ACADEMIC SENATE PROPOSAL TRACKING SHEET
(Document To Be Originated By Academic Senate Secretary On Canary Color Paper)

All proposals MUST have their originating college faculty body (Ex. Nursing, Technical Sciences, Arts & Sciences, Education) approval and must be signed by the submitter and the college chair/dean before being submitted to the academic senate secretary.

1. Submit all proposals (using the appropriate Academic Senate program/degree and/or course revision forms) to the Academic Senate Secretary.
2. The Academic Senate Secretary logs and numbers items and forwards them to the appropriate Academic Senate subcommittee(s): Teacher Education (if applicable), General Education (if applicable), or Curriculum.
3. The Academic Senate subcommittee(s) consider(s) the proposal. If approved, the proposal is forwarded to the next committee. If a committee disapproves the proposal, the originator may request that the item be forwarded to the next body for consideration. The committee will provide written rationale to the originator when a proposal is disapproved and the proposal is returned to the originator.
4. The Academic Senate considers the proposal and approves or disapproves. If approved, the proposal is forwarded to the Full Faculty for consideration. If the Academic Senate disapproves the proposal, the originator may request that the item be forwarded to the Full Faculty for consideration. The Academic Senate will provide written rationale to the originator when proposals are disapproved and the proposal is returned to the originator.
5. The Full Faculty considers academic senate approved proposals. If faculty approve, the proposal will then be forwarded to the Provost. The Provost approves or disapproves the proposal. If approved, the proposal is then forwarded to the Chancellor.
7. The Chancellor approves or disapproves the proposal.
   Subcommittee and Academic Senate college representatives will notify their respective colleges' of the progress of submitted proposals or the proposal may be tracked via the web page --
   http://www.msun.edu/admin/provost/asproposals.htm
   Documentation and forms for the curriculum process is also available on the web page:
   http://www.msun.edu/admin/provost/asforms.htm

*****(If a proposal is disapproved at any level, it is returned through the Academic Senate secretary to the Chair/Dean of the submitting college who then notifies the originator.)

Proposal # 04-03 **Title:** Information Systems Engineering Tech. BS
(proposal explanation, submitter and college chair/dean signatures on attached program/degree or course revision form)

	Date			
Received by ACAD Senate	1-14-05			
Forwarded to Teacher Ed Council	N/A	Approved _____	Disapproved _____	
		Signature		Date
Forwarded to Gen Ed Committee	N/A	Approved _____	Disapproved _____	
		Signature		Date
Returned to ACAD Senate				
Forwarded to Curriculum Committee	1-21-05	Approved	Disapproved	2-14-05
		Signature		Date
Returned to ACAD Senate for Vote	2-25-05	Approved _____	Disapproved _____	
		Signature		Date
Sent to Provost's office for Full Faculty vote	3-2-05			
Voted on at Full Faculty meeting	_____	Approved	Disapproved	3/8/05
		Signature		Date
Forwarded to Provost for Approval/Disapproval	3-23-05	Approved ✓	Disapproved _____	
		Signature		Date
Forwarded to Chancellor for Approval/Disapproval	_____	Approved	Disapproved	3/27/01
		Signature		Date
Copies sent to originating college and registrar's office	3/23/05			

C:/data/proposaltracking sheet ACAD 10 10 01

Bachelor of Science
Information Systems Engineering Technology

General Education Core   33

Course	Title	Credits
ENGL 112	Written Communication (CAT I)	3
SPCH 142	Interpersonal Communication (CAT I)	3
MATH 110	Math for the Liberal Arts **or**	
MATH 112	College Algebra (CAT II)	3
	Natural Science (CAT III)	6
	Social Science (CAT IV)	3
	History (CAT V)	3
	Cultural Diversity (CAT VI)	3
	Fine Arts (CAT VII)	3
	Humanities (CAT VIII)	3
	Technology (CAT IX)	3

Degree Core

Course	Title	Credits
CIS 111	Integrated Business Apps	3
CIS 112	Web Site Development	3
CIS 115	Visual Basic Programming	3
CIS 171	Dsktp/Sml Bus Databses/Access	3
CIS 2XX	Computer Hardware Support	3
CIS 155	Java Programming	3
CIS 270	Systems Analysis & Design	3
CIS 285	Spreadsheet	3
ACCT 261	Prin of Accounting I	3
ISET 350	Advanced Java Programming	3
ISET 300	Operating Systems Intro	3
ENGL 366	Technical Writing	3
ISET 410	Enterprise Resource Planning	3
ISET 471	Info Systems Engineering	3
	Electives	15
		57

Choose **two** of the following three options

Software option

Course	Title	Credits

ISET 355	Data Structures	3
ISET 371	Enterprise Databases Using Oracle	3
ISET 365	Software Engineering	3
ISET 455	E-Commerce Programming	3
	Elective	3
		15

Networking option

Course	Title	Credits
ISET 360	Business Telecommunications	3
ISET 335	Computer Network Security	3
ISET 479	Cooperative Education	3
ISET 435	E-commerce Programming	3
	Electives	3
		15

Hardware option

Course	Title	Credits
ISET 305	Digital Systems	3
ISET 401	Interfacing	3
ISET 430	Adv. Communication Systems	3
ISET 361	E-commerce Programming	3
	Electives	3
		15

Total degree credits   **120**

COURSE CHANGES AS A RESULT OF DEVELOPMENT OF ISET DEGREE

New degree - Information Systems Engineering Technology B.S.
Drop- Computer Information Systems B.S.
Drop - Computer Engineering Technology B.S.
Drop - Computer Engineering Technology A.A.S.
Change - Computer Information Systems AAS to Associate of Science degree
Change - Computer Information Systems Minor to ISET Minor
Change - CIS Education Minor
Change - Electronics Engineering Technology A.A.S.

Signatures on program sheets indicate approval of entire package

Current Course Prefix	#	New Course Prefix	#	Course Title
CIS	110	CIS	110	Intro To Comp[uters
CIS	111	CIS	111	Integrated Business Applications
CIS	112	CIS	112	Web Site Development
CIS	115	CIS	115	Visual Basic Programming
CIS	155	CIS	155	Java Programming
CIS	171	CIS	171	Desktop/Sml Bus Dbases Using MS Access
CIS	270	CIS	270	Systems Analysis & Design
CIS	285	CIS	285	Spreadsheet
CIS	320	CIS	320	Computers in Education
CIS	420	CIS	420	Cmptr Teaching Methods
CPET	201	ISET	2XX	Computer Hardware Support
CIS	300	ISET	300	Operating Systems Introduction
EET	305	ISET	305	Digital systems
EET	308	ISET	308	Industrial Electronics
NEW		ISET	335	Computer Network Security
CIS	255	ISET	350	Advanced Java Programming
CIS	355	ISET	355	Data Structures
CIS	360	ISET	360	Bus.Telecomm. & Netwrking
CIS	161	ISET	361	Assembly I & Computer Architecture
CIS	271	ISET	365	Software Engineering
CIS	371	ISET	371	Enterprise Databases Using Oracle
EET	401	ISET	401	Interfacing
CIS	410	ISET	410	Enterprise Resource Planning
EET	430	ISET	430	Advance Communications Systems
NEW		ISET	435	Network Routing & Security
CIS	455	ISET	455	E-Commerce Programming
CIS	471	ISET	471	Information System Engineering
CIS	325	DROP		Information Resource Mgmt.
CPET	260	DROP		Networking I
CPET	301	DROP		Discrete Mathematics
CPET	410	DROP		Senior Seminar
EET	304	DROP		Network Circuit Analysis
EET	307	DROP		Communications Circuits
EET	311	DROP		Analog IC's
EET	450	DROP		Advanced Digital Systems

PROGRAM/DEGREE REVISION FORM

NEW _____ DROPPED _____ MAJOR REVISION __X__ FOR INFORMATION ONLY

College _College of Technical Sciences_   Program Area _Cmptr Information Systems_ Date _11-4-04_

Submitter ⟨signature⟩   Chair/Dean ⟨signature⟩ Date _2·16·05_

Please provide a brief explanation & rational for the proposed revision(s)

The revision below reflect changes to accommodate the revised general education package

Please provide in the space below a "before" & after" picture of the program with the changes in the program noted program noted. Attach appropriate Course Revision Forms. Please indicate changes by shading the appropriate cells

Proposal Title: INFORMATION SYSTEMS ENGINEERING BACHELOR OF SCIENCE gen ed change
Using CIS AS as first two years

Current Program Listed in 04-05 Catalog

Course Prefix	Course #	Course Title	Crs.	
		FRESHMAN YEAR		
Courses to be taken Fall Semester				
CIS	111	Integ. Business Applications	3	
		Electives	3	
ENGL	111	Written Communication I	3	
CIS	112	Web Site Development	3	
SPCH	142	Interpersonal Commun.	3	15
CIS	115	Visual Basic Programming	3	
CIS	171	Dsktp/Sml Bus Dbases/Access	3	
MATH	110	Math for Liberal Arts (4)		
		OR	3/4	
MATH	112	College Algebra (3)		
ISET	2XX	Computer Hardware Support	3	
		Electives	3	
		General Education Dist	3	
		SOPHOMORE YEAR		
Courses to be taken Fall Semester				
CIS	155	Java Programming	3	
CIS	270	Systems Analysis & Design	3	
CIS	285	Spreadsheet	3	
ACCT	261	Principles of Accounting I	3	
		Electives	3	
		Electives	3	
		Electives	3	
		Electives	3	
		Electives	3	
		JUNIOR YEAR		
Courses to be taken Fall Semester				
		Elective	3	
AND CHOOSE TWO of the THREE OPTIONS:				
Software Option				
ISET	355	Data Structures	3	
ISET	371	Enter Dbase /Oracle	3	
Networking Option				
ISET	360	Bus Tele/Ntwrk	3	
		Elective	3	
Hardware Option				
ISET	305	Digital Systems	3	
		Elective	3	

Proposed Program for 05-06 Catalog

Course Prefix	Course #	Course Title	Gen Ed Credits	Degree Crs.
FRESHMAN YEAR				
Courses to be taken Fall Semester				
		FRESHMAN YEAR		
		Fall Semester		
CIS	111	Integ. Bus Apps		3
		CAT IX - Tech/Human Rel	3	
ENGL	112	Written Comm II (CAT I)	3	
CIS	112	Web Site Development		3
SPCH	142	Interpersonal Commun. (CAT I)	3	
		Spring Semester		
CIS	115	Visual Basic Programming		3
CIS	171	Dsktp/Sml Bus Dbases/Access		3
MATH	110	Math for Liberal Arts (4) (CAT II)		
		OR	3/4	
MATH	112	College Algebra (3) (CAT II)		
CIS	2XX	Computer Hardware Support		3
		CAT III - Nat Sci	3	
		CAT III - Nat Sci	3	
		SOPHOMORE YEAR		
		Fall Semester		
CIS	155	Java Programming		3
CIS	270	Systems Analysis & Design		3
CIS	285	Spreadsheet		3
ACCT	261	Principles of Accounting I		3
		CAT IV - Soc Sci	3	
		Spring Semester		
		CAT V - History	3	
		CAT -VI - Cult Dev	3	
		CAT VII - Fine Arts	3	
		CAT VIII - Humanities	3	
			33/34	27
				60
		JUNIOR YEAR		
Courses to be taken Fall Semester				
		Elective		3
AND CHOOSE TWO of the THREE OPTIONS:				
Software Option				
ISET	355	Data Structures		3
ISET	371	Enter Dbase /Oracle		3
Networking Option				
ISET	360	Bus Tele/Ntwrk		3
		Elective		3
Hardware Option				
ISET	305	Digital Systems		3
		Elective		3

