FORM FOR REQUEST FOR CHANGE IN UNDERGRADUATE PROGRAM

Program: Computer Information Systems

Formal Option: (if applicable) _____ or Specialty Field: (if applicable) _____

Department: <u>Computer Information Systems/BSIST</u> College: <u>Lexington Community College</u>

Degree title: <u>Associate in Applied Science</u>   Bulletin pp.: <u>UK-224, LCC-50</u>

CIP Code: <u>A11.0301</u> UK ID No.: _____ HEGIS CODE: _____

Accrediting Agency (if applicable): _____

I. PROPOSED CHANGE(S) IN PROGRAM REQUIREMENTS

1. <u>**Particular University Studies Requirements or Recommendations for this program**</u>

   Not Applicable

2. <u>**College Depth and Breadth of Study Requirements (if applicable) (including particular courses required or recommended for this program)**</u> **NOTE: To the extent that proposed changes in 2. through 6. involve additional courses offered in another program, please submit correspondence with the program(s) pertaining to the availability of such courses to your students.**

   Not Applicable

3. **Premajor or Preprofessional Course Requirements (if applicable)**

CIS 105	**Introduction to Computing**	**3**
CIS 110	**Operating Systems Concepts**	**3**
CIS 120	**Program Design**	**3**
CIS 130	**Microcomputer Applications**	**3**

Total Hours: 73-75

4. **Credit Hours Required**

   Current: 73-75   Proposed: **no change**

   a. **Total Required for Graduation: 73**

   b. **Required by level:**

   100 52   **200 21**

   300 _____   **400-500 _____**

   c. **Premajor or Preprofessional (if applicable) 12**

   d. **Field of Concentration (if applicable) Not applicable**

   e. **Division of Hours Between Major Subject and Related Field (if applicable) Not applicable**

   f. **Hours Needed for a Particular Option or Specialization (if applicable) 24-25**

   g. **Technical or Professional Support Electives (if applicable) 3**

   h. **Minimum Hours of Free or Supportive Electives [Required] Not applicable**

5. **Major or Professional Course Requirements**

   Current:

   ## Core

   General Education
ENG 101	**Writing I**	**3**
ENG 102	**Writing II**	**3**
MA 109	**College Algebra**	**3**
	Oral Communication Course	**3**
	Social Interaction Course	**3**
	Heritage/Humanities/Foreign Language Course	**3**
	Science Course	**3-4**

Premajor Requirements

CIS 105	**Introduction to Computing**	**3**
CIS 110	**Operating Systems Concepts**	**3**
CIS 120	**Program Design**	**3**
CIS 130	**Microcomputer Applications**	**3**

Major Requirements

CIS 150	**Internet Technologies**	**3**
CIS 160	**Data Communications and Networking**	**4**
ET 134	**Computer Hardware Maintenance**	**3**
	Approved Level I Programming Language	**3**
	Approved Technical Course(s)	**3**

Subtotal	49-50

Applications Option

CIS 170	**Introduction to Database Design**	**3**
CIS 220	**Systems Analysis and Design**	**3**
CIS 290	**Information Systems Design and Implementation**	**3**
	Approved Applications Specialization	**9**
	Approved Management Course	**3**
	Approved Accounting Course	**3**

Subtotal	24

Computer Science Option

CS215	**Introduction to Program Design, Abstraction, and Problem Solving***	**4**
CS216	**Introduction to Software Engineering***	**3**
MA113	**Calculus I***	**4**
MA114	**Calculus II***	**4**
PHY241	**General University Physics Laboratory***	**1**
	USP Requirement*	**3**
	USP Requirement*	**3**

Subtotal	22

Note: Students pursuing the Computer Science Option:
MUST take CS 115, Introduction to Computer Programming (3) as their core Approved Level I Programming Language course,
AND
MUST take PHY 231, General University Physics (4) as their core Science course,
AND
MUST take MA 110, Analytical Geometry and Trigonometry (4); OR MA 109, College Algebra (3) AND MA 112, Trigonometry (2) as their core Mathematics course,

AND
SHOULD take EE 280, Design of Logic Circuits (3) OR CS 275, Discrete Mathematics (4) at the University of Kentucky as their core Technical Course.

