs.kent.edu/~walker
330-672-9105 Kent State University, Kent OH 44242

==========

Reply all | Delete Junk |

Proposed COMT major within the BTAS

AS Alemagno, Sonia

To: ☐ WARD, WILLIAM III; ☐ FROEHLICH, LARRY; ☐ WATSON, RUTH;

Reply all |

Tue 3/29/2016 12:38 PM

Action Items

The College of Public Health supports the proposed Computer Technology (COMT) major within the Bachelor of Technical and Applied Studies (BTAS) degree, and the new concentration (Health IT) and new COMT courses. We discussed this in our Leadership Committee and there are no objections.

Please let us know if we can be of any assistance.

Sonia Alemagno

Sonia A. Alemagno, Ph.D.
Dean and Professor of Health Policy and Management
Kent State University
College of Public Health
326 Lowry
Kent, Ohio 44242
(330) 672-6501

KENT STATE UNIVERSITY | College of Applied Engineering, Sustainability and Technology

May 8, 2017

Dr. Nathan Richey
Vice President for Kent State System Integration
Library Building-3rd Floor-Suite 384G
Kent State University
P.O. Box 5190
Kent, Ohio 44242

Dear Dr. Richey:

The Computer Engineering Technology faculty in CAEST met to review your initial inquiry to the Ohio Department of Education to convert the Computer Technology concentration under the Technical and Applied Studies Major into a Bachelor of Science degree in Information Technology (BSIT). The faculty have no objection to the Computer Technology concentration becoming a major with the new name Information Technology.

Best regards,

Robert Sines, Dean
CAEST

From: "Broome, Barbara" <bbroome1@kent.edu>
Date: December 4, 2015 at 2:17:04 PM EST
To: "STOCKER, SUSAN" <sjstocke@kent.edu>
Subject: Re: Health IT Proposals

Hi Sue,

The College of Nursing has no issue with the proposal.

Thanks

Barb

Barbara Broome, PhD, RN, FAAN

Dean, College of Nursing

113 Henderson Hall

Kent State University

Kent, Ohio 44242-0001

330-672-3777

From: STOCKER, SUSAN
Sent: Tuesday, December 1, 2015 8:32 AM
To: Broome, Barbara
Subject: FW: Health IT Proposals

Barb
The regional college is hoping to move degrees forward Bachelor in Technical and Applied Studies (BTAS) – IT Health Professionals. I'm checking to see if Nursing will have any issues with the degree/content when it gets to EPC. Thanks--

See comments below

From: Clinton Keller [mailto:clinton.keller@gmail.com]
Sent: Tuesday, December 01, 2015 8:36 AM
To: STOCKER, SUSAN
Subject: Re: FW: Health IT Proposals

Hi Susan,

Thanks for reaching out to me. Jackson had a great time too. I was so thankful Isabel was there. She was a treat to play with for Jackson.

Regarding your two program I think it's a great idea. There is unbelievable demand for people in this field. There are plenty of IT people and there are plenty of clinical people but few people bridge the gap with an understanding of both. We can't hire people fast enough for our needs.

As for the actual curriculum, I have a couple thoughts that you can feel free to disregard.

Overall, I think it looks really good.

1. Regarding the "Technician Concentration" I really think the student could be better served with courses other than the ICD and CPT coding classes. (Although I admit I don't truly know exactly what these cover) But those two areas are handled by very specialized departments in a hospital system and in the IT world, we don't' interact with them that heavily. We build tools that use them but we don't need to understand much about either of them. I was the lead analyst on our conversion from the ICD-9 to ICD-10 code set and I don't have any experience with coding at all. I'm sure these courses could be beneficial, but I wonder if other courses might serve them better.

2. The "IT Support for Healthcare" looks really good. I would say our number one challenge in Healthcare IT from a technical standpoint is Security. That issue keeps our executives up late at night. The more they can get on this topic, the better. Hospitals face huge fines if our patient information is compromised.