		JUNIOR YEAR con't	
Courses to be taken Spring Semester			
		Core Courses	
ISET	350	Advanced Java Programming	3
ISET	300	Operating Systems Intro	3
ENGL	366	Technical Writing	3
AND CHOOSE TWO of the THREE OPTIONS:			
Software Option			
ISET	365	Sftwr Engineer	3
Networking Option			
ISET	335	Data Structures	3
Hardware Option			
ISET	361	E-commerce prog	3
		SENIOR YEAR	
Courses to be taken Fall Semester			
		Elective	3
		Elective	3
		Elective	3
		Elective	3
AND CHOOSE TWO of the THREE OPTIONS:			
Networking Option			
ISET	479	Co-op Ed	3
Hardware Option			
ISET	401	Interfacing	3
Software Option			
		Elective	3
Courses to be taken Spring Semester			
Core Courses			
ISET	410	Enterprise Resource Planning	3
ISET	471	Info. System Engineering	3
		Elective	3
		Elective	3
AND CHOOSE TWO of the THREE OPTIONS:			
Software Option			
ISET	455	E-Commerce prog	3
Networking Option			
ISET	435	Ntwrk Routing	3
Hardware Option			
ISET	430	Adv Comm Sys	3

		JUNIOR YEAR con't		
Courses to be taken Spring Semester				
		Core Courses		
ISET	350	Advanced Java Programming		3
ISET	300	Operating Systems Intro		3
ENGL	366	Technical Writing		3
AND CHOOSE TWO of the THREE OPTIONS:				
Software Option				
ISET	365	Sftwr Engineer		3
Networking Option				
ISET	335	Data Structures Comp Netwk Su		3
Hardware Option				
ISET	361	E-commerce prog		3
		SENIOR YEAR		
Courses to be taken Fall Semester				
		Elective		3
		Elective		3
		Elective		3
AND CHOOSE TWO of the THREE OPTIONS:				
Networking Option				
ISET	479	Co-op Ed		3
Hardware Option				
ISET	401	Interfacing		3
Software Option				
		Elective		3
Courses to be taken Spring Semester				
Core Courses				
ISET	410	Enterprise Resource Planning		3
ISET	471	Info. System Engineering		3
		Elective		3
AND CHOOSE TWO of the THREE OPTIONS:				
Software Option				
ISET	455	E-Commerce prog		3
Networking Option				
ISET	435	Ntwrk Routing		3
Hardware Option				
ISET	430	Adv Comm Sys		3

PROGRAM/DEGREE REVISION FORM

NEW _____ DROPPED _____ MAJOR REVISION __X__ FOR INFORMATION ONLY

College College of Technical Sciences   **Program Area** Computer Info Systems   **Date** 11-5-04

Submitter _____ signature   **Chair/Dean** _____ signature   **Date** 1-10-05

Please provide a brief explanation & rational for the proposed revision(s)

Rename CIS Minor to reflect changes made resulting from the restructuring of the CIS degree to the ISET degree

Please provide in the space below a "before & after" picture of the program with the changes in the program noted. Attach appropriate Course Revision Forms. Please indicate changes by shading the appropriate cells.

INFORMATION SYSTEMS ENGINEERING TECHNOLOGY MINOR

Required Courses

CIS	115	Visual Basic Programming	3	CIS	115	Visual Basic Programming	3
CIS	155	Java Programming	3	CIS	155	Java Programming	3
CIS	171	Dsktop/Sml Bus DB/Using MS Access	3	CIS	171	Dsktop/Sml Bus DB/ Access	3
CIS	255	Advanced Java Programming	3	ISET	355	Advanced Java Programming	3
CIS	285	Spreadsheet	3	CIS	285	Spreadsheet	3
				CIS	2XX	Computer Hardware Support	3
CIS	325	Information Resource Mgmt.	3				
CIS	360	Bus. Telecomm. & Networking	3	ISET	360	Bus. Telecomm. & Networking	3
CIS	410	Enterprise Resource Planning	3	ISET	410	Enterprise Resource Planning	3

Choose six (6) credits from the following:

CIS	300	Operating Systems Introduction	3	ISET	300	Operating Systems Introduction	3
CIS	355	Data Structures	3	ISET	355	Data Structures	3
CIS	371	Enterprise Databases Using Oracle	3	ISET	371	Enterprise Databases Using Oracle	3
CIS	455	E-Commerce Programming	3	ISET	455	E-Commerce Programming	3
				ISET	335	Computer Network Security	3
				ISET	435	Network Routing & Security	3
			30	ISET	305	Digital systems	3
							30

Are you using both 335 & 435

cmptr info sys minor REVISION prog rev 11 04

PROGRAM/DEGREE REVISION FORM

NEW _____ DROPPED _____ MAJOR REVISION __X__ FOR INFORMATION ONLY

College College of Technical Sciences   **Program Area** Computer Eng. Tech   **Date** 11-5-04

Submitter _____ signature   **Chair/Dean** _____ signature   **Date** 7-10-05

Please provide a brief explanation & rational for the proposed revision(s)

Redesign of the CIS Ed Minor to reflect changes made resulting from the restructuring of the CIS degree to the ISET degree

Please provide in the space below a "before & after" picture of the program with the changes in the program noted. Attach appropriate Course Revision Forms. Please indicate changes by shading the appropriate cells.

COMPUTER INFORMATION SYSTEMS SECONDARY ED (5-12) MINOR

Required Courses

CIS	115 Visual Basic Programming	3		CIS	115 Visual Basic Programming	3
CIS	155 Java Programming	3		CIS	155 Java Programming	3
CIS	171 Dsktop/Sml Bus DB Using Access	3		CIS	171 Dsktop/Sml Bus DB Using Access	3
CIS	255 Advanced Java Programming	3		ISET	350 Advanced Java Programming	3
CIS	285 Spreadsheet	3		CIS	285 Spreadsheet	3
				CIS	2XX Computer Hardware Support	3
CIS	300 Operating Systems Intro	3				
CIS	320 Computers in Education	3				
CIS	355 Data Structures	3				
CIS	360 Bus. Telecommun/Networking	3		ISET	360 Bus. Telecommun/Networking	3
CIS	420 Computer Teaching Methods	2				
				ISET	410 Enterprise Resource Planning	3

Choose 6 (six) credits from the following:

ISET	300 Operating Systems Introduction	3
ISET	355 Data Structures	3
ISET	371 Enterprise Database Using Oracle	3
ISET	455 E-Commerce Programming	3
ISET	335 Computer Network Security	3
ISET	435 Network Routing & Security	3
ISET	305 Digital Systems	3

29

30

does the ed minor use both ISET 335 and 435?
335 - Computer Network Security
435 - Network Routing & Security

cmptr info sys ed minor REVISION prog rev 11 04

PROGRAM/DEGREE REVISION FORM

NEW _____ DROPPED __X__ MAJOR REVISION __X__ FOR INFORMATION ONLY

College _College of Technical Sciences_   Program Area _Computer Engineer.Tech_   Date 11-04

Submitter _____ Chair/Dean _____ Date _1·10·05_
signature   signature

Please provide a brief explanation & rational for the proposed revision(s)

Computer Engineering Technology A.A.S. to be dropped and replacd with Information Systems Technology A.S.

Please provide in the space below a "before & after" picture of the program with the changes in the program noted. Attach appropriate Course Revision Forms. Please indicate changes by shading the appropriate cells.

COMPUTER ENGINEERING TECHNOLOGY ASSOCIATE OF APPLIED SCIENCE

FRESHMAN YEAR

Courses to be taken Fall Semester

IT	100 Intro to Technology	3	
EET	101 Intro to Electricity/Electronics	5	
ENGL	111 Written Communication I	3	
MATH	112 College Algebra	3	
CIS	111 Integrated Bus. Applications	3	17

Courses to be taken Spring Semester

	Soc Sci Elective (Area B)	3	
CIS	115 Visual Basic Programming	3	
EET	103 Electronics Fundamentals I	5	
ENGL	112 Written Communication II	3	
MATH	125 Trigonometry (Area C)	2	16
			33

**DROP
Computer
Engineering
Technology A.A.S.**

SOPHOMORE YEAR

Courses to be taken Fall Semester

CIS	155 Java Programming	3	
EET	207 Digital Fundamentals	5	
SPCH	141 Fund. of speech	3	
	OR		
SPCH	142 Interpersonal Communication	3	
CPET	260 Networking I	3	
PHYS	231 Fund. of Physics I (Area C)	3	
PHYS	234 Fund. of Physics I lab (Area C)	1	18

Courses to be taken Spring Semester

EET	204 Electronic Fund. II	4	
CPET	201 Computer Hardware I	3	
CIS	Elective (CIS)	3	
MATH	133 Intro. to Calculus	3	
	Gen Ed Dist (Area B - ABET req.)	3	16
			34
			67

cmptr eng aas DROP prog rev 11 04

PROGRAM/DEGREE REVISION FORM

NEW _____ DROPPED __X__ MAJOR REVISION _____ FOR INFORMATION ONLY

College _College of Technical Sciences_   Program Area _Cmptr.Engineering Tech_   Date 11-04

Submitter _____ Chair/Dean _____ Date _1.10.05_

Please provide a brief explanation & rational for the proposed revision(s)

Discontinue offering the CPET BS degree - implement a new BS degree titled Information Systems Engineering Technology that will be a complete 2 + 2 in that the first two years can be any associate degree. The following two years will consis of 3 optional paths.

Please provide in the space below a "before & after" picture of the program with the changes in the program noted. Attach appropriate Course Revision Forms. Please indicate changes by shading the appropriate cells.

COMPUTER ENGINEERING TECHNOLOGY BACHELOR OF SCIENCE

FRESHMAN YEAR
Courses to be taken Fall Semester
IT	100 Intro to Technology	3	
EET	101 Intro to Electricity/Electronics	5	
ENGL	111 Written Communication I	3	
MATH	112 College Algebra	3	
CIS	111 Integrated Bus.Applications.	3	17

Courses to be taken Spring Semester
	Soc Sci. Elective (Area B)	3	
CIS	115 Visual Basic Programming	3	
EET	103 Electronic Fund. I	5	
ENGL	112 Written Communication II	3	
MATH	125 Trigonometry (Area C)	2	16
			33

SOPHOMORE YEAR
Courses to be taken Fall Semester
CIS	155 Java Programming	3	
EET	207 Digital Fundamentals	5	
SPCH	141 Fund. Of Speech	3	
	OR		
SPCH	142 Interpersonal Communication	3	
CPET	260 Networking I	3	
PHYS	231 Fund. of Physics I (Area C)	3	
PHYS	234 Fund. of Physics I lab (Area C)	1	18

Courses to be taken Spring Semester
EET	204 Electronic Fund. II	4	
CPET	201 Computer Hardware I	3	
CIS	Elective	3	
MATH	133 Intro. to Calculus	3	
	Gen Ed Dist.(Area B)(ABET req.)	3	16
			34

DROP COMPUTER ENGINEERING Bachelor degree

JUNIOR YEAR
Courses to be taken Fall Semester
CIS	360 Bus Telecomm. & Networking	3	
EET	305 Digital Systems	3	
MATH	220 Calc. & Analytic Geo. I	5	11

Courses to be taken Spring Semester
CIS	255 Adv. Java Programming	3	
	Elective (300-400)	3	
	Elective (300-400)	3	
	Math/Sci. Elective	4	
	Gen Ed Dist. (Area A)	3	16
			27

