A. COMPUTER INFORMATION SYSTEMS

FORM FOR REQUEST FOR CHANGE IN UNDERGRADUATE PROGRAM

Program: Computer Information Systems

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

Department: Computer Information Systems/BSIST College: Lexington Community College

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

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</u> <u>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. <u>Premajor or Preprofessional Course Requirements (if applicable)</u>

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

Total Hours: <u>73-75</u>

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 Edu	cation	
ENG 101	Writing I	3
ENG 102	Writing II	3
MA 109	College Algebra	
	Oral Communication Course	3 3 3
	Social Interaction Course	3
	Heritage/Humanities/Foreign Language Course	3
	Science Course	3-4
Premajor Re	equirements	
CIS 105	Introduction to Computing	3
CIS 110	Operating Systems Concepts	
CIS 120	Program Design	3 3
CIS 130	Microcomputer Applications	3
Major Requi	irements	
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
Applicatio	ons Option	

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 Approved Accounting Course	3 3
	Subtotal		24
	Computer	Science Option	
	CS215 CS216 MA113 MA114 PHY241	Introduction to Program Design, Abstraction, and Problem Solving* Introduction to Software Engineering* Calculus I* Calculus II* General University Physics Laboratory* USP Requirement* USP Requirement*	4 3 4 4 1 3 3
	Subtotal		22
MUS their of AND MUS Scient AND MUS MA 1 core N AND SHOU Discret	T take CS 115 core Approved T take PHY 2 ce course, T take MA 11 09, College A Mathematics of ULD take EE ete Mathemat tical Course.	rsuing the Computer Science Option: 5, Introduction to Computer Programming (3) as d Level I Programming Language course, 31, General University Physics (4) as their core 0, Analytical Geometry and Trigonometry (4); OR Igebra (3) AND MA 112, Trigonometry (2) as their course, 280, Design of Logic Circuits (3) OR CS 275, tics (4) at the University of Kentucky as their core echnologies Option	
	IMD175	Web Usability Design* OR	3
I #2	IMD180 CIS253	Intermediate Web Design* Data Driven Web Pages* 3 Approved Level I Web Programming Language* Approved Level II Web Programming	(3) 3
Language* 3 Implementation*	CIS170 CIS220 CIS290 3 CIS294	Database Design* Systems Analysis and Design* Information Systems Design and Seminar in Web Technologies* 3	3 3
	Subtotal	Seminar in Web reenhologies 5	24

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

Network Technology Option

CIS 260 Troubleshooting	Network Hardware Installation and 3	
CIS 269 CIS 292	Internet Protocols Designing Network Solutions Approved Level I Network	3 3
	Approved Level I Network Technology Specialization Approved Level I or II Network	6
	Technology Specialization Approved Scripting Language Course	6 3
Subtotal	Approved Scripting Language Course	24
Programn	ning Option	
CIS 170	Introduction to Database Design	3
CIS 220 CIS 290	Systems Analysis and Design Information Systems Design and	3
Implementation	3 Approved Level I Programming Language	3
	Approved Level II Programming Language Approved Level I or II Programming Language	3-4 3-4
	Approved Management Course Approved Accounting Course	3 3
Subtotal		24-25
Total		73-75
Course Cl	hoice Lists	
Approved A	ccounting Courses*	
ACC 201 ACC 202	Financial Accounting I Managerial Uses of Accounting Information	3 3
Approved M	lanagement Courses*	
BE 200 BE 283 BE 287 BE 291 QT 101	Small Business Management Principles of Management Supervisory Management Retail Management Quality Management Principles	3 3 3 3 3

Approved Applications Specializations*

	Productivity	y Software Specialization	
	IMD 235	Advanced Word Processing	3
	AND	nuvuneeu () onu i rocessing	Ŭ
	CIS 234	Advanced Spreadsheet Applications	3
	AND		-
	CIS 236	Advanced Database Applications	3
			-
	Database D	eveloper Specialization	
	CIS 171	SQL I	3
	AND	-	
	CIS 271	SQL II	3
	AND	-	
	CIS 236	Advanced Database Applications	3
	Approved Lo	evel I Network Technology Specializations*	
	Windows 20	000 Specialization	
	CIS 211	Microsoft Windows Client Operating Systems:	
(Topi	ic) 3		
	AND		
	CIS 212	Microsoft Windows Server Operating Systems:	
(Topi	ic) 3		
	<u>Unix Specia</u>	lization	
	CIS 217	Unix Administration	3
	AND		
	CIS 218	Advanced Unix Administration	3
	CISCO Spe	<u>cialization</u>	
	CIS 281	Routing and Switching	3
	AND		
	CIS 282	Advanced Routing and Switching	3
	Note: Stude	nts pursuing the Cisco Specialization should also	
	take CIS283	, Wide Area Network Management and Design in	
	order to com	plete their Cisco Certified Network Administrator	
	(CCNA) pre	paration.	
	Approved Lo	evel II Network Technology Specializations*	
	Advanced N	<u> Aicrosoft Windows Specialization</u>	
	CIS 261	Microsoft Windows Directory Services	
Adm	inistration 3		
	AND		
	CIS 262	Microsoft Windows Network Infrastructure	3
	Approved La	evel I Programming Languages*	
	CIS 140	JavaScript I: JavaScript and the Web	3
	CIS 143	COBOL I	3

