

Computer Information Systems

Taylorville Redwood Campus, BB 109, (801) 957-5150
General Information, (801) 957-5150
Academic Advisor, BB 132A, (801) 957-4990
www.slcc.edu/cis

Department Chair: Kim Cosby
Professors: Jimmy Chen, Gordon Frisbey, Susumu Kasai, Lorna Wells, Bruce Worthen
Associate Professors: Paul Anstall, Robert Baird, Randy Koziatek, Philip Nielson
Assistant Professor: Edward Walsh
Instructor: Dan Pope

THE PROGRAM

The Computer Information Systems Associate of Applied Science program prepares students for professional careers in the information systems field as program designers, programmer/analysts or systems analysts. Graduates perform detailed program design, coding, testing, documentation and implementation of commercially oriented information systems. The program develops a student's ability to conceptualize, design and implement information systems.

The Department offers the following:

- Associate of Science transfer degree
- Associate of Applied Science Degree in Computer Information Systems with emphasis in Computer Programming and Design
- Associate of Applied Science Degree in Computer Information Systems with emphasis in Web Programming and Development
- Associate of Applied Science Degree in Computer Information Systems with emphasis in Database Design, Management and Administration.
- Certificate of Completion in Business and Personal Computing.

The Computer Information Systems associate degree programs are accredited by the Association of Collegiate Business Schools and Programs (ACBSP). This accreditation represents the achievement of meeting the high national standards established for associate degree granting business programs.

General Education and elective courses provide training in oral and written communication and human relations skills. COMM 1010 is taught using group and team activities in the learning process to develop the student's interactive skills and to build human values and ethics.

These programs prepare students for professional careers in the information systems field as program designers, programmer/analysts or systems analysts. Graduates perform detailed program design, coding, testing, documentation and implementation of commercially-oriented information systems. The program develops a student's ability to conceptualize, design and implement information systems. Job opportunities include:

- Computer and information systems managers
- Computer programmers
- Computer software engineers
- Computer support specialists
- Computer systems analysts

- Database administrators
- Database designers
- Market research analysts
- Network and computer systems administrators
- Network systems and data communications analysts
- Web programmer and developers

TRANSFER INFORMATION

The Computer Information Systems Associate of Science degree prepares students for transfer to all four-year institutions. In addition, students transferring to Weber State University Computer Science Bachelor's degree program can take courses offered evenings at SLCC through the University Center. For further information contact the University Center at (801) 957-4990.

Preparing for transfer requires advance research and planning by students. Please contact the School of Business Academic Advisor, (801) 957-4323.

GRADE REQUIREMENT

*In this program, students must complete CIS 1030 and CIS 1130 with a 3.0 grade or higher. In addition, students must maintain a 2.5 cumulative grade point average in all CIS courses. Students who do not maintain a 2.5 cumulative grade point average may not continue in the program without approval of the Division Chair. Grades less than 2.0 will not be credited toward graduation. Success highly depends upon students being able to type at least 35 words per minute. It is recommended that CIS students who need improvement take appropriate keyboarding and skill building courses.

CERTIFICATION

To be successful in the computer industry students need broad, foundational problem solving skills provided by academic degrees that give breadth of knowledge to obtain employment as well as preparation for certification exams. Industry certifications are a very positive development in the computer field, but are intended to be a supplement to academic training, not a substitute for it. Many certification tests assume students have significant computer experience and are intended only to offer an in-depth examination of a specific version of software.

PREPARATION NOTE

Students who need to take preparatory classes to meet the requirements of first semester courses should plan on extra time to complete a certificate or degree. The classes designed to assist students in reaching the skill level necessary to enter the certificate and degree programs are WRTG 0990 (College Preparatory Writing), and MATH 1010 (Intermediate Algebra) Placement testing will be done upon entry to the College unless students have had prior college-level experience.

PREREQUISITES

It is the student's responsibility to examine each course description for details of prerequisite classes. Those prerequisites must be satisfied before the designated class may be taken. Students without prerequisite class skills are at a disadvantage and may be required to repeat the course after satisfying the prerequisites.

Students who wish to take the CIS 1020 Computer Essentials challenge exam are advised to review information at www.slcc.edu/cis. An 80% or higher is required on each section of the test. Once an exam is passed a P is posted to the transcript and credit is awarded.