CONTINUED NEXT PAGE

SENIOR YEAR

Courses to be taken Fall Semester

		Elective (300-400)	3
CIS	300	Operating Systems Intro.	3
		Elective (300-400)	3
EET	450	Adv. Digital Systems	3
CIS		Elective (300-400)	3 15

Courses to be taken Spring Semester

EET	401	Interfacing (Sr. project)	3
EET	430	Adv. Communication Systems	3
		Elective	3
		Gen Ed Dist. (Area A-Humanities)	3
		Gen Ed Dist. (Area B-Soc Sci)	3 15

30

124

cmptr eng tech BS DROP prog rev 11 04

PROGRAM/DEGREE REVISION FORM

NEW _____ DROPPED _____ MAJOR REVISION __X__ FOR INFORMATION ONLY

College __College of Technical Sciences__   Program Area __EET AAS__   Date __Feb 2005__

Submitter _____ Chair/Dean _____ Date _2·16·05_
signature   signature

Please provide a brief explanation & rational for the proposed revision(s)

The revision below reflects changes to accommodate the revised general education package

Please provide in the space below a "before" & after" picture of the program with the changes in the program noted program noted. Attach appropriate Course Revision Forms. Please indicate changes by shading the appropriate cells

Proposal Title: ELECTRONICS ENGINEERING TECHNOLOGY AAS gen ed changes

Current Program Listed in 04-05 Catalog

Course Prefix	Course #	Course Title	Crs.
		FRESHMAN YEAR	
		Fall Semester	
IT	100	Introduction to Technology	3
EET	101	Intro to Electricity/Electronics	5
ENGL	111	Written Communication I	3
MATH	112	College Algebra	3
SPCH	141	Fund. of Speech	
		OR	3
SPCH	142	Interpersonal Communication	
		Spring Semester	
CIS	110	Intro To Computers	3
DRFT	156	Intro. to CAD	3
EET	103	Electronics Fundamentals I	5
MATH	125	Trigonometry (Area C)	2
CPET	260	Networking I	3
		SOPHOMORE YEAR	
		Fall Semester	
CIS	115	Visual Basic Programming	3
EET	205	Communications Fund.	4
EET	207	Digital Fundamentals	5
PHYS	234	Fund. of Physics I lab (Area C)	1
PHYS	231	Fund. of Physics I (Area C)	3
		Spring Semester	
EET	204	Electronic Fund. II	4
EET	206	Electronics Equip. Design & Feb.	4
MATH	133	Intro. to Calculus	3
PHYS	232	Fund of Physics II	3
PHYS	235	Fund of Physics II lab	1
		Gen Ed Dist (Area B - ABET req.)	3

67

Proposed Program for 05-06 Catalog

Course Prefix	Course #	Course Title	Gen Ed Credits	Degree Crs.
		FRESHMAN YEAR		
		Fall Semester		
IT	100	Intro to Technology (TECH)	3	
EET	101	Intro to Electricity/Electronics		5
ENGL	111	Written Communication I		3
MATH	112	College Algebra (MATH (3)	3	
SPCH	141	Fund. of Speech		
		OR (COMM)	3	
SPCH	142	Interpersonal Communication		
		Spring Semester		
CIS	110	Intro To Computers		3
DRFT	156	Intro. to CAD		3
EET	103	Electronics Fundamentals I		5
MATH	125	Trigonometry MATH (3)		3
CPET	260	Networking I		3
		SOPHOMORE YEAR		
		Fall Semester		
CIS	115	Visual Basic Programming		3
EET	205	Communications Fund.		4
EET	207	Digital Fundamentals		5
PHYS	234	Fund. of Physics I lab (CAT III)		1
PHYS	231	Fund. of Physics I (CAT III)		3
		Spring Semester		
EET	204	Electronic Fund. II		4
EET	206	Electronics Equip. Design & Feb.		4
MATH	133	Intro. to Calculus		3
PHYS	232	Fund of Physics II (Cat III)		3
PHYS	235	Fund of Physics II lab (CAT III)		1
		CAT IV or V or VI ABET req		3

9   59

~~more than meets AS gen ed requirements~~   68

MATH 125 reflects change to 3 cr class

EET aas gen ed prog rev 0!

PROGRAM/DEGREE REVISION FORM

NEW _____ DROPPED _____ MAJOR REVISION __X__ FOR INFORMATION ONLY

College <u>College of Technical Sciences</u>   Program Area <u>CIS AS</u>   Date <u>Feb 2005</u>

Submitter _____ Chair/Dean _____ Date <u>2·16·05</u>

signature   signature (indicates "college" level approval)

Please provide a brief explanation & rational for the proposed revision(s)

The revision below reflects changes to accommodate the revised general education package

Please provide in the space below a "before" & after" picture of the program with the changes in the program noted program noted. **Attach appropriate Course Revision Forms.** Please indicate changes by shading the appropraite cells

Proposal Title: <u>COMPUTER INFORMATION SYSTEMS AAS to AS gen ed changes</u>

Current Program Listed in 04-05 Catalog as AAS

Course Prefix	Course #	Course Title	Crs.
		FRESHMAN YEAR	
		Fall Semester	
CIS	111	Integ. Business Applications	3
		Electives	3
ENGL	111	Written Communication I	3
CIS	112	Web Site Developmen	3
SPCH	142	Interpersonal Commun.	3
		Spring Semester	
CIS	115	Visual Basic Programming	3
CIS	171	Dsktp/Sml Bus Dbases/Access	3
MATH	110	Math for Liberal Arts (4)	
		OR	3/4
MATH	112	College Algebra (3)	
DRFT	156	Intro to CAD (Area D	3
		Electives	2/3
		SOPHOMORE YEAR	
		Fall Semester	
CIS	155	Java Programming	3
CIS	270	Systems Analysis & Desigr	3
CIS	285	Spreadsheet	3
BUS	250	Business Stats (Area D)	3
		Electives	3
		Spring Semester	
CIS	271	Software Engineering	3
CIS	255	Adv. Java Programming	3
		Electives	3
		Electives	3
		Electives	3

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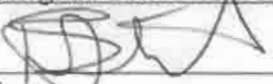
Proposed Program for 05-06 Catalog as AS

Course Prefix	Course #	Course Title	Gen Ed Credits	Degree Crs.
		FRESHMAN YEAR		
		Fall Semester		
CIS	111	Integ. Bus Apps		3
		CAT IX - Tech/Human Rel	3	
ENGL	112	Written Comm II (CAT I)	3	
CIS	112	Web Site Developmen		3
SPCH	142	Interpersonal Commun. (CAT I)	3	
		Spring Semester		
CIS	115	Visual Basic Programming		3
CIS	171	Dsktp/Sml Bus Dbases/Access		3
MATH	110	Math for Liberal Arts (4) (CAT II)		
		OR	3/4	
MATH	112	College Algebra (3) (CAT II)		
CIS	2XX	Computer Hardware Suppor		3
		CAT III - Nat Sci	3	
		CAT III - Nat Sci	3	
		SOPHOMORE YEAR		
		Fall Semester		
CIS	155	Java Programming		3
CIS	270	Systems Analysis & Desigr		3
CIS	285	Spreadsheet		3
ACCT	261	Principles of Accounting I		3
		CAT IV - Soc Sci	3	
		Spring Semester		
		CAT V - History	3	
		CAT -VI - Cult Dev	3	
		CAT VII - Fine Arts	3	
		CAT VIII - Humanities	3	
			33/34	27

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cis aas to as gen ed prog rev 2 0

NEW ____ DROPPED ____ MAJOR REVISION ____ FOR INFORMATION ONLY _X___

College College of Technical Sciences Program Area _____CIS/ISET_____ Date 11-04

Submitter _____ Chair/Dean _____ Date _____
         Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
    Changes to CIS courses to reflect the change from Computer Information System & Computer
    Engineering Technology to Information Systems Engineering Technology

Please provide the following info

College	College of Technical Sciences
Program Area:	Computer Information Systems
	(New - Information Systems Engineering Technology)

Date:	November 2004

Course pref and no.:	CIS 111
Course title:	Integrated Business Applications
Credits:	3

Required by:	~~CIS B.S.~~ (New - ISET B.S)
	CIS A.A.S.
	~~New - ISET A.S.~~
	Business Technology Minor
	Associate of Sciences (with a Program of study in Business)

Selective in:	Automotive Technology B.S. (selective)
Elective in:	
General Educ:	

Lecture:	X
Lecture/lab:	
Contract hrs. lecture:	3
Contact hrs. lab:	

Catalog Description (Include all prerequisites:)
    An in-depth integrated application using the case method will be developed. Students will learn to use the
    integrated tools in modern applications programs to save time and increase the accuracy and integrity of the
    overall information used in building reports. OLE and file linking will be used extensively. Visual BASIC
    scripting will be used to increase application cohesion. **Course Fee $5.00**

Course Outcome Objectives:
Students will use OLE to import and link information from applications into one or more reports and documents

**New instructional Resources needed (including: library materials, special equipment, and facilities). Please note:
approval does not indicate support for new faculty or additional resources.**
CIS 111 courserevisionform 11 04

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date _11-04___

Submitter _____ Chair/Dean _____ Date _____
       Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
        Changes to CIS courses to reflect the change from Computer Information System & Computer
        Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College:	College of Technical Sciences
Program Area:	Computer Information Systems
	(New - Information Systems Engineering Technology)
Date:	November 2004
Course pref and no.:	CIS 112
Course title:	Web Site Development
Credits:	3
equired by:	Information Systems Engineering Technology B.S.
	CIS AS
Selective in:	
Elective in:	
General Educ:	
Lecture:	X
Lecture/lab:	
Contract hrs. lecture:	3
Contact hrs. lab:	

Catalog Description (Include all prerequisites:)
        This class covers essential Internet Web Site skills for students. Topics covered include: web page construction,
        Photo editing, and file transfer protocol (FTP). Students will create a working Web site. Prerequisite: Basic
        computer skills

Course Outcome Objectives:

New instructional Resources needed (including: library materials, special equipment, and facilities). Please note:
approval does not indicate support for new faculty or additional resources.

CIS 112 course revision form 11 04

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION ____ FOR INFORMATION ONLY _X_

College __College of Technicial Sciences__ Program Area _____CIS/ISET_____ Date _11-04_

Submitter _____ Chair/Dean _____ Date _____
      Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
      Changes to CIS courses to reflect the change from Computer Information System & Computer
      Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College:	College of Technical Sciences
Program Area:	Computer Information Systems
	(New - Information Systems Engineering Technology)
Course pref and no.:	CIS 110
Course title:	Introduction To Computers
Credits:	3
Required by:	
Selective in:	
Elective in:	
General Educ:	Basic Skills
Lecture:	
Lecture/lab:	X
Contract hrs. lecture:	1
Contact hrs. lab:	4

Current Catalog Description (Include all prerequisites:)

      A literacy based approach is used to survey the computer and the computer industry. Topics covered include: Microcomputer applications, input, processor, output, auxiliary storage, file and database management, communications, information system life cycle, program development and systems software, and trends, issues and career opportunities in the computer industry. An opportunity for hands-on work with standard software packages including word processors, electronic spreadsheets, database systems, and graphics packages is presented in lab sections. **Course Fee $5.00**

Course Outcome Objectives:

Goals/Objectives

      To provide a broad foundation for students in information and computing technology which will help the student in further courses.

      identify PC applications

      describe hardware and software components in computer systems

      to develop an appreciation of the importance of systems for organizations

      identify types of information systems

      describe the value of information to organization

      describe the interrelation of organizational components by information flows

      describe the role of Information Systems in information processing

      to introduce Information Systems development in organizations.

      describe the value of information to organizations

describe the interrelation of organizational components by information flows.

identify the role of users, management and Information Systems personnel in planning and implementation of information systems

describe development methodologies and professional practices

to introduce popular microcomputer applications including Graphics, Word processing, Spreadsheets, Database, and Telecommunications.

use applications software including Word Processing, Database, Spreadsheets, and Graphics to complete lab projects

to provide the student with an understanding of the impact of computer technology on society.

know history and development of computer technology

discuss current trends, and future directions of computer science and information systems.

be aware of careers in computer technology and information systems areas.