Internet Technologies Option

IMD175	**Web Usability Design***	**3**
	OR	
IMD180	**Intermediate Web Design***	**(3)**
CIS253	**Data Driven Web Pages*** **3**	
	Approved Level I Web Programming Language*	**3**
	Approved Level II Web Programming Language* 3	
CIS170	**Database Design***	**3**
CIS220	**Systems Analysis and Design***	**3**
CIS290	**Information Systems Design and Implementation* 3**	
CIS294	**Seminar in Web Technologies* 3**	
	Subtotal	24

Note: Students pursuing the Internet Technologies Option must take CIS171 and either CIS140 or CIS149.

Network Technology Option

CIS 260	**Network Hardware Installation and Troubleshooting** **3**	
CIS 269	**Internet Protocols**	**3**
CIS 292	**Designing Network Solutions**	**3**
	Approved Level I Network Technology Specialization	**6**
	Approved Level I or II Network Technology Specialization	**6**
	Approved Scripting Language Course	**3**
	Subtotal	24

Programming Option

CIS 170	**Introduction to Database Design**	**3**
CIS 220	**Systems Analysis and Design**	**3**
CIS 290	Information Systems Design and Implementation 3	
	Approved Level I Programming Language	**3**
	Approved Level II Programming Language	**3-4**
	Approved Level I or II Programming Language	**3-4**

Approved Management Course		**3**
Approved Accounting Course		**3**

Subtotal   24-25

Total   73-75

Course Choice Lists

Approved Accounting Courses*

ACC 201	**Financial Accounting I**	**3**
ACC 202	**Managerial Uses of Accounting Information**	**3**

Approved Management Courses*

BE 200	**Small Business Management**	**3**
BE 283	**Principles of Management**	**3**
BE 287	**Supervisory Management**	**3**
BE 291	**Retail Management**	**3**
QT 101	**Quality Management Principles**	**3**

Approved Applications Specializations*

Productivity Software Specialization

IMD 235	**Advanced Word Processing**	**3**
AND		
CIS 234	**Advanced Spreadsheet Applications**	**3**
AND		
CIS 236	**Advanced Database Applications**	**3**

Database Developer Specialization

CIS 171	**SQL I**	**3**
AND		
CIS 271	**SQL II**	**3**
AND		
CIS 236	**Advanced Database Applications**	**3**

Geographic Information Systems

GIS110	**Spatial Data Analysis and Map Interpretation**	**3**
AND		
GIS120	**Introduction to Geographic Information Systems**	**3**
AND		
GIS210	**Advanced Geographic Information Systems**	**3**

Approved Level I Network Technology Specializations*

Windows 2000 Specialization

CIS 211   Microsoft Windows Client Operating Systems:
(Topic) 3
              AND
CIS 212   Microsoft Windows Server Operating Systems:
(Topic) 3

Unix Specialization
CIS 217   Unix Administration   3
              AND
CIS 218   Advanced Unix Administration   3

CISCO Specialization
CIS 281   Routing and Switching   3
              AND
CIS 282   Advanced Routing and Switching   3
Note: Students pursuing the Cisco Specialization should also
take CIS283, Wide Area Network Management and Design in
order to complete their Cisco Certified Network Administrator
(CCNA) preparation.

Approved Level II Network Technology Specializations*

Advanced Microsoft Windows Specialization
CIS 261   Microsoft Windows Directory Services
Administration 3
              AND
CIS 262   Microsoft Windows Network Infrastructure   3

Approved Level I Programming Languages*

CIS 140	**JavaScript I: JavaScript and the Web**	3
CIS 141	**VBScript I: VBScript Fundamentals**	3
CIS 143	**COBOL I**	3
CIS 145	**Perl I: Perl Fundamentals**	3
CIS 148	**Visual Basic I**	3
CIS 149	**Java I: Java Fundamentals**	3
CIS 171	**SQL I**	3
CS 115	**Introduction to Computer Programming**	3

Approved Level II Programming Languages*

CIS 243	**COBOL II**	3
CIS 245	**Perl II: Perl and the Web**	3
CIS 248	**Visual Basic II**	3
CIS 249	**Java II: Java and the Web**	3
CIS 271	**SQL II**	3
CS 215	**Introduction to Program Design, Abstraction, and**	
	Problem Solving	4
CS 216	**Introduction to Software Engineering**	3