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ELECTIVE OPTIONS

Cooperative Education is the College's program for recognizing and rewarding new learning associated with study-related employment in a business, industrial or government work environment. Credit earned from CIS 2000 is applied toward graduation requirements as CIS elective credit. CIS major and sophomore standing are requirements for Cooperative Education in the CIS department.

The Department strongly recommends that students enhance their employment opportunities through Cooperative Education as soon as skills permit, to complement the certificate or degree. Contact CO-OP Office at (801) 957-4014.

CLASS AVAILABILITY

The semester in which courses are taught is listed below. Students should check the semester class schedule for day/evening availability and modifications caused by varying enrollment.

COMPLETING THE LISTED REQUIREMENTS BELOW RESULTS IN RECEIVING AN ASSOCIATE OF SCIENCE TRANSFER DEGREE*

(minimum 62 hours required)

The Computer Information Systems Associate of Science Degree prepares students for transfer to a four-year institution in Information Systems, Computer Science, or related fields. Graduates are trained in a broad range of skills in information systems to prepare a student for transfer for further study towards a bachelor or other advanced degrees.

TRANSFER INFORMATION

The AS degree is designed to transfer to all four-year institutions. Preparing for a smooth transition to a four-year college or university requires advance research and planning by students. Requirements for four-year universities and colleges are subject to change; ongoing planning is essential. A course articulation exists with Weber State University Computer Science Department. This program is offered in the evening at SLCC through the University Center. Two tracks offered include: Computer and Network Security

SOFTWARE ENGINEERING

Transfer requirements are available at the University Center in the Construction Trade Building Room 272, or in the Student Center Room 240 in the Transfer Center files.

GENERAL EDUCATION REQUIREMENTS

COURSE	CR	SEM	PREREQUISITES
CORE SKILLS COMPOSITION			
ENGL 1010 Intro To Writing	3	A	pre-test
ENGL 2010 Interm Writing	3	A	ENGL 1010 w/C or better
QUANTITATIVE LITERACY			
*MATH 1210 1060	Calculus I	4	A MATH w/C or better or appropriate CPT score
*MATH 1220 or 1040 for Weber State University Transfer.			
AMERICAN INSTITUTIONS (3 CREDITS)			
ECON 1740 Econ Hist of US	3	A	RDG 0990 w/C or better or appropriate placement

OR

HIST 1700 Amer Civilization	3	A	RDG 0990 w/C or better or appropriate placement
OR			
POLS 1100 US Gov & Politics	3	A	RDG 0990 w/C or better or appropriate placement

INSTITUTIONAL REQUIREMENTS

LIFELONG WELLNESS

HLAC _____	1	A	none
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STUDENT CHOICE (3 CREDITS)

COMM 1010 is required for Weber State University.

COMPUTER LITERACY

DISTRIBUTION AREAS

Choose one course (three credit hours) from each of the following distribution areas. One of the courses must also be a Diversity course (DV).

Biological Science (BS)	3-4	A	RDG 0900 w/C or better
Fine Arts (FA)	3	A	none
Humanities (HU)	3	A	none
Interdisciplinary (ID)	3	A	none
Physical Science (PS)	3	A	none
Social Science (SS)	3	A	none

Interdisciplinary except CIS 1430.

See pp. 23-27 for options in each of these categories.

MAJOR COURSE REQUIREMENTS

COURSE	CR	SEM	PREREQUISITES
*CIS 1030 Obj-Oriented Pro I	3	F, Sp	CIS 1020 or concurrent
*CIS 1130 Obj-Oriented Pro II	3	F, Sp	CIS 1030
CIS 1135 Obj-Ori Analy/Dsgn	3	F, Sp	CIS 1130 or concurrent
CIS 1430 Intern/HTML Fndtls	3	F	CIS 1020 or competency
CIS 2150 Comp Organization	3	F, Sp	CIS 1030 and CIS 1130 or concurrent
CIS 2350 UNIX/Linux	3	F, Sp	CIS 1020 or comp
or			
CIS 2730 C++Prog. w/Objects	3	F, Sp	CIS 1135
CIS 2420 Ntwk Hard Conf	3	F	CIS 1430
CIS 2430 Web Programming	3	F, Sp	CIS 1430
CIS 2600 Fund of DB Mgmt	3	F, Sp	CIS 1030 or concurrent

*CIS 1030 and CIS 1130 must be completed with a B grade or better.