New instructional Resources needed (including: library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

CIS 110 courserevisionform 11 04

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION ____ FOR INFORMATION ONLY __X_

College _College of Technicial Sciences_ Program Area ____CIS/ISET____ Date 11-04

Submitter _____ Chair/Dean _____ Date _____
Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College:	College of Technical Sciences
Program Area:	Computer Information Systems
	(New - Information Systems Engineering Technology)
Date:	November 2004

Course pref and no.:	CIS 115
Course title:	Visual Basic Programming
Credits:	3

Required by: Computer Information Systems B.S.   **(New - Information Systems Engineering B.S.)**
~~Computer Information Systems, AAS~~
New - Computer Information Systems A.S.
Computer Information Systems Minor   **(New - ISET Minor)**
Computer Information Systems Ed Minor
~~Engineering Technology, Electronics Engineering Technology A.A.S.~~
Land Survey Technology Certificate

Selective in:
Elective in:
General Educ:

Lecture: X
Lecture/lab: X
Contract hrs. lecture: 3 2
Contact hrs. lab: 2

Current Catalog Description (Include all prerequisites:)
An introduction to computer programming and problem solving techniques. Stresses modularity and structured techniques. Structured program design using design tools is heavily stressed. Programming structures including looping, sequence, and decision are thoroughly examined. Students will be exposed to the BASIC programming language with an overview of the language and specific implementation examples. Prerequisite: Basic Computer skills.

Course Outcome Objectives:
-identify structured programming requirements.
-understand the logic of programming in general and be able to specify the logic for moderately complex programs.
-demonstrate the ability to break complex problems into a manageable group of modules.

-demonstrate an understanding of logical analysis.
-demonstrate an understanding of logic sets.
-utilize truth logic principles in developing truth tables.
-understand the primary and essential structures of programming by demonstrating the use of all logical structures in flow charts.
-utilize proper design principles in developing Warnier diagrams.
-demonstrate how to employ logical structures in pseudocode programming.
-illustrate how to use logical structures in Nassi-Schneiderman charts.
-apply structured programming principles in solving programming problems
-implement programs using the BASIC programming language.

New instructional Resources needed (including: library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

CIS 115 course revision form 11 04

COURSE REVISION FORM

NEW _____ DROPPED _____ MAJOR REVISION _____ FOR INFORMATION ONLY__X__

College __College of Technical Sciences__ Program Area _____CIS/ISET_____ Date 11-04____

Submitter _____ Chair/Dean _____ Date _____
       Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
    Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College: College of Technical Sciences

Program Area: Computer Information Systems
(New - Information Systems Engineering Technology)

Date: November 2004

Course pref and no.: CIS 155

Course title: Java Programming

Credits: 3

Required by: Computer Information Systems Associate of Science
Computer Information Systems, B.S. **(New - ISET B.S)**
Computer Information Systems Minor **(New - ISET Minor)**
Computer Information Systems Education Minor

Selective in:

Elective in:

General Educ:

Lecture: X

Lecture/lab:

Contract hrs. lecture: 3

Contact hrs. lab:

Current Catalog Description (Include all prerequisites:)
    This course focuses on intermediate computer program design and development using structured techniques. Includes small project development. Stresses modularity, program design, implementation, and testing. Object oriented programming/object oriented design (OOP/OOD) techniques will be utilized.
    Prerequisite: Basic computer skills

Course Outcome Objectives:
    Competencies Assumed:
    Familiarity with DOS including formatting, copying, deleting, and running programs from disks.
    Familiar with microcomputer hardware operation.
    College level reading & writing skills
    Familiarity with programming LOGIC and Structured Design; Flow-charting, Warnier-Orr, Sets, Truth Tables, Pseudocode, Array processing and File processing. Read design charts including pseudocode, flow charts, top down chart, and Warnier-Orr diagrams.
    Produce Warnier-Orr design charts.

New instructional Resources needed (including: library materials, special equipment, and facilities).
Please note: approval does not indicate support for new faculty or additional resources.

CIS 155 course form 11 04

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION ____ FOR INFORMATION ONLY_X___

College __College of Technical Sciences__ Program Area _____CIS/ISET_____ Date 11-04___

Submitter _____ Chair/Dean _____ Date _____
Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

         Changes to CIS courses to reflect the change from Computer Information System & Computer
         Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College:	College of Technical Sciences
Program Area:	Computer Information Systems
	(New - Information Systems Engineering Technology)
Date:	November 20004
Course pref and no.:	CIS 171
Course title:	Desktop/Small Business Databases using MS Access
Credits:	3 (sem)
Lecture:	X
Lecture/Lab:	
Contact hrs Lec.	3
Contact Hrs. Lab:	

Required in which programs:
     Computer Information Systems, AAS   **(New – CIS A.S.)**
     Computer Information Systems B.S.   **(New - ISET B.S)**
     Computer Information Systems Minor   **(New - ISET Minor)**
     Computer Information Systems Education Minor
     Engineering Technology: Civil Engineering Technology, B.S., _Minore (GIS)_
     Engineering Technology: Civil Engineering Technology, AAS
     Land Survey Technology Certificate
     Design Drafting, Associate
     Design Drafting B.S., No Minor

Catalog Course Description (include prerequisites):

         This course addresses the fundamental concepts of computerized database management and database
         design with emphasis on the relational model. Includes hands-on experience using MS Access in
         creating databases, forms, reports, and queries. Prerequisite: Basic computer skills

Course Objectives:
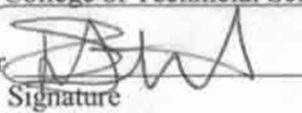
         ~~Know relational database terminology.~~
         Apply relational database theory in database application development.
         Logically design database applications using structured techniques and tools.
         Implement database designs.
         Analyze database structures for adherence to relational theory and practice.
         Manipulate a relational database including modify, retrieve, and structured data.
         Apply logical statements in database queries.
         Apply relational techniques in structuring and querying databases.
         Generate reports using simple databases and related databases.
         Operate a relational, SQL, Network, and distributed DBMS product(s).

CIS 171 courserevisionform 11 04

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION ___ FOR INFORMATION ONLY__X__

College _College of Technicial Sciences_ Program Area ____CIS/ISET____ Date _11-04___

Submitter _____ Chair/Dean _____ Date _____
      Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College:	College of Technical Sciences
Program Area:	Computer Information Systems
	(New - Information Systems Engineering Technology)
Date:	November 2004

Course pref and no.:	CIS 270
Course title:	Systems Analysis and Design
Credits:	3 (sem)

Lecture:	X
Lecture/lab:	
Contract hrs. lecture:	3
Contact hrs. lab:	

Required in which programs: Computer Information Systems, AAS   **NEW - A.S.**

Catalog Course Description (include prerequisites):
This is a study of the systematic analysis and design of computer software using case tools, data flow analysis, and culminating in a complete system design. Prerequisite: CIS 110 or equivalent competencies, CIS 171.

Course Objectives:
This course is an introductory systems analysis and design for computer programmers, systems analysts, and information systems personnel. The course presents an overview of information systems and the system development life cycle for the systems analyst. Course emphasis will then focus on tools and techniques that the programmer or analyst can use to document information systems. Classical and structured tools for describing data flow, data structure, process flow, file design, input and output design, and program specifications will be applied to documenting systems. Emphasis will also be placed on the integrated use of the classical and structured tools. The course will survey other important skills for the systems analyst such as fact-finding, communications, project management, and cost-benefit analysis.

Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):

CIS 270 courserevisionform 11 04

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION ____ FOR INFORMATION ONLY_X__

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date _11-04___

Submitter ⟨signature⟩ Chair/Dean _____ Date _____
    Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

    Changes to CIS courses to reflect the change from Computer Information System & Computer
    Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College: College of Technical Sciences
Program Area: Computer Information Systems
                      Information Systems Engineering Technology
Date: November 2004
Course pref and no.: CIS 285
Course title: Spreadsheet
Credits: 3 (sem)
Lecture: X
Lecture/lab:
Contract hrs. lecture: 3
Contact hrs. lab:
Required in which programs:

    Computer Information Systems, AAS   **(New – CIS A.S.)**
    Computer Information Systems Minor   **(New - ISET Minor)**
    Computer Information Systems Education Minor
    Computer Information Systems B.S.   **(New - ISET B.S)**   ??????????

Catalog Course Description (include prerequisites):

    This class includes theory and applications of spreadsheet software. Included also are advanced features such as
    programming, web linking, scripting, goal seeking, solver application integration, list management, complex
    models, macro implementation, graphic creation, and graphic presentation of analyzed data will be covered.
    Prerequisites: CIS 110 or equivalent competencies, MATH 110 or higher.

Course Objectives:

    Goals:

    By passing this class the student will possess a working knowledge of spreadsheets, functions and formulas that
    will enable then to solve problems using the commands and functions found within the spreadsheet program.
    This class will also expose the student to the MACRO and Command Language. Students will solve a variety of
    business spreadsheet problems using macros not solvable by normal spreadsheet commands. Graphical
    presentation of information will be introduced with the basics of business graphics creation being covered. The
    student will analyze and present data graphically.

    Content/Objectives:

        know function syntax
        know menu command structure
        know how to print, using headers and footers
        demonstrate correct functions to use for problem solving
        Utilize macro programs using looping, branching, menus
        Solve problems using the spreadsheet program as a TOOL
        understand the basics of graphical presentation of information
        Create both 2d and 3d pie, bar, line, and other graphs

CIS 285 courserevisionform 11 04

NEW ____ DROPPED ____ MAJOR REVISION ____ FOR INFORMATION ONLY __X__

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date 11-04___

Submitter _____ Chair/Dean _____ Date _____
       Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
    Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College:	College of Technical Sciences
Program Area:	Computer Information Systems
	(New - Information Systems Engineering Technology)
Date:	November 2004

Course pref and no.:	CIS 320
Course title:	Computers in Education
Credits:	3 (sem)
Lecture:	X
Lecture/lab:	
Contract hrs. lecture:	3
Contact hrs. lab:	
Required in:	Computer Information Systems, Education Minor
	Industrial Technology B.S. (5-12 Teaching)

Catalog Course Description (include prerequisites):
    This class presents three strategies that enable a teacher to integrate computers into their educational environment to enhance their capabilities and productivity. The topics covered include multi-media, telecommunications, and classroom management. Prerequisite: CIS 110 or equivalent competencies.

Course Objectives:
    Telecommunications:
        connect to educational resources application of telecommunications technology
            send and receive electronic mail to/from colleagues in state and nation wide
            send and receive data files
            implement a classroom project involving telecommunications and K-12 students
    Multi-media
        integrate multi-media in a classroom for effective student learning
            operate Multi-media equipment
            describe requirements for the use of Multi-media in the learning environment
    Classroom Management:
        operate a representative Classroom Management software application
        integrate testing items with objectives through the use of management software
        correlate item analysis of test items/assignments with outcomes assessment and objectives

Other:

> investigate educational sources for hardware, software, professional organization, and applicable conferences through the use of computer journals and educational computing journals
>
> investigate trends of computing in public school institutions and compare those with trends in industry
>
> research some innovative uses for computer technology and the computer sciences in the public school settings.