Approved Level I Web Programming Languages*

CIS148	Visual Basic I	3
CIS149	Java I: Java Fundamentals	3
CIS171	SQL I	3

Approved Level II Web Programming Languages*

CIS248	Visual Basic II	3
CIS249	Java II: Java and the Web	3
CIS271	SQL II	3

Approved Scripting Languages*

CIS 140	JavaScript I: JavaScript and the Web	3
CIS 141	VBScript I: VBScript Fundamentals	3
CIS 145	Perl I: Perl Fundamentals	3

Technical Courses*

ACH 100	Construction Documents I	3
ACH 185	Computer-Aided Drafting I	3
CAD 100	Introduction to Computer-Aided Design	3
COE 199	Cooperative Education: CIS	1-8
ET 112	Digital Logic Circuits	4
ET 256	Microprocessor Fundamentals	4
GIS 120	Introduction to Geographic Information Systems	3
IMD 126	Introduction to Desktop Publishing	3
IMD 226	Advanced Desktop Publishing	3
	Additional CIS Course(s) (EXCEPT CIS103)	1-3
	Additional CS Course(s)	
	(EXCEPT CS100 and CS101)	3-4
	Approved Accounting Courses 3	

* Or other courses approved by Computer Information Systems Program Coordinator

Note:
- **Students may not use one course to fulfill multiple requirements.**
- **Students may choose CIS280 or COE199 for a maximum of 3 credit hours.**

Proposed

All CIS prefixes will be changed to CIT,

Current	Proposed
CIS103	CIT103
CIS105	CIT105
CIS110	CIT110
CIS120	CIT120
CIS130	CIT130
CIS140	CIT140
CIS141	CIT141
CIS143	CIT143
CIS145	CIT145
CIS148	CIT148
CIS149	CIT149
CIS150	CIT150
CIS160	CIT160
CIS170	CIT170
CIS171	CIT171
CIS211	CIT211
CIS212	CIT212
CIS213	CIT213
CIS214	CIT214
CIS217	CIT217
CIS218	CIT218
CIS220	CIT220
CIS230	CIT230
CIS234	CIT234
CIS236	CIT236
CIS243	CIT243
CIS245	CIT245
CIS248	CIT248
CIS249	CIT249
CIS253	CIT253
CIS255	CIT255
CIS260	CIT260
CIS261	CIT261
CIS262	CIT262
CIS263	CIT263
CIS269	CIT269
CIS271	CIT271
CIS280	CIT280
CIS281	CIT281
CIS282	CIT282
CIS283	CIT283
CIS290	CIT290
CIS292	CIT292
CIS294	CIT294

CIS295   CIT295
CIS299   CIT299

Core

General Education
ENG 101	**Writing I**	**3**
ENG 102	**Writing II**	**3**
MA 109	**College Algebra**	**3**
	Oral Communication Course	**3**
	Social Interaction Course	**3**
	Heritage/Humanities/Foreign Language Course	**3**
	Science Course	**3-4**

Premajor Requirements
CIT 105	**Introduction to Computing**	**3**
CIT 110	**Operating Systems Concepts**	**3**
CIT 120	**Program Design**	**3**
CIT 130	**Microcomputer Applications**	**3**

Major Requirements
CIT 150	**Internet Technologies**	**3**
CIT 160	**Data Communications and Networking**	**4**
ET 134	**Computer Hardware Maintenance**	**3**
	Approved Level I Programming Language	**3**
	Approved Technical Course(s)	**3**

Subtotal   49-50

Applications Option

CIT 170	**Introduction to Database Design**	**3**
CIT 220	**Systems Analysis and Design**	**3**
CIT 290	**Information Systems Design and Implementation**	**3**
	Approved Applications Specialization	**9**
	Approved Management Course	**3**
	Approved Accounting Course	**3**

Subtotal   24

Computer Science Option

CS215	**Introduction to Program Design, Abstraction, and Problem Solving***	**4**
CS216	**Introduction to Software Engineering***	**3**
MA113	**Calculus I***	**4**
MA114	**Calculus II***	**4**
PHY241	**General University Physics Laboratory***	**1**
	USP Requirement*	**3**

	USP Requirement*	**3**
	Subtotal	22

Note: Students pursuing the Computer Science Option:
MUST take CS 115, Introduction to Computer Programming (3) as their core Approved Level I Programming Language course,
AND
MUST take PHY 231, General University Physics (4) as their core Science course,
AND
MUST take MA 110, Analytical Geometry and Trigonometry (4); OR MA 109, College Algebra (3) AND MA 112, Trigonometry (2) as their core Mathematics course,
AND
SHOULD take EE 280, Design of Logic Circuits (3) OR CS 275, Discrete Mathematics (4) at the University of Kentucky as their core Technical Course.