ADDITIONAL TRANSFER REQUIREMENTS

In order to transfer to WSU upper division coursework, additional courses are required beyond the AS degree; they can be taken at SLCC prior to transferring to the WSU program. The 2 tracks are Network Security and Administration and Software Engineering.

COURSE	CR	SEM	PREREQUISITES
CS 2450 Software Engineering	3	A	CIS 1135 & CIS 2730 or
CS 2430 Discrete Structures	3	Sp	CIS 2350 CIS 1135 & CIS 2730 or
MATH 1210 Calculus I	3	A	CIS 2350 MATH 1060 w/C or better
MATH 1040 Statistics	3	A	MATH 1010 w/C or better
or			
MATH 1220 Calculus II	3	A	MATH 1210 w/C or better

NOTE: Admission into a major program at a transfer institution depends upon the receiving institution's requirements for that major. Some major programs are restricted and require special application as well as a competitive GPA. See an Academic Advisor at both SLCC and the intended receiving institution for specific articulation information.

SAMPLE SCHEDULE			
FALL SEMESTER		SPRING SEMESTER	
CIS 1030	3	CIS 1130	3
CIS 1430	3	CIS 1135	3
ENGL 1010	3	CIS 2430	3
STUDENT CHOICE	3	ENGL 2010	3
DISTRIBUTION	6	MATH 1210	4
TOTAL	18	TOTAL	16
2ND FALL SEMESTER		2ND SPRING SEMESTER	
CIS 2420	3	CIS 2150	3
CIS 2600	3	CIS 2350	3
HLAC	1	or	
DISTRIBUTION	3-4	CIS 2730	3
AMERICAN INST	3	DIST	9
TOTAL	13-14	TOTAL	15

ASSOCIATE OF APPLIED SCIENCE^{CTE} DEGREE IN COMPUTER INFORMATION SYSTEMS/COMPUTER PROGRAMMING AND DESIGN EMPHASIS

(minimum 66 hours required)

This emphasis is for professional careers in the information systems field. Opportunities include positions such as programmers, program designers, programmer/analysts or system analysts. Graduates are trained to perform detailed program designing, coding, testing, documentation and implementation of commercially oriented information systems.

GENERAL EDUCATION REQUIREMENTS

COURSE	CR	SEM	PREREQUISITES
CORE SKILLS			
COMPOSITION			
ENGL 2100 Technical Wrtng	3	A	ENGL 1010 w/C or better
QUANTITATIVE STUDIES			
MATH 1050 College Algebra	4	A	MATH 1010 w/C or better or appropriate CPT score
OR			
MATH 1090 College Alg Bus	3	A	MATH 1010 w/C or better or appropriate CPT score
COMMUNICATION			
COMM 1010 Elem of Eff Comm	3	A	none
HUMAN RELATIONS			
MKTG 1010 Customer Serv	2	A	none

DISTRIBUTION AREAS

Choose an additional six credit hours from at least two of the following distribution areas:

Biological Science (BS)	3-4	A	RDG 0900 w/C or better
Fine Arts (FA)	3	A	none
Humanities (HU)	3	A	none
*Interdisciplinary (ID)	3	A	none
Physical Science (PS)	3	A	none
Social Science (SS)	3	A	none

*Except CIS 1430.

See pp. 23-27 for options in each of these categories.

MAJOR COURSE REQUIREMENTS

COURSE	CR	SEM	PREREQUISITES
BUS 2200 Bus Communications	3	A	ENGL 1010 w/C or better
*CIS 1030 Obj-Oriented Pro I	3	F, Sp	CIS 1020 or concurrent
*CIS 1130 Obj-Oriented Pro II	3	F, Sp	CIS 1030
CIS 1135 Obj-Ori Analy/Dsgn	3	F, Sp	CIS 1130 or concurrent
CIS 1430 Intern/HTML Fndtls	3	F	CIS 1020 or competency
CIS 1520 Operating Systems	3	F, Sp	CIS 1020 or competency

CIS 2150 Comp Organization	3	F, Sp	CIS 1030 and CIS 1130 or concurrent
CIS 2600 Fund of DB Mgmt	3	F, Sp	CIS 1030 or concurrent
CIS 2730 C++ Prog w/Objs	3	F, Sp	CIS 1135 or concurrent
CIS 2760 Java I	3	F, Sp	CIS 1135 or Concurrent
CIS 2800 Bus Sys Design	3	F, Sp	CIS 2600, and CIS 2760 or CIS 2730

*CIS 1030 and CIS 1130 must be completed with a B grade or better.