New and/or Additional Equipment Required:

New and/or Additional Library Resources Required:

Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):

CIS 320 courserevisionform 11 04

COURSE FORM

epartment: College of Technical Sciences
Program Area: Computer Information Systems
                        New - Information Systems Engineering Technology

Date: November 2004

Course pref and no.:   CIS 420
Course title: Computer Teaching Methods
Credits: 3

Lecture: X
Lecture/Lab:
Gradeable Lab:
Contact hours lecture: 3
Contact hours lab:

Required in: Computer Information Systems Education Minor

Catalog Course Description (include prerequisites):

   Appropriate techniques for teaching Computer Science and Computer Information Systems at the secondary level. Includes topics for teaching computer software. Recommend completion of all computer courses prior to or during attendance in CIS 420. Prerequisite: CIS 110 or equivalent competencies, CIS 115, CIS 155, CIS 255, and CIS 320

Course Objectives:

New and/or Additional Equipment Required:
New and/or Additional Library Resources Required:
Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):

CIS 420 courserevisionform 11 04

p   **COURSE REVISION FORM**

NEW ____ DROPPED ____ MAJOR REVISION __X__ FOR INFORMATION ONLY ____

College __College of Technicial Sciences__ Program Area _____CIS/ISET_____ Date 11-04___

Submitter _____ Chair/Dean _____ Date _____
         Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
     Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:
College: College of Technical Sciences
Program Area: Computer Information Systems
                    (New - Information Systems Engineering Technology B.S
Date: November 2004

Course Prefix & No.:   **ISET 2XX (New)**

Course Title: **Computer Hardware Support**
Credits: 3

Required by: **Information Systems Engineering Technology Minor**
                    Computer Information Systems A.S.
Selective in:
Elective in:
General Education:
Lecture:
Lecture/Lab: X
Gradable Lab:
Contact hours lecture: 2
Contact hours lab: 2

Current Catalog Description (include all prerequisites):
None
Proposed or New Catalog Description (include all prerequisites):
An introduction to current computer hardware leading to the students' ability to successfully pass the COMP/TIAA+ Certification exam.

Course Outcome Objectives:
Familiarity with current computer hardware.
Ability to troubleshoot computer systems.

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.
CIS 2XX courseNEWform 11 04

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION __X__ FOR INFORMATION ONLY____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date 11-04____

Submitter _____ Chair/Dean _____ Date _____
      Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College:	College of Technical Sciences
Program Area:	Computer Information Systems
	(New - Information Systems Engineering Technology)
Date:	November 2004
Course pref and no.:	~~CIS 300~~ **ISET 300**
Course title:	Operating Systems Introduction
Credits:	3
Lecture:	X
Lecture/lab:	
Contract hrs. lecture:	3
Contact hrs. lab:	
Required by:	Computer Information Systems BS **New - ISET B.S core**
	New - Information Systems Engineering Technology Minor
	Computer Information Systems Education Minor

Current Catalog Description (Include all prerequisites:)

Introduction to the basic principles of how operating systems function. Concepts of single user operating systems and multi-user operating systems including the programming requirements and considerations under each. Prerequisite CIS 110 or equivalent competencies, CIS 115, CIS 155, CIS 255-.

Proposed or New Catalog Description (Include all prerequisites:

Introduction to the basic principles of how operating systems function. Concepts cover single user operating systems and multi-user operating systems including the programming requirements and considerations under each. Prerequisites: CIS 110 or equivalent competencies, CIS 115, CIS 155 and ISET 3xx (Advanced Java - 350).

Course Outcome Objectives:

This course presents an introduction to the basic principles of how operating systems function. Surveyed systems will include DOS, Windows NT, UNIX, OS/2, VMS, Novell, and others. The programming environment under each operating system will be considered with possible programming assignments for each.

Topics:

    Process description and control

    Concurrency: mutual exclusion and synchronization - deadlock and starvation

    memory management

    virtual memory

    uniprocessor scheduling

    multiprocessor and real-time scheduling

    I/O management and disk scheduling

    file management

    networking and distributed processing

    distributed process management

    security

Queuing analysis

introduction to Object-oriented design

New instructional Resources needed (including: library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

ISET 300 courserevisionform 11 04

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION __X__ FOR INFORMATION ONLY ____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date _11-04___

Submitter _____ Chair/Dean _____ Date _____
       Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:
 College: College of Technical Sciences
Program Area:(New - Information Systems Engineering Technology)
Date: November 2004
Course Prefix & No.: ~~EET 305~~   **ISET 305**

Course Title: Digital Systems
Credits: 3

Required by: **Information Systems Engineering Technology B.S – Hardware Option)**

Selective in:
Elective in:
General Education:

Lecture:
Lecture/Lab: X
Gradable Lab:
Contact hours lecture: 2
Contact hours lab: 2

Current Catalog Description (include all prerequisites):
This course involves an introduction to programmable logic devise and an in-depth study of a selected microcontroller system. **Course Fee: $15.00**

Course Outcome Objectives:
The student will have demonstrated the ability demonstrate knowledge of:
- Microprocessor Structure
- Programming in a real-time environment
- Compiler/Assembler operation
- Introduction to the PIC processor structure
- Introduction to embedded systems
- Programming for system control
- An introduction to Electronics for digital systems.

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.
ISET 305 EET 305 courserevisionform 11 04

COURSE REVISION FORM

NEW _____ DROPPED ____ MAJOR REVISION _X__ FOR INFORMATION ONLY_____

College _College of Technical Sciences_ Program Area _____CIS/ISET_____ Date 11-04___

Submitter _____ Chair/Dean _____ Date _____
       Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
  Change EET 308 to ISET 308 to reflect the change from Computer Information System & Computer Engineering
  Technology to Information Systems Engineering Technology

Please provide the following information:
Department: College of Technical Sciences
Program Area: New - Information Systems Engineering Technology

Date: February 1998
Course pref and no.: ~~EET 308~~   **ISET 308**
Course title: Industrial Electronics
Credits: 4

Required by: Industrial Technology BS
                        Industrial Technology Ed BS
                        AOT BS
                        ~~Ag Tech AAS~~

Selective in:
Elective in:
General Educ:
Lecture:
Lecture/lab: X
Contact hrs. lecture: 3
Contact hrs.Lab: 2

Current Catalog Description (include all prerequisites):
  This course focuses on basic power circuits and machines. Topics include power distribution systems, DC and AC
  motors, power control circuits, transducers, and industrial process control. **Coarse Fee $9.00**
Course Objectives:
  The student will have demonstrated the ability to:
  1. Identify parts of a control circuit.
  2. Discuss the operation of selected control devices.
  3. Explain the operation of industrial power supplies, invertors, & connectors.
  4. Understand & construct open and closed loop systems.
  5. Explain the operation of selected sensors.
  6. Examine the characteristics of selected Ac & DC motors.
  7. Perform experiments to verify theoretical concepts.

New and/or Additional Equipment Required:
New and/or Additional Library Resources Required:
Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):
  ISET 308 EET 308 courseREVISIONform 11 04

1

COURSE REVISION FORM

NEW _____ DROPPED _____ MAJOR REVISION __X__ FOR INFORMATION ONLY_____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date 11-04____

Submitter _____ Chair/Dean _____ Date _____
       Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College: College of Technical Sciences
Program Area: Computer Information Systems
                   New - Information Systems Engineering Technology

Date: November 2004

Course pref and no.:   **ISET 335   (NEW -- suggested number)   x**
Course title: Computer/Network Security
Credits: 3

Lecture: X
Lecture/Lab:
Gradeable Lab:
Contact hours lecture: 3
Contact hours lab:

Required in: **Information Systems Engineering Technology Minor   (selective)**
                   Information Systems Engineering Technology B.S – Networking Option

Proposed Course Description (include prerequisites):
The computer/network security course provides a basic overview of security policy, common threats and attacks and the technologies that can address network security issues. It also covers installation, configuration and basic troubleshooting of security solutions. Students will be required to successfully install and configure equipment in a pre-determined lab environment. Pre-requisites: Junior/senior in ISET, completion of ISET 300 or similar operating systems course.

Course Objectives:

General Knowledge

    Why we need security
    Review security basics
    Identify the features and benefits of security products
    Install an embedded firewall (EFW)
    Configure and manage a EFW
    Design and troubleshoot a EFW network
    List steps to install, configure and manage a hardware firewall, software firewall and a VPN firewall
    List steps to install, configure and manage a VPC review security basics
    Identify the features and benefits of security products

List steps to install, configure and manage a VPN
Locking down services for more effective security
Operating system add-ons
Disabling and removing unnecessary services
Controlled specific services, including FTP, Telnet, and HTTP
Scanning and protecting shares

Encryption Techniques

Encryption and internetworking
Encryption in enterprise networks
Understanding trust relationships
Symmetric key encryption
Public ket encryptIon
One-way encryption
Data encryption standard
Working with digital certificates
SSL encryption and web servers
Use pretty good privacy (PGP) to sign a document
Deploying S/MIME
Public Key Infrastructure (PKI) vs certificate authority (CA)
Encryption protocois and system performance

Intrusions and Attacks

Intrusion Threats
Scanning Attacks
Detecting a NIC in "Promiscuous Mode"
Sniffing Attacks, Including Sniffing E-Mail, Telnet, NFS, NIS, And Web Traffic
E-Mail Bombing
Scanning and Cracking a Share
System Bug-Based Attacks
Causes and Results of a Denial of Service (DOS) Attacks
Defining and Conducting Buffer Overflow Attacks
How to Protect Your Operating Systems, Routers, and Equipment Against Physical Attacks
Brute Force Attack
Dictionary Attack
Social Engineering
Understanding Key Logging
Identifying Trojans
Describe the Effects of a Worm
Three Virus Types (Boot Sector, Macro, File Attaching)IP Spoofing
IP Spoofing

Security Components
Identifying and Implementing Security Policies

New and/or Additional Equipment Required:
New and/or Additional Library Resources Required:
Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):

ISET 335 courserNEWform 11 04

COURSE REVISION FORM

NEW _____ DROPPED _____ MAJOR REVISION __X__ FOR INFORMATION ONLY_____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date 11-04_____

Submitter _____ Chair/Dean _____ Date _____
            Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
    Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

Department:	College of Technical Sciences
Program Area:	Computer Information Systems
	(New - Information Systems Engineering Technology)

Date: November 2004

Course pref and no.:	~~CIS 255~~	**new ISET 350**
Course title:	Advanced Java Programming	
Credits:	3	

Lecture: X
Lecture/lab:
Contract hrs. lecture: 3
Contact hrs. lab:

Required in which programs:
    Information Systems Engineering Technology B.S.
    Computer Information Systems Education Minor

Catalog Course Description (include prerequisites):
    This is an advanced object oriented programming and application development course using Java, a continuation of CIS 155, Java Programming. This course will expand the student's knowledge of object oriented programming to include graphical user interface development utilizing programming language libraries. Advanced computer programming topics including arrays and mathematics topics including matrix multiplication and basic trigonometric functions used in graphics programming will be covered. Prerequisite: CIS 155

Course Objectives:

New and/or Additional Equipment Required:
New and/or Additional Library Resources Required:
Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):

ISET 255 350 courserevisionform 11 04

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION __X__ FOR INFORMATION ONLY____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date _11-04___

Submitter _____ Chair/Dean _____ Date _____
      Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College:	College of Technical Sciences
Program Area:	Computer Information Systems
	New - Information Systems Engineering Technology
Date:	November 2004
Course pref and no.:	~~CIS 355~~ **ISET 355**
Course title:	Data Structures
Credits:	3
Required by:	Computer Information Systems B.S. **New – ISET B.S. – Core course**
	New - Information Systems Engineering Technology Minor
	Computer Information systems Education Minor
Selective in:	
Elective in:	
General Educ:	
Lecture:	X
Lecture/lab:	
Contract hrs. lecture:	3
Contact hrs. lab:	

Catalog Description (Include all prerequisites:)

~~This is an advanced object oriented programming and application course using a continuation of CIS 155 Java Programming. This course will expand the student's knowledge of object oriented programming to include graphical user interface development utilizing programming language libraries. Advanced computer programming topics including arrays and mathematical topics including matrix multiplication and basic trigonometric functions used in graphics programming will be covered. Prerequisite: CIS 155~~

Proposed Catalog Description (Include all prerequisites:)

This is an advanced programming techniques course and a survey of fundamental data structures. It covers pointers, arrays, user defined data structures, abstract data types, time-space complexity, algorithm proofs, program testing, and operating system interactions. Computability and intractable problems are discussed. Object oriented programming and object oriented design techniques will be utilized. _Prerequisite: CIS 155_

Course Outcome Objectives:

Create programs that implement/utilize list, stack, queue, and tree data structures.