Overall, from an Electronic Medical Record standpoint, I think it really helps to have as much database understanding as possible. EMR's are basically databases with pretty front end design that attempt to make storing info easier. From there, we need to be able to manage huge amounts of information (database administration) and then do analysis and reporting. I would say the number one need going forward is people that can report and analyze all of this information. (data analytics, predictive analytics, statistics)

Not all hospital IT people are going to be EMR analysts, but that is our greatest need at this point and most other IT functionality is becoming integrated with the EMR from devices like IV pumps, to phones and tablets etc.

That's my not-so-quick .02. Maybe it's more than you wanted.

Feel free to contact me if you have any further questions

Cell: 260-442-4908

Clint

Clint Keller
Parkview Health
Project Epic
Ambulatory Analyst
(ph) 260-373-8858
(fax) 260-373-8246

On Tue, Dec 1, 2015 at 8:05 AM, STOCKER, SUSAN <sjstocke@kent.edu> wrote:

Hi Clint
It was good to see you—Isabel is still talking about Jackson!
Can I take advantage of your expertise? would you give the attached file a quick look—we are trying to start two degrees related to Health IT. See if the curriculum makes sense, is there a need to such workers, etc—thanks--

Sounds like some valuable feedback

From: Piar, Pamela [mailto:PIARP@ccf.org]
Sent: Thursday, December 03, 2015 7:16 AM
To: STOCKER, SUSAN
Subject: RE: proposals

Without understanding some of the details of the classes it is hard to see what a student will learn; however when we think about preparation and focus here are some suggestions:

- Instead of specific classes on ICD10 or CTP, have a data standards class. There are many standards when it comes to healthcare and it would be good for students to have an overview of all the standards
- Concentration on process improvement techniques – lean six sigma, others tools to get an idea how to look at a process and apply tools for improvement.
- Similar techniques and understanding on developing and understanding metrics. We see the industry moving more and more relent on metrics and students, employees need to understand how to analyze data, develop and monitor metrics
- Change management is big and how to understand the operational change the new technology, or new project is interjecting in the environment
- Finally, maybe an overview on emotional intelligence, again most of our comments are based on process and understanding a process and the effect it has on the group or environment.

Hope this is helpful, we are willing to have a conversation to give more detail if you need.

From: STOCKER, SUSAN [mailto:sjstocke@kent.edu]
Sent: Wednesday, November 25, 2015 8:37 AM
To: Piar, Pamela
Subject: RE: proposals

I never received that email--- is there a need for workers with that level of preparation, focus, coursework, etc—Do you see any flaws in the curriculum?- suggestions to improve it, etc—
Thanks.

From: Piar, Pamela [mailto:PIARP@ccf.org]
Sent: Wednesday, November 25, 2015 8:35 AM
To: STOCKER, SUSAN
Subject: RE: proposals

Yes, I am wondering what the ask is. I sent an email earlier, what would you really like to know from us or how could we help

From: STOCKER, SUSAN [mailto:sjstocke@kent.edu]
Sent: Wednesday, November 25, 2015 8:26 AM
To: Piar, Pamela
Subject: proposals

Hi
Just checking to confirm that the attachments my assistant sent regarding proposed new degrees made it to you? thanks

Susan J. Stocker, Ph.D.
Dean and Chief Administrative Officer
Kent State University at Ashtabula
440-964-4211

==========

==========

Please consider the environment before printing this e-mail
Cleveland Clinic is ranked as one of the top hospitals in America by U.S.News & World Report (2015). Visit us online at http://www.clevelandclinic.org for a complete listing of our services, staff and locations. Confidentiality Note: This message is intended for use only by the individual or entity to which it is addressed and may contain information that is privileged, confidential, and exempt from disclosure under applicable law. If the reader of this message is not the intended recipient or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please contact the sender immediately and destroy the material in its entirety, whether electronic or hard copy. Thank you.