ELECTIVES (15 CREDITS)

ACCT 1110 Financial Acct I	3	A	none
CIS 2000 CO-OP	2-4	A	instructor's approval
CIS 2010 BusCompProf DBase	3	F, Sp	CIS 1020 or comp
CIS 2350 UNIX/Linux	3	F, Sp	CIS 1020 or comp
CIS 2410 Adv Sprdst App	3	Sp	CIS 1020 or comp
CIS 2420 Ntwk Hard Conf	3	Sp, F	CIS 1430
CIS 2430 Web Programming	3	Sp	CIS 1430
CIS 2460 Ntwk Mgmt	3	Sp	CIS 1520
CIS 2550 Data Base Prog	3	F, Sp	CIS 1030, CIS 2010
CIS 2650 ORACLE	3	Sp	CIS 2010
CIS 2735 Win App Prog	3	F, Sp	CIS 2730
CIS 2770 Java II	3	F, Sp	CIS 2760
CIS 2990 Current Topics	1-3	F, Sp	instructor's approval
FIN 1380 Financial Math	3	A	MATH 0990 or CPT
MKTG 1030 Intro to Mktg	3	A	none
MKTG 1050 Consumerism (ID)	3	A	none

SAMPLE SCHEDULE			
FALL SEMESTER		SPRING SEMESTER	
CIS 1520	3	CIS 1130	3
CIS 1030	3	CIS 1135	3
CIS 1430	3	CIS ELECTIVE	3
CIS ELECTIVES	3	COMM 1010	3
MATH 1050	3	DISTRIBUTION	6
OR		TOTAL	15-16
MATH 1090	3-4		
TOTAL	17		
2ND FALL SEMESTER		2ND SPRING SEMESTER	
CIS 2600	3	BUS 2200	3
CIS 2760	3	CIS 2150	3
CIS ELECTIVES	6	CIS 2730	3
MKTG 1010	2	CIS 2800	3
ENGL 2100	3	CIS ELECTIVE	3
TOTAL	17	TOTAL	15

ASSOCIATE OF APPLIED SCIENCE^{CTE} DEGREE IN COMPUTER INFORMATION SYSTEMS WEB/PROGRAMMING AND DEVELOPMENT EMPHASIS

(minimum 63 hours required)

This emphasis is for professional careers in the Web Programming and Development area of the information systems field. Work titles include web programmer, web designer and web engineer. Fundamentals of business as well as technical skills are emphasized, in order to utilize Web Programming and Development effectively in a business environment. The "business to consumer" and "business to business" paradigms are explored. Graduates are trained in the technical aspects of website management, preparation, development and implementation.

GENERAL EDUCATION REQUIREMENTS

COURSE	CR	SEM	PREREQUISITES
CORE SKILLS			
COMPOSITION			
ENGL 1010 Intro to Wrtng	3	A	pre-test

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QUANTITATIVE STUDIES

MATH 1010 Intrmd Algebra 4 A MATH 0990 w/C or better or appropriate CPT score

OR

FIN 1380 Financial Math 3 A MATH 0990 w/C or better or appropriate CPT score

COMMUNICATION

COMM 1010 Elem of Eff Comm 3 A none

HUMAN RELATIONS

MKTG 1010 Customer Serv 2 A none

OR

MKTG 1960 Profsnlsm in Bus 3 A none

DISTRIBUTION AREAS

Choose an additional six credit hours from at least two of the following distribution areas:

Biological Science (BS)	3-4	A	RDG 0900 w/C or better
Fine Arts (FA)	3	A	none
Humanities (HU)	3	A	none
Interdisciplinary (ID)	3	A	none
Physical Science (PS)	3	A	none
Social Science (SS)	3	A	none

Interdisciplinary: Recommend BUS 1050.

Social Sciences: Recommend ECON 1010.

See General Education section for options in each of these categories.