Understand the concept of ADT and apply it in an object oriented language.

Understand memory management concerns with dynamic allocation of data.

New instructional Resources needed (including: library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

ISET 355 courserevisionform 11 04

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION __X__ FOR INFORMATION ONLY____

College __College of Technical Sciences__ Program Area _____ CIS/ISET _____ Date 11-04___

Submitter _____ Chair/Dean _____ Date _____
        Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College:	College of Technical Sciences
Program Area:	Computer Information Systems
	New - Information Systems Engineering Technology
Date:	November 2004
Course pref and no.:	~~CIS 360~~ **ISET 360**
Course title:	Business Telecommunications and Networking
Credits:	3

Lecture: X
Lecture/Lab:
Gradeable Lab:
  ontact hours lecture: 3
Contact hours lab:

Required in which programs: Computer Information Systems B.S.   **New – ISET B.S. – Networking Option**
                                  Computer Information Systems Minor   **New – ISET Minor**
                                  Computer Information Systems Education Minor

Catalog Course Description (include prerequisites):
     This course is an overview of network and communications using the internet and LAN, WAN and MAN configurations. This class will stress TCP/IP in relation to the OSI model. Hugs, switches, and NIC's will be configured and tested. Students will be required to perform both out-of class and in-class homework using Windows NT, Windows 2000 and Unix computers. Students will be required to install and set up software on a network. Some work will be performed in teams. Prerequisite: CIS 110 or higher, CIS 155, CIS 255. **Course Fee $5.00**

Course Objectives:
    Competencies Assumed:
        Familiarity with DOS including formatting, copying, deleting, and running programs from disks.
        College level reading & writing skills
        Experience operating a computer.
        Knowledge of computer hardware components, terminology and modems.
        Ability to use a Word processor/Text Editor.
    Understand basic principles of telecommunications including
    .   hardware, media, and software
    .   communications networks (LANs, WANs, VANs)
    .   planning & designing communications networks
    Operate a microcomputer telecommunications package to
    .   upload & download files

- send & receive messages
- build & execute scripts
- use Internet

Operate a local area network to
- install application software as a single or shared application
- assign rights to groups and individual users
- implement mapping to different applications on the server

New and/or Additional Equipment Required:
New and/or Additional Library Resources Required:
Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):

ISET 360 courserevisionform 11 04

NEW _____ DROPPED _____ MAJOR REVISION __X__ FOR INFORMATION ONLY_____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date 11-04___

Submitter _____ Chair/Dean _____ Date _____
          Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
   Changes to CIS courses to reflect the change from Computer Information System & Computer
   Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College: College of Technical Sciences
Program Area: Computer Information Systems
                        (New - Information Systems Engineering Technology)
Date: November 2004
Course pref and no.:   ~~CIS 161~~   new   **ISET 361**
Course title: Assembly I & Computer Architecture
Credits: 3
Lecture: X
Lecture/Lab:
Contact hrs Lec.   3
Contact Hrs. Lab:
Required By: **(New – CIS A.S.)**
                       (New - Information Systems Engineering Technology B.S – Hardware Option)
                       (New - Information Systems Engineering Technology Minor)

Catalog Course Description (include prerequisites):
   Introductory assembly language programming on a representative computer using a macro assembler.
   A survey of the fundamental design objectives of common computers, covering basic components,
   digital logic, number systems, character codes, CPU design elements, machine code, instruction sets,
   interrupts, fast memory, auxiliary storage, and data transfer. Prerequisite: CIS 110 or equivalent
   competencies and CIS 115.

Proposed Catalog Course Description (include prerequisites):
   This course provides an advanced study of selected digital systems. Topics will include digital design
   and fabrication using ASIC, CPLD, FPLD devices as well as other programmable digital logic with
   emphasis on fabrication of a complete digital system. Other topics will include sensors, analog to
   digital conversion, digital to analog conversion, data logging, and telemetry systems. Prerequisite:
   ISET 305 or equivalent. **Course Fee: $12.00**

Course Outcome Objectives:
   Upon successful completion of this course, the student will be able to demonstrate knowledge of
   1. ASIC, CPLD and FPLD devices
   2. Digital design tools
   3. Embedded controllers
   4. Central processing units in stand-alone configuration
   5. Machine and Assembly language programming
   6. Higher level language programming of embedded devices
   7. Device programmers
   8. Analysis of digital circuits using standard diagnostic tools such as oscilloscope, logic analyzer, etc.

9. Proper documentation of an engineering design project
10. RF communication modules for telemetry.
11. Typical sensors used in industry for scientific and diagnostic testing
12. Programming to support data collection and analysis.

New instructional Resources needed (including: library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):
ISET 161 361 course revision form 11 04

COURSE REVISION FORM

NEW _____ DROPPED _____ MAJOR REVISION __X__ FOR INFORMATION ONLY_____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date _11-04_

Submitter _____ Chair/Dean _____ Date _____
　　　　　　Signature　　　　　　　　　　Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
　　　Changes to CIS courses to reflect the change from Computer Information System & Computer
　　　Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College:　　　　　　　　　College of Technical Sciences
Program Area:　　　　　　Computer Information Systems
　　　　　　　　　　　　　(New - Information Systems Engineering Technology)
Date:　　　　　　　　　　November 2004
Course pref and no.:　　　~~CIS 271~~　**ISET 365**
Course title:　　　　　　　Software Engineering
Credits:　　　　　　　　　3
Lecture:　　　　　　　　　X
Lecture/lab:
Contract hrs. lecture:　　　3
Contact hrs. lab:
Required in which programs:　　　**Information Systems Engineering Technology B.S. software option**

Catalog Course Description (include prerequisites):
　　　This course continued CIS 270. It entails program implementation, testing, debugging, and
　　　documentation of a complete system. It includes project management techniques such as ISO 9000
　　　standards, Visual Basic, Access, ODBC connections and programming logic. Prerequisites: CIS 110
　　　or higher, CIS 115, CIS 171, and CIS 270.

Course Objectives:
　　　Overview -- Systems Analysis and Design is one of the most difficult activities to teach students. So
　　　much of systems analysis and design depends on tools, experience and situations that are difficult to
　　　recreate in a typical academic setting.

　　　In this course, the student will continue CIS 270 by coding the developed system.

　　　By passing this course, the student will be able to:
　　　　　Code a system expressed by a system aa and D document.

Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups,
computer labs):

ISET 271 365 courserevisionform 11 04

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION __X__ FOR INFORMATION ONLY____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date 11-04___

Submitter _____ Chair/Dean _____ Date _____
        Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College: College of Technical Sciences
Program Area: Computer Information Systems
                      New - Information Systems Engineering Technology

Date: November 2004

Course pref and no.:   ~~CIS 371~~   ISET 371
Course title: Enterprise Databases Using Oracle
Credits: 3

ecture: X
Lecture/Lab:
Gradeable Lab:
Contact hours lecture: 3
Contact hours lab:

Required in: **New - Information Systems Engineering Technology Minor**
                      New - Information Systems Engineering Technology B.S – Software Option

Catalog Course Description (include prerequisites):
    In this course, the Oracle database server will be used for application creation including analysis, design, implementation, and testing of large scale, enterprise database oriented projects. It covers advanced database concepts including relational databases, client-server applications and Oracle Database Administration. Prerequisites: CIS 115 and CIS 171

Course Objectives:
    Understand the client/server database environment utilized in enterprise information systems.
    Create a client/server database application utilizing current technologies.
    Understand the security models utilized with large multi-user database systems.

New and/or Additional Equipment Required:
New and/or Additional Library Resources Required:
Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):

ISET 371 courserevisionform 11 04

COURSE REVISION FORM

NEW ___ DROPPED ___ MAJOR REVISION __X__ FOR INFORMATION ONLY ___

College _College of Technicial Sciences_ Program Area ____CIS/ISET____ Date _11-04_

Submitter _____ Chair/Dean _____ Date _____
      Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
    Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:
College: College of Technical Sciences
Program Area:(New - Information Systems Engineering Technology)
Date: November 2004
Course Prefix & No.: ~~EET 401~~   **ISET 401**

Course Title: Interfacing
Credits: 3

Required by: **Information Systems Engineering Technology B.S – Hardware Option)**

Selective in:
Elective in:
General Education:

Lecture:
Lecture/Lab: X
Gradable Lab:
Contact hours lecture: 3
Contact hours lab:

Current Catalog Description (include all prerequisites):
The course focuses on the student's education and experience on specific technical projects. Students will complete individual projects and then integrate the individual projects into a group project. Emphasis is placed on research, construction, testing, and presentation of individual interfacing circuits for a selected micro controller system. During the course the student will submit formally written reports and give public explanation and demonstrations of the projects. This course meets the general education requirements for a capstone course. Prerequisities: EET 305 and senior standing. **Course Fee: $12.00**

Proposed or New Catalog Description (include all prerequisites):

LARRY NEEDS TO COMPLETE THIS -- CHECK PREREQ

Course Objectives: On completion of this course the student will have demonstrated the ability to:
1. Design and construct simple input and output circuits.
2. Interface and program large scale integration devices.
3. Implement control circuits by interfacing a microcontroller to analog and digital devices.
4. Explain the operation and selection of digital to analog and analog to digital converters.
5. Interface a microcontroller to selected transducers.
6. Interpret manufacturers' manuals and data sheets for interface devices.
7. Discuss the constraints imposed when interfacing a micro-controller to external devices.
8. Troubleshoot interface circuits.

9.   Write assembly language programs to implement operation of selected applications.
10.   Complete an assigned individual project within a given limited amount of time.
11.   Complete an assigned group project within a given limited amount of time.
12.   Use library resources to become familiar with and stay current with developments in interfacing and microcontrollers.
13.   Complete a project proposal for a selected senior project.
14.   Complete the selection/construction of a microcontroller for use in the senior project.