Internet Technologies Option

IMD175	**Web Usability Design***	**3**
	OR	
IMD180	**Intermediate Web Design***	**(3)**
CIT253	**Data Driven Web Pages*** **3**	
	Approved Level I Web Programming Language*	**3**
	Approved Level II Web Programming Language* 3	
CIT170	**Database Design***	**3**
CIT220	**Systems Analysis and Design***	**3**
CIT290	**Information Systems Design and Implementation* 3**	
CIT294	**Seminar in Web Technologies* 3**	
	Subtotal	24

Note: Students pursuing the Internet Technologies Option must take CIT171 and either CIT140 or CIT149.

Network Technology Option

CIT 260	**Network Hardware Installation and Troubleshooting 3**	
CIT 269	**Internet Protocols**	**3**
CIT 292	**Designing Network Solutions**	**3**
	Approved Level I Network Technology Specialization	**6**
	Approved Level I or II Network Technology Specialization	**6**

	Approved Scripting Language Course	**3**
	Subtotal	24

Programming Option

CIT 170	**Introduction to Database Design**	**3**
CIT 220	**Systems Analysis and Design**	**3**
CIT 290	Information Systems Design and Implementation	3
	Approved Level I Programming Language	**3**
	Approved Level II Programming Language	**3-4**
	Approved Level I or II Programming Language	**3-4**
	Approved Management Course	**3**
	Approved Accounting Course	**3**

	Subtotal	24-25

	Total	73-75

Course Choice Lists

Approved Accounting Courses*

ACC 201	**Financial Accounting I**	**3**
ACC 202	**Managerial Uses of Accounting Information**	**3**

Approved Management Courses*

BE 200	**Small Business Management**	**3**
BE 283	**Principles of Management**	**3**
BE 287	**Supervisory Management**	**3**
BE 291	**Retail Management**	**3**
QT 101	**Quality Management Principles**	**3**

Approved Applications Specializations*

Productivity Software Specialization

IMD 235	**Advanced Word Processing**	**3**
AND		
CIT 234	**Advanced Spreadsheet Applications**	**3**
AND		
CIT 236	**Advanced Database Applications**	**3**

Database Developer Specialization

CIT 171	**SQL I**	**3**
AND		
CIT 271	**SQL II**	**3**
AND		

CIT 236	**Advanced Database Applications**	**3**

Geographic Information Systems

GIS110	**Spatial Data Analysis and Map Interpretation**	**3**
AND		
GIS120	**Introduction to Geographic Information Systems**	**3**
AND		
GIS210	**Advanced Geographic Information Systems**	**3**

Approved Level I Network Technology Specializations*

Windows 2000 Specialization

CIT 211	**Microsoft Windows Client Operating Systems:**	
(Topic) 3		
AND		
CIT 212	**Microsoft Windows Server Operating Systems:**	
(Topic) 3		

Unix Specialization

CIT 217	**Unix Administration**	**3**
AND		
CIT 218	**Advanced Unix Administration**	**3**

CITCO Specialization

CIT 281	**Routing and Switching**	**3**
AND		
CIT 282	**Advanced Routing and Switching**	**3**

Note: Students pursuing the Cisco Specialization should also take CIT283, Wide Area Network Management and Design in order to complete their Cisco Certified Network Administrator (CCNA) preparation.

Approved Level II Network Technology Specializations*

Advanced Microsoft Windows Specialization

CIT 261	**Microsoft Windows Directory Services**	
Administration 3		
AND		
CIT 262	**Microsoft Windows Network Infrastructure**	**3**

Approved Level I Programming Languages*

CIT 140	**JavaScript I: JavaScript and the Web**	**3**
CIT 141	**VBScript I: VBScript Fundamentals**	**3**
CIT 143	**COBOL I**	**3**
CIT 145	**Perl I: Perl Fundamentals**	**3**
CIT 148	**Visual Basic I**	**3**
CIT 149	**Java I: Java Fundamentals**	**3**
CIT 171	**SQL I**	**3**
CS 115	**Introduction to Computer Programming**	**3**