CIS 145 CIS 148 CIS 149 CIS 171 CS 115	Perl I: Perl Fundamentals Visual Basic I Java I: Java Fundamentals SQL I Introduction to Computer Programming	3 3 3 3 3
Approved L	evel II Programming Languages*	
CIS 243 CIS 245 CIS 248 CIS 249 CIS 271 CS 215	COBOL II Perl II: Perl and the Web Visual Basic II Java II: Java and the Web SQL II Introduction to Program Design, Abstraction, and	3 3 3 3 3
CS 216	Problem Solving Introduction to Software Engineering	4 3
Approved L	evel I Web Programming Languages*	
CIS148 CIS149 CIS171	Visual Basic I Java I: Java Fundamentals SQL I	3 3 3
Approved L	evel II Web Programming Languages*	
CIS248 CIS249 CIS271	Visual Basic II Java II: Java and the Web SQL II	3 3 3
Approved S	cripting Languages*	
CIS 140 CIS 145	JavaScript I: JavaScript and the Web Perl I: Perl Fundamentals	3 3
Technical C	ourses*	
ACH 100 ACH 185 CAD 100 COE 199 ET 112 ET 256 GIS 120 IMD 126 IMD 226	Construction Documents I Computer-Aided Drafting I Introduction to Computer-Aided Design Cooperative Education: CIS Digital Logic Circuits Microprocessor Fundamentals Introduction to Geographic Information Systems Introduction to Desktop Publishing Advanced Desktop Publishing Additional CIS Course(s) (EXCEPT CIS103) Additional CS Course(s) (EXCEPT CS100 and CS101) Approved Accounting Courses 3	3 3 1-8 4 4 3 3 1-3 3-4

* 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

Core

General Edu ENG 101 ENG 102 MA 109	Writing I Writing I Writing II College Algebra Oral Communication Course Social Interaction Course Heritage/Humanities/Foreign Language Course Science Course	3 3 3 3 3 3 3-4
Premajor Re CIS 105 CIS 110 CIS 120 CIS 130	equirements Introduction to Computing Operating Systems Concepts Program Design Microcomputer Applications	3 3 3 3
Major Requ CIS 150 CIS 160 ET 134	irements Internet Technologies Data Communications and Networking Computer Hardware Maintenance Approved Level I Programming Language Approved Technical Course(s)	3 4 3 3 3
Subtotal		49-50
Applicati	ons Option	
CIS 170 CIS 220 CIS 290	Introduction to Database Design Systems Analysis and Design Information Systems Design and Implementation Approved Applications Specialization Approved Management Course Approved Accounting Course	3 3 9 3 3
Subtotal		24
Computer	r Science Option	
CS215 CS216 MA113 MA114 PHY241	Introduction to Program Design, Abstraction, and Problem Solving* Introduction to Software Engineering* Calculus I* Calculus II* General University Physics Laboratory*	4 3 4 4 1

USP Requirement*	3
USP Requirement*	3

22

Subtotal

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	v o	
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

Network Hardware Installation and	
3	
Internet Protocols	3
Designing Network Solutions	3
Approved Level I Network	
Technology Specialization	6
Approved Level I or II Network	
	3 Internet Protocols Designing Network Solutions Approved Level I Network Technology Specialization

	Technology Specialization Approved Scripting Language Course	6 3	
Subtotal		24	
Program	ming Option		
CIS 170 CIS 220 CIS 290 Implementation	Introduction to Database Design Systems Analysis and Design Information Systems Design and 3 Approved Level I Programming Language	3 3 3	
	Approved Level II Programming Language Approved Level I or II Programming Language Approved Management Course Approved Accounting Course	3-4 3-4 3	
Subtotal		24-25	
Total		73-75	
Course (Choice Lists		
Approved	Approved Accounting Courses*		
ACC 201 ACC 202	Financial Accounting I Managerial Uses of Accounting Information	3 3	
Approved	Management Courses*		
BE 200 BE 283 BE 287 BE 291 QT 101	Small Business Management Principles of Management Supervisory Management Retail Management Quality Management Principles	3 3 3 3 3	
Approved	Applications Specializations*		
IMD 235	ity Software Specialization Advanced Word Processing	3	
AN CIS 234	Advanced Spreadsheet Applications	3	
AN CIS 236	D Advanced Database Applications	3	
CIS 171	<u>Developer Specialization</u> SQL I	3	
AN CIS 271	D SQL II	3	