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.
ISET 401 EET 401 courserevisionform 11 04

COURSE REVISION FORM

NEW _____ DROPPED _____ MAJOR REVISION __X__ FOR INFORMATION ONLY_____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date _11-04___

Submitter _____ Chair/Dean _____ Date _____
       Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College :   College of Technical Sciences
Program Area: Computer Information Systems
                  New - Information Systems Engineering Technology

Date:

Course pref and no.:   ~~CIS 410~~   **ISET 410**
Course title: Enterprise Recourse Planning
Credits: 3

ecture: X
ecture/Lab:
Gradeable Lab:
Contact hours lecture: 3
Contact hours lab:

Required in: **New - Information Systems Engineering Technology Minor**
                  New - Information Systems Engineering Technology B.S – Core
                  Land Survey Technology Certificate

Catalog Course Description (include prerequisites):

This class covers the application of selected behavioral and quantitative decision support tools, emphasizing problem identification, technique selection, and results or computerized solution interpretations. Topics include: decision models, resource allocation models, project management models, and forecasting models including software contracts, proposals, data warehousing, and data mining. Prerequisites: CIS 110 or higher competencies, MATH 110 or MATH 112.

Course Objectives:

New and/or Additional Equipment Required:
New and/or Additional Library Resources Required:
Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):
ISET 410 courserevisionform 11 04

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION __X__ FOR INFORMATION ONLY____

College _College of Technicial Sciences_ Program Area ____CIS/ISET____ Date 11-04___

Submitter _____ Chair/Dean _____ Date _____
        Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
    Changes to CIS courses to reflect the change from Computer Information System & Computer
    Engineering Technology to Information Systems Engineering Technology

Please provide the following information:
 College: College of Technical Sciences
Program Area:(New - Information Systems Engineering Technology)
Date: November 2004
Course Prefix & No.: ~~EET 430~~   **ISET 430**

Course Title: Advanced Communications Systems
Credits: 3

Required by: **Information Systems Engineering Technology B.S – Hardware Option)**

Selective in:
Elective in:
General Education:

Lecture:
Lecture/Lab: X
Gradable Lab:
Contact hours lecture: 2
Contact hours lab: 2

Current Catalog Description (include all prerequisites):
The course provides an advanced study of communications systems and circuits. Topics include FM
circuits, antennas, transmission lines, and cellular and microwave systems. **Course Fee: $12.00**

Course Outcome Objectives:
1. Analyze communication system performance
2. Troubleshoot communication systems
3. Evaluate communication system design

**Additional instructional resources needed (including library materials, special equipment, and
facilities). Please note: approval does not indicate support for new faculty or additional resources.**
ISET 430 EET 430 courserevisionform 11 04

NEW _____ DROPPED _____ MAJOR REVISION __X__ FOR INFORMATION ONLY_____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date _11-04___

Submitter _____ Chair/Dean _____ Date _____
         Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
> Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College:	College of Technical Sciences
Program Area:	Computer Information Systems
	New - Information Systems Engineering Technology

Date: November 2004

Course pref and no.:	**ISET 435** **(NEW -- suggested number)**
Course title:	Network Routing and Security
Credits:	3

Lecture:	X
Lecture/Lab:	
Gradeable Lab:	
Contact hours lecture:	3
Contact hours lab:	

Required in: **Information Systems Engineering Technology Minor**   **(selective)**
                       Information Systems Engineering Technology B.S – Networking Option

Proposed Course Description (include prerequisites):

> Today's companies need security professionals to protect and maintain their vital information. Security Administration course that builds an understanding of hacking, authentication, encryption, prevention and deterrence, viruses, worms, "Denial of Service" attacks, auditing, and scanning. Students learn to establish solid security policies, implement Intrusion Detection Systems, determine security threats, build deterrence and prevention systems, and audit their network for potential threats.

> Junior/Senior in ISET, completion of **ISET 335 Computer Network Security** or similar operating systems course.

> Knowledge of fundamental system administration procedures on UNIX, Linux, mainframe, or Microsoft Windows operating systems. Knowledge of internetworking fundamentals including IP addressing and subnets.

Course Objectives:

ecurity Basics

Why We Need Security

Hacker Motivations

How to Protect Network Resources

Security Services

Increasing Latency Through Security Mechanisms

Security Policies and Access Control

Risk Factors for Data Security

Authentication Policy and Procedures

Maintaining Data Integrity and Confidentiality

TCP/IP Security

TCP/IP Security Issues

Authenticating TCP/IP

TCP/IP Stack Elements and Security Challenges

IP, UDP, and TCP Header Security

The TCP/IP Stack and Operating System Functionality

Routing Issues and Security

IPv6 Features and Security

Security Componetns

Identifying and Implementing Security Policies

Understanding Audit Trails

Security-Related Organizations, Warning Services, and Certifications

Security Architectures

How to Use Firewalls, Intrusion Detection Systems (IDS), and Scanning Options

Enhanced Logging and Auditing

Perimeter Security

Concepts of Perimeter Security

Proxy-Server-Level Firewall Security

Microsoft Proxy Server

Firewall Implementations

Features of a Packet Filtering Firewall

Features of a Proxy-Based Firewall

Understand Service Redirection, Service Passing, and Gateway Daemons

Application-Level Gateways

Circuit-Level Gateways

Fundamental Firewall Topology

Proxy Services and Data Confidentiality

Proxy Caching in Regards to Performance

The Importance of Securing Routers

Securing Routers and Router Security

Detecting Intruders

Ways to Detect and Deter Internal Hackers

IDS Rules

Intrusion Detection Issues in Hub-Based and Switched Networks

Host-Based (i.e., Log-Based) Intrusion Detection

Implementing Host-Based Intrusion Detection

Implementing Network-Based Intrusion Detection

Distracting Hackers Once You Have Detected them

Incident Response

Define Incident Response
General Steps to Take When Responding to an Incident
The Importance of a Well-Defined Security Policy in Regards to Incident Response
Appropriate Authorities to Contact Regarding Theft of Data and Assorted Attacks
Specific NT And UNIX Security Issues
The NT and UNIX Login Process
Particular Operating System Areas That Hackers Target
Accounts Database Storage Procedures

Auditing

Specific Operating System Areas to Audit
Specific Network Elements to Audit
Specific Ways to Audit a System

Account And Permissions

Key Administrative Accounts, and the Commands Used to Obtain Them
Effective Operating System Policies
Adding and Removing Users in Windows NT and UNIX
User-Level Security Measures in Windows NT and UNIX
Group-Level Security Measures in Windows NT and UNIX
Rights Versus Permissions
Password Aging in Windows NT and UNIX
Restricting Users According to Groups
Understand How to Establish Profiles to Ensure User
Restrict User Access Based on Time
Renaming and Removing Groups in Windows NT
Controlling the Ability for Users to Upgrade Permissions on a Process-Specific Basis Using Groups and/or Scripts

Services And Shares

Locking Down Services for More Effective Security
Operating System Add-ons
Disabling and Removing Unnecessary Services
Controlling Specific Services, Including FTP, Telnet, and HT
Scanning and Protecting Shares
Identifying Specific Operating System Attacks

Tools

Understanding Keyloggers
Using Cracking Programs Such as "John The Ripper" and "L0phtcrack"
Securing Local and Roaming User Profiles
How to Deploy Port Blocking and Monitoring
Specific Attacks on UNIX
Issues Regarding NFS, NIS, and the Rlogin Programs
Modifying the Windows NT Registry for Security
Denying Interactive Login on UNIX and NT Systems
How Tcpwrapper Functions
Deploying and Configuring Md5
Configuring COPS
Utilizing a Host Scanner

Logging And Analysis

Understanding Host-Scanning Logs and View Results
Applying System Patches and Hot Fixes

Conducting Detailed Log Analysis
Logging Daemons for NT, UNIX and Novell, as well as Cisco IOS
Log Analysis Tools
Check System Logs and Identify Specific Threats
Checksum Analysis
Understanding the Auditing Process
Practicality in Auditing
Risk Management Practices
Physical Security Measures
Analyzing Physical Security
Last Issues Regarding Router and Firewall Placement
Identifying Steps to Take to Secure a Web Server
Operating System And Application Specifics
Implementing Network and Vulnerability Scanners
Local and Remote Promiscuous Mode Detection
Denying Service to Networks and System Hosts
Threats and Vulnerabilities
Analyzing Security Policies
Creating Effective Security Through Changing User Habits and the Security Policy Itself
Network and Vulnerability Scanners
Securing Apache Server in Linux
Securing Microsoft IIS Web Server
Configure Server and Daemon Logs
How to Conduct Auditing of Various Operating Systems
Ways to Check for Last Local and Remote Logon in UNIX
Configure Auditing in Windows NT
Conducting Network-Based Auditing
Installing and Configuring SSH as an Alternative to Telnet
Configure SSH Clients
Installation and Configuration of RAS and Microsoft VPN for Internet Communications

New and/or Additional Equipment Required:
New and/or Additional Library Resources Required:
Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):

ISET 435 courserNEWform 11 04

COURSE REVISION FORM

NEW _____ DROPPED _____ MAJOR REVISION __X__ FOR INFORMATION ONLY_____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date 11-04___

Submitter _____ Chair/Dean _____ Date _____
       Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
> Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College:	College of Technical Sciences
Program Area:	Computer Information Systems
	New - Information Systems Engineering Technology
Date:	November 2004

Course pref and no.:	~~CIS 455~~ **ISET 455**
Course title:	E-Commerce Programming
Credits:	3
Lecture:	X
Lecture/Lab:	
Gradeable Lab:	
Contact hours lecture:	3
Contact hours lab:	

Required in: **New - Information Systems Engineering Technology Minor   (selective)**
                           New - Information Systems Engineering Technology B.S – Software Option

Catalog Course Description (include prerequisites):
> This course applies WWW and internet presentation and programming techniques for providing quality information content on internet and in house networks, including dynamic information generation and dissemination through the use of interactive database links, client-server connections, and distributed software architectures. Prerequisites: CIS 110 or equivalent competencies, CIS 115, CIS 155, CIS 171, and CIS-371

Proposed Catalog Course Description (include prerequisites):
> This course applies WWW and internet presentation and programming techniques for providing quality information content on internet and in house networks, including dynamic information generation and dissemination through the use of interactive database links, client-server connections, and distributed software architectures. Prerequisites:, CIS 155, CIS 171

Course Objectives:
> Create a web based application simulating an E-commerce site utilizing a database backend and dynamic web programming front end.
> Install and operate a web server including setup required to operate the dynamic capabilities needed to execute a web program.
> Understand security concerns with e-commerce.

New and/or Additional Equipment Required:
New and/or Additional Library Resources Required:
Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):

ISET 455 courserevisionform 11 04

COURSE REVISION FORM

NEW ____ DROPPED ____ MAJOR REVISION __X__ FOR INFORMATION ONLY____

College _College of Technical Sciences_ Program Area ____CIS/ISET____ Date 11-04___

Submitter _____ Chair/Dean _____ Date _____
        Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College: College of Technical Sciences
Program Area: Computer Information Systems
                      New - Information Systems Engineering Technology

Date: November 2004

Course pref and no.:   ~~CIS 471~~ ISET 471
Course title: Information System Engineering
Credits: 3
Lecture: X
Lecture/Lab:
Gradeable Lab:
Contact hours lecture: 3
Contact hours lab:
Required in: **Information Systems Engineering Technology B.S – Core**
Catalog Course Description (include prerequisites):

This class involves an Intensive analysis, design, and programming project. Covers professional standards of behavior. Prerequisites: CIS 110 or equivalent competencies, CIS 115, CIS 171, CIS 270, CIS 271, and CIS 371

Proposed or New Catalog Description (include all prerequisites)
ISET 471 Information Systems Engineering Technology Capstone Project. Intensive project requiring integration of knowledge and skills learned. This course should be taken in the last semester of attendance and requires completion of most of the student's degree program before entrance.

Course Objectives:
The student will create a project specific to the course of study they are completing.
The student will present their completed project to an audience.
The student will write a professional project report.