MAJOR COURSE REQUIREMENTS

COURSE	CR	SEM	PREREQUISITES
ACCT 1110 Financial Acct I	3	A	none
ART 1800 Digital Media Essentials	4	A	none
ART 1810 Intern Photshp/Multimed	2	A	ART 1800
*CIS 1030 Obj-Oriented Pro I	3	F, Sp	CIS 1020 or comp
*CIS 1130 Obj-Oriented Pro II	3	F, Sp	CIS 1030
CIS 1430 Intern/HTML Fndtls	3	F	CIS 1020 or competency
CIS 1555 SQL Programming	3	F, Sp	CIS 1020 1055 or comp or concurrent
CIS 2150 Computer Organization	3	F, Sp	CIS 1130
CIS 2350 UNIX/Linux	3	F, Sp	CIS 1020 or comp
CIS 2420 Ntwk Hard Conf	3	Sp, F	CIS 1430
CIS 2430 Web Programming	3	Sp	CIS 2420
CIS 2470 JSP, Java Servlets	3	F, Sp	concurrent w/CIS 1135
MGT 1100 Small Business Mgmt	3	A	CIS 2430 and CIS 1030
			none

ELECTIVES (8 CREDITS)

CIS 1055 Database Design & Proc	3	F, Sp	CIS 1020
CIS 1135 Obj-Orntd Anlys/Design	3	A	CIS 1130
CIS 1520 Operating Systems	3	A	none
CIS 2600 Fund of Database Mgt	3	A	CIS 1030
CIS 2650 Oracle	3	F, Sp	CIS 2010
CIS 2990 Special Topics	1-3	A	none
ART 2140 Advanced Photoshop	2	A	ART 1360 or ART 1810 or ART 2340

2340

ART 2610 Multimedia Authoring 2 A ART 2440

*CIS 1030 and CIS 1130 must be completed with a B or better.

SAMPLE SCHEDULE

FALL SEMESTER		SPRING SEMESTER	
ACCT 1110	3	CIS 1130	3
CIS 1030	3	CIS 2430	3
CIS 1430	3	ART 1800	3
CIS 1555	3	COMM 1010	3
MATH 1010	4	MKTG 1960	3
OR		OR	
FIN 1380	3	MKTG 1010	2
TOTAL	15-16	TOTAL	14-15
2ND FALL SEMESTER		2ND SPRING SEMESTER	
CIS 2350	3	MGT 1100	3
CIS 2420	3	ELECT	5
CIS 2470	3	ENGL 1010	3
ART 1810	2	CIS 2150	3
ELECT	3	DISTRIBUTION	3
DISTRIBUTION	3	TOTAL	17
TOTAL	17		

ASSOCIATE OF APPLIED SCIENCE^{CTE} DEGREE IN COMPUTER INFORMATION SYSTEMS/DATABASE DESIGN, MANAGEMENT & ADMINISTRATION EMPHASIS

(minimum 63 hours required)

The program provides academic and technical training necessary for students to gain entry-level positions in database analysis, design, and application development in both private and public organizations where daily business operations relies significantly on database management systems.

Information Management is relevant to every organization (public, private, for profit, non-profit, small business, large businesses). This program trains individuals with the skills needed to manage this information. Database managers and administrators are in short supply and in high-demand. This is a dynamic, changing field. Individuals would be required to develop databases, analyze them, and extract relevant data which would be required to allow businesses to be viable.

GENERAL EDUCATION REQUIREMENTS

COURSE	CR	SEM	PREREQUISITES
CORE SKILLS COMPOSITION			
ENGL 1010 Intro to Writing	3	A	pre-test
QUANTITATIVE STUDIES			
MATH 1010 Intern Algebra	4	A	MATH 0990 w/C or better or appropriate CPT score
OR			
FIN 1380 Financial Math	3	A	MATH 0970 w/C or better or appropriate CPT score
COMMUNICATION			
COMM 1010 Elem of Eff Comm	3	A	none
HUMAN RELATIONS			
MKTG 1960 Profess in Bus	3	A	none

DISTRIBUTION AREAS

Choose an additional six credit hours from at least two of the following distribution areas:

Biological Science (BS)	3-4	A	RDG 0900 w/C or better
Fine Arts (FA)	3	A	none
Humanities (HU)	3	A	none
*Interdisciplinary (ID)	3	A	none
Physical Science (PS)	3	A	none
Social Science (SS)	3	A	none

*Except CIS 1430.

See General Education section for options in each of these categories.