Approved Level II Programming Languages*

CIT 243	**COBOL II**	**3**
CIT 245	**Perl II: Perl and the Web**	**3**
CIT 248	**Visual Basic II**	**3**
CIT 249	**Java II: Java and the Web**	**3**
CIT 271	**SQL II**	**3**
CS 215	**Introduction to Program Design, Abstraction, and**	
	Problem Solving	**4**
CS 216	**Introduction to Software Engineering**	**3**

Approved Level I Web Programming Languages*

CIT148	**Visual Basic I**	**3**
CIT149	**Java I: Java Fundamentals**	**3**
CIT171	**SQL I**	**3**

Approved Level II Web Programming Languages*

CIT248	**Visual Basic II**	**3**
CIT249	**Java II: Java and the Web**	**3**
CIT271	**SQL II**	**3**

Approved Scripting Languages*

CIT 140	**JavaScript I: JavaScript and the Web**	**3**
CIT 141	**VBScript I: VBScript Fundamentals**	**3**
CIT 145	**Perl I: Perl Fundamentals**	**3**

Technical Courses*

ACH 100	**Construction Documents I**	**3**
ACH 185	**Computer-Aided Drafting I**	**3**
CAD 100	**Introduction to Computer-Aided Design**	**3**
COE 199	**Cooperative Education: CIT**	**1-8**
ET 112	**Digital Logic Circuits**	**4**
ET 256	**Microprocessor Fundamentals**	**4**
GIS 120	**Introduction to Geographic Information Systems**	**3**
IMD 126	**Introduction to Desktop Publishing**	**3**
IMD 226	**Advanced Desktop Publishing**	**3**
	Additional CIT Course(s) (EXCEPT CIT103)	**1-3**
	Additional CS Course(s)	
	(EXCEPT CS100 and CS101)	**3-4**
	Approved Accounting Courses 3	

* Or other courses approved by Computer Information Systems Program Coordinator

Note:
- Students may not use one course to fulfill multiple requirements.
- Students may choose CIT280 or COE199 for a maximum of 3 credit hours.

6. **Minor Requirements (if applicable)**

   Not Applicable
Total Hours: 73-75

7. **Rationale for Change(s): (If rationale involves accreditation requirements, please include specific references to those requirements.)**

   This change to the Computer Information Systems Program is necessary to avoid confusion due to the impending inclusion of LCC's catalog of courses with KCTCS's catalog. Since 1998, several courses have been changed at LCC and within KCTCS so that there is no longer an exact match between courses with the same number. At the same time, new course have been created in both systems using the same numbers, for example CIS255 and CIS262.

8. **List below the typical semester by semester program for a major.**

   Current (Note: Semester by semester program represents General Education, Premajor, and Major Core courses.)

   An asterisk indicates a required course.

   First Year – Summer Session:

CIT 105	Introduction to Computing*	3
	Social Interaction Course*	3
Subtotal		6

   First Year – Fall Semester:

CIT 110	Operating Systems Concepts*	3
CIT 120	Program Design*	3
CIT 130	Microcomputer Applications*	3
ENG 101	Writing I*	3
MA 109	College Algebra*	3
	Oral Communications Course*	3
Subtotal		18

   First Year – Spring Semester:

	OPTION REQUIREMENT*	**3**
CIT 150	**Internet Technologies***	**3**
ENG 102	**Writing II***	**3**
ET 134	**Computer Hardware Maintenance***	**3**
CIT 160	**Data Communications and**	
	Networking*	**4**
	Approved Level I Programming	
	Language*	**3**
	Subtotal	19

Second Year – Fall Semester:

	OPTION REQUIREMENT*	**3**
	OPTION REQUIREMENT*	**3**
	OPTION REQUIREMENT*	**3**
	OPTION REQUIREMENT*	**3**
	Science Course*	**3-4**
	Subtotal	15-16

Second Year – Spring Semester:

	OPTION REQUIREMENT*	**3**
	OPTION REQUIREMENT*	**3**
	OPTION REQUIREMENT*	**3**
	Heritage/Humanities/Foreign	
	Language Course*	**3**
	Approved Technical Course*	**3-4**
	Subtotal	15-16
	Total	73-75

Will this program be printed in the <u>Bulletin</u>? Yes ☒ No ☐