N ew and/or Additional Equipment Required:
New and/or Additional Library Resources Required:
Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):
ISET 471 courserevisionform 11 04

COURSE REVISION FORM

NEW _____ DROPPED __X_ MAJOR REVISION _____ FOR INFORMATION ONLY_____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date _11-04___

Submitter _____ Chair/Dean _____ Date _____
       Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

    Changes to CIS courses to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

Department: College of Technical Sciences
Program Area: Computer Information Systems
                (New - Information Systems Engineering Technology)
Date: November 2004
Course pref and no.:   CIS 325   **DROP COURSE**
Course title: Information Resource Management
Credits: 3
Lecture: X
Lecture/lab:
Contract hrs. lecture: 3
Contact hrs. lab:
Required in which programs:

    Computer Information Systems B.S.

    Computer Information Systems Minor

Catalog Course Description (include prerequisites):

    This class will cover information management areas including BPM, collaborative and work-group software, version control software, help desk software and collaborative networking in LAN and WAN environments.

Course Objectives:

    Define what an Information system is.

    Define the strategic role of an information system as: a strategic resource and a competitive weapon.

    Explain the relationship and interactions between IS and organizations.

    Know and explain the ethical and social impact of information systems including: Privacy, freedom, property rights, liability, accountability and control.

    Understand computers and information processing including: hardware and software concepts.

    Know current information management practices including databases, Hypermedia and Object systems.

    Define common telecommunications terms, system functions, components and types of networks.

    Understand enterprise computing and networking as it relates to management.

    Know methods for ensuring IS information quality.

    Understand methods for system implementation.

New and/or Additional Equipment Required:

New and/or Additional Library Resources Required:

Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):

CIS 325 courseDROPform 11 04

COURSE REVISION FORM

NEW _____ DROPPED __X_ MAJOR REVISION _____ FOR INFORMATION ONLY_____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date 11-04___

Submitter _____ Chair/Dean _____ Date _____
Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
Drop CPET courses 201, 260, 301, 410 to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College: College of Technical Sciences
Program Area: Computer Engineering Technology
Date: 06-2002
Course Prefix & No.:   CPET 260

Course Title: Networking I
Credits: 3

Required by:

Selective in:
Elective in:
General Education:

Lecture: X
Lecture/Lab:
Contact hours lecture: 3
Contact hours lab:

Current Catalog Description (include all prerequisites):
Coverage includes the basic concepts of networking including LAN & WAN hardware and software, OSI network model and the protocol services approach to networking.

Course Outcome Objectives:
Understand the OSI model
Define and contrast:
        Local area networks
        Wide area Networks
Network hardware including:
        Routers
        Gateways
        Network interface boards
        Hubs
Understanding hardware standards:
        Network wiring standards (CAT 5/CAT 5e)
        Network topologies

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

CPET 260 courseDROPform 11 04

COURSE REVISION FORM

NEW _____ DROPPED __X_ MAJOR REVISION _____ FOR INFORMATION ONLY_____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date 11-04___

Submitter _____ Chair/Dean _____ Date _____
　　　Signature　　　　　　　　　　　　Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
　　　Drop CPET courses 201, 260, 301, 410 to reflect the change from Computer Information System
　　　& Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College:	College of Technical Sciences
Program Area:	Computer Engineering Technology
Date:	06-2002
Course Prefix & No.:	CPET 301
Course Title:	Discrete Mathematics
Credits:	3
Required by:	Computer Engineering Technology B.S. and A.A.S.

Selective in:
Elective in:
General Education:

Lecture:　　　　　　　　X
Lecture/Lab:
Contact hours lecture: 3
Contact hours lab:

Current Catalog Description (include all prerequisites):
This is an introductory Coarse in mathematics and logical processes used in computer programming and
design. _Course_

Course Outcome Objectives:
Familiarity and the ability to use:
　　　Boolean Algebra including identities and algebraic simplification
　　　Diagramming techniques to illustrate and quantify
　　　Number basen conversions
　　　Binary number systems including 1's complement, 2's complement, and representation
　　　　　of floating point numbers in binary (computer) systems
　　　Tabulation and approximation techniques for generation of Trigonometric and
　　　　　Transcendental functions.

**Additional instructional resources needed (including library materials, special equipment, and
facilities). Please note: approval does not indicate support for new faculty or additional resources.**

CPET 301 courseDROPform 11 04

COURSE REVISION FORM

NEW _____ DROPPED __X_ MAJOR REVISION _____ FOR INFORMATION ONLY_____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date _11-04___

Submitter _____ Chair/Dean _____ Date _____
        Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
Drop CPET courses 201, 260, 301, 410 to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

College: College of Technical Sciences
Program Area: Computer Engineering Technology
Date: 06-2002
Course Prefix & No.: CPET 410

Course Title: Senior Seminar-Computer Systems
Credits: 3

Required by: Computer Engineering Technology B.S. and A.A.S.

Selective in:
Elective in:
General Education:

Lecture: X
Lecture/Lab:
Contact hours lecture: 3
Contact hours lab:

Current Catalog Description (include all prerequisites):
A seminar based course on the current developments and directions in the computer industry. The course will consist of intense research into hardware developments that will affect the 'state of the art' definition of computer systems.

Course Outcome Objectives:
Current developments in:
> *Central Processing Units*
> System expansion bus technology
> Memory organization and interfacing
> Video display adapters, systems and display units
> Basic 'chipset' designs
> Peripheral interfacing
> Network standards
> Hardware/Software interfaces and operating systems.

Additional instructional resources needed (including library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

CPET 410 courseDROPform 11 04

COURSE REVISION FORM

NEW _____ DROPPED __X__ MAJOR REVISION _____ FOR INFORMATION ONLY _____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date _11-04___

Submitter _____ Chair/Dean _____ Date _____
      Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

    Drop EET courses 304, 307, 311, 450 to reflect the change from Computer Information System &
    Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

Department:	College of Technical Sciences
Program Area:	Engineering Technology: Electronics Engineering Technology
Date:	February 1998

Course pref and no.:	EET 304
Course title:	Network Circuit Analysis
Credits:	3

Required by: Engineering Technology: Electronics Engineering Technology B.S., No Minor Required
Selective In:
Elective In:
General Education:

Lecture:
Lecture/Lab:
Contact Hrs. Lecture: 3 hrs/wk
Contract Hrs. Lab: 0 hrs/wk

Catalog Course Description (include prerequisites):

    A study of DC and AC circuits using mesh and nodal analysis, source free RL and RC, RLC circuits, unit
    step forcing function, sinusoidal forcing function, phasors, sinusoidal steady state response, complex
    frequency, frequency response, Fourier analysis, Fourier transforms, and LaPlace transforms.
    Prerequisite: EET 204 and MATH 133.

Course Objectives:

    The course objective will include, the use of computer circuit simulation to aid analysis. The student
    edition of PSpice, as well as some shareware packages will be utilized.

New and/or Additional Equipment Required:
New and/or Additional Library Resources Required:
Special Facility Needs Required: (laboratory space, specialized labs, rooms to facilitate large groups, computer labs):

EET 304 courseDROPform 11 04

COURSE REVISION FORM

NEW _____ DROPPED __X_ MAJOR REVISION _____ FOR INFORMATION ONLY_____

College _College of Technical Sciences_ Program Area _____CIS/ISET_____ Date _11-04___

Submitter _____ Chair/Dean _____ Date _____
                     Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
    Drop EET courses 304, 307, 311, 450 to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

Department: College of Technical Sciences
Program Area: Engineering Technology: Electronics Engineering Technology
Date: February 1998

Course pref and no.:   EET 307
Course title: Communications Circuits
Credits: 4
Required by: Engineering Technology: Electronics Engineering Technology B.S., No Minor
Required
Selective in:
Elective in:
General Educ:

Lecture:
Lecture/lab: X
Contract hrs. lecture: 3
Contact hrs. lab: 2

Current/proposed Catalog Description (Include all prerequisites:)
    This course provides a study of electronic telecommunication circuits which includes communications techniques, digital communication theory, circuits, and transmission and network communications.
    Prerequisite: EET 205 **Course Fee: $10.00**

Course Outcome Objectives:
    Topical Outline:
        Frequency Conversion
        Receiver noise, sensitivity and dynamic range relationships
        frequency synthesis
        direct digital synthesis
        Alpha-numeric codes
        pulse-code modulation
        PCM quantization effects
        delta modulation
        digital signal encoding formats
        telemetry
        cellular telephone

New instructional Resources needed (including: library materials, special equipment, and facilities).
Please note: approval does not indicate support for new faculty or additional resources.

EET 307 courseDROPform 11 04

COURSE REVISION FORM

NEW _____ DROPPED __X__ MAJOR REVISION _____ FOR INFORMATION ONLY _____

College _College of Technicial Sciences_ Program Area _____CIS/ISET_____ Date _11-04_

Submitter _____ Chair/Dean _____ Date _____
        Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):

Drop EET courses 304, 307, 311, 450 to reflect the change from Computer Information System & Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

Department: College of Technical Sciences
Program Area: Engineering Technology: Electronics Engineering Technology
Date: February 1998

Course pref and no.: EET 311
Course title: Analog IC's
Credits: 4

Required by: Engineering Technology: Electronics Engineering Technology B.S., No Minor Required

Selective in:
Elective in:
General Educ:
Lecture:
Lecture/lab: X
Contract hrs. lecture: 2
Contact hrs. lab: 4

Current/proposed Catalog Description (Include all prerequisites:)

This course provides a study of integrated circuits in the applications of voltage amplifiers, Norton amplifiers, instrumentation amplifiers, voltage and current regulation, active filters and phase locked loops. **Course Fees: $6.00**

Course Outcome Objectives:

On completion the student will have demonstrated the ability to:
1. explain the operation of amplifier circuits
2. explain the operation of filter circuits
3. explain the operation of voltage regulator circuits
4. explain the operation of a phase locked loop
5. perform laboratory experiments to verify theoretical concepts

New instructional Resources needed (including: library materials, special equipment, and facilities). Please note: approval does not indicate support for new faculty or additional resources.

EET 311 courseDROPform 11 04

COURSE REVISION FORM

NEW ___ DROPPED __X_ MAJOR REVISION ___ FOR INFORMATION ONLY ___

College _College of Technical Sciences_ Program Area ____ CIS/ISET ____ Date 11-04 ___

Submitter _____ Chair/Dean _____ Date _____
          Signature   Signature (indicates "college" level approval)

Please provide a brief explanation & rationale for the proposed revision(s):
      Drop EET courses 304, 307, 311, 450 to reflect the change from Computer Information System &
      Computer Engineering Technology to Information Systems Engineering Technology

Please provide the following information:

Department: College of Technical Sciences
Program Area: Engineering Technology: Electronics Engineering Technology
Date: February 1998

Course pref and no.: EET 450
Course title: Advanced Digital Systems
Credits: 3

Required by: Engineering Technology: Electronics Engineering Technology, B.S.
Selective in:
Elective in:
General Educ:

Lecture:
Lecture/lab: X
Contract hrs. lecture: 3
Contact hrs. lab: 0

Current/proposed Catalog Description (Include all prerequisites:)
      This course provides an advanced study of selected digital systems. Topics include mass storage devices,
      memory systems, bus architecture, and local area networks. **Course Fee: $12.00**

Course Outcome Objectives:
      1.   Explain the selection & operation of mass storage devices
      2.   Install & troubleshoot local area networks
      3.   Compare & control the architecture of selected systems

New instructional Resources needed (including: library materials, special equipment, and facilities).
Please note: approval does not indicate support for new faculty or additional resources.

EET 450 courseDROP form 11 04