	AND CIS 236	Advanced Detabase Applications	3
	CIS 230	Advanced Database Applications	3
	Geographic	Information Systems	
	GIS110	Spatial Data Analysis and Map Interpretation	3
	AND		•
	GIS120 AND	Introduction to Geographic Information Systems	3
	GIS210	Advanced Geographic Information Systems	3
	015210	Auvanced Geographic Information Systems	0
	Approved Le	evel I Network Technology Specializations*	
	XX/: 1 - 20		
	Windows 20 CIS 211	<u>00 Specialization</u> Microsoft Windows Client Operating Systems:	
(Тор		where some windows Chent Operating Systems.	
(100	AND		
	CIS 212	Microsoft Windows Server Operating Systems:	
(Тор	ic) 3		
			
	<u>Unix Specia</u> CIS 217	<u>lization</u> Unix Administration	2
	CIS 217 AND	Unix Administration	3
	CIS 218	Advanced Unix Administration	3
	CISCO Spe		
	CIS 281	Routing and Switching	3
	AND		2
	CIS 282 Note: Stude	Advanced Routing and Switching <i>nts pursuing the Cisco Specialization should also</i>	3
		, Wide Area Network Management and Design in	
		plete their Cisco Certified Network Administrator	
	(CCNA) prej		
	Approved Le	evel II Network Technology Specializations*	
	A dwamaad N	Courseft Windows Specialization	
	CIS 261	<u> Iicrosoft Windows Specialization</u> Microsoft Windows Directory Services	
Adm	inistration 3	wheresone windows Directory Services	
	AND		
	CIS 262	Microsoft Windows Network Infrastructure	3
Approved Level I Programming Languages*			
	CIS 140	JavaScript I: JavaScript and the Web	3
	CIS 140 CIS 141	VBScript I: VBScript Fundamentals	3
	CIS 141 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 L	Approved Level II Programming Languages*		
CIS 243 CIS 245 CIS 248 CIS 249 CIS 271 CS 215	Java II: Java and the Web SQL II Introduction to Program Design, Abstraction,	3 3 3 3 3	
CS 216	and Problem Solving Introduction to Software Engineering	4 3	
Approved L	Level I Web Programming Languages*		
CIS148 CIS149 CIS171	Visual Basic I Java I: Java Fundamentals SQL I	3 3 3	
Approved L	Approved Level II Web Programming Languages*		
CIS248 CIS249 CIS271	Visual Basic II Java II: Java and the Web SQL II	3 3 3	
Approved S	Scripting Languages*		
CIS 140 CIS 141 CIS 145 Technical C	JavaScript I: JavaScript and the Web VBScript I: VBScript Fundamentals Perl I: Perl Fundamentals	3 3 3	
ACH 100 ACH 185 CAD 100 COE 199 ET 112 ET 256 GIS 120 IMD 126 IMD 226	Construction Documents I Computer-Aided Drafting I Introduction to Computer-Aided Design Cooperative Education: CIS Digital Logic Circuits Microprocessor Fundamentals Introduction to Geographic Information Systems Introduction to Desktop Publishing Advanced Desktop Publishing Additional CIS Course(s) (EXCEPT CIS103) Additional CS Course(s) (EXCEPT CS100 and CS101) Approved Accounting Courses 3	3 3 1-8 4 4 3 3 1-3 3-4	

* 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.

6. Minor Requirements (if applicable)

Not Applicable Total Hours: <u>73-75</u>

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

This change to the Computer Information Systems Program is necessary to add the VBScript course to the list of Approved Level I Programming Languages and Approved Scripting Languages. Also added is an Application Option specialization in Geographic Information Systems.

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

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

An asterisk indicates a required course.

First Year – Summer Session:

CIS 105	Introduction to Computing*	3
	Social Interaction Course*	3
Subtotal		6
<u> First Year – Fall</u>	<u>Semester:</u>	
CIS 110	Operating Systems Concepts*	3
CIS 120	Program Design*	3
CIS 130	Microcomputer Applications*	3
ENG 101	Writing I*	3
MA 109	College Algebra*	3
	Oral Communications Course*	3
Subtotal		18
<u> First Year – Spri</u>	ng Semester:	
	ODTION DECUIDEMENT*	2

	OPTION REQUIREMENT*	3
CIS 150	Internet Technologies*	3

ENG 102	Writing II*	3
ET 134	Computer Hardware Maintenance*	3
CIS 160	Data Communications and Networking*	4
	Approved Level I Programming Language*	3
Subtotal		19
Second Year – Fa	all Semester:	
	OPTION REQUIREMENT*	3
	OPTION REQUIREMENT*	3
	OPTION REQUIREMENT*	3 3 3
	OPTION REQUIREMENT*	
	Science Course*	3-4
Subtotal		15-16
<u>Second Year – Sj</u>	oring Semester:	
	OPTION REQUIREMENT*	3
	OPTION REQUIREMENT*	3
	OPTION REQUIREMENT*	3
	Heritage/Humanities/Foreign	
	Language Course*	3
	Approved Technical Course*	3-4
Subtotal		15-16

	Subtotal	15-1
al		73-75

Total

Will this program be printed in the <u>Bulletin</u>? Yes \square No \square