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MAJOR COURSE REQUIREMENTS

COURSE	CR	SEM	PREREQUISITES
CIS 1030 Obj-Oriented Pro I	3	F, Sp	CIS 1020 or concurrent
CIS 1055 Fund of DB Design	3	A	CIS 1020 or comp
CIS 1430 Intern/HTML Fndtls	3	F	CIS 1020 or competency
CIS 1555 SQL Programming concurrent	3	F, Sp	CIS 1055 or
CIS 2010 BusCompProf DBase	3	A	CIS 1020 or comp or Challenge exam
CIS 2350 UNIX/Linux	3	F, Sp	CIS 1020 or comp
CIS 2410 Adv Sprdst App	3	Sp	CIS 1020 or comp or Challenge exam
CIS 2430 Web Programming	3	Sp	CIS 2420
CIS 2550 Data Base Prog	3	F, Sp	CIS 1030, CIS 2010
CIS 2600 Fund. Datab. Mgmt	3	F, Sp	CIS 1030 or concurrent
CIS 2650 Oracle Datab. Dev.	3	F, Sp	CIS 1555
MKTG 1010 Cust Serv Tech	2	A	none
ENGL 2100 Tech Writing	3	A	ENGL 1010 w/C or better
____ Electives	7		

*CIS 1030 and CIS 1130 must be completed with a B grade or better.

ELECTIVES (7 CREDITS)

ACCT 1110 Financial Acct I	3	A	none
BUS 2200 Bus Communications	3	A	ENGL 1010 w/C or better
CIS 1520 Operating Systems	3	F, Sp	CIS 1020 or comp
CIS 1900 Special Projects	1	F, Sp	none
CIS 2000 CO-OP	2-4	A	approval
CIS 2420 Net Hard Con	3	F, Sp	CIS 1430
CIS 2990 Current Topics	1-3	F, Sp	approval
FIN 1380 Financial Math	3	A	MATH 0990 or CPT
MKTG 1030 Intro to Mktg	3	A	none
MKTG 1050 Consumerism (ID)	3	A	none

SAMPLE SCHEDULE

FALL SEMESTER		SPRING SEMESTER	
CIS 1030	3	CIS 1555	3
CIS 1055	3	CIS 1430	3
CIS 2010	3	COMM 1010	3
ENGL 1010	3	MKTG 1960	3
MATH 1010	4	ENGL 2100	3
OR		ELEC	3
FIN 1380	3	TOTAL	18
TOTAL	15-16		
2ND FALL SEMESTER		2ND SPRING SEMESTER	
CIS 2600	3	CIS 2350	3
CIS 2550	3	CIS 2410	3
MKTG 1010	2	CIS 2430	3
DIST	6	CIS 2650	3
TOTAL	14	ELECTIVES	4
		TOTAL	16

CERTIFICATE OF COMPLETION/CTE BUSINESS & PERSONAL COMPUTING

(minimum 33 hours required)

This Certificate of Completion provides students foundational and necessary skills in Business and Personal Computing. Upon completion of the program, students will learn the skills necessary to manage their own personal computing needs as well as some of the fundamental skills necessary in business.

MAJOR COURSE REQUIREMENTS

COURSE	CR	SEM	PREREQUISITES
*CIS 1070 Living in a Digital World	3	F, Sp	none
CIS 1430 Intern/HTML ttt	3	F	CIS 1020 or competency
CIS 1520 Operating Systems	3	F, Sp	CIS 1020 or comp
CIS 2010 BusCompProf DBase	3	F, Sp	CIS 1020 or comp or Challenge Exam
CIS 2410 Adv Sprdst App	3	Sp	CIS 1020 or comp
BUS 1050 Foundations of Business	3	F, Sp	Concur w/ENGL 1010
FIN 1050 Personal Finance	3	F, Sp	
CS 1030 Connected Computing	3	F, Sp	

CHOOSE ONE OF THE FOLLOWING

CS 1031 Open Srce Windows Dsktp	1	F, Sp	CS 1030 concurrent
CS 1032 Open Srce Linux Desktop	1	F, Sp	CS 1030 concurrent
CS 1033 Open Srce Mac Desktop	1	F, Sp	CS 1030 concurrent

SAMPLE SCHEDULE

FALL SEMESTER		SPRING SEMESTER	
CIS 1070	3	BUS 1050	3
CIS 1430	3	CIS 2010	3
CIS 1520	3	CIS 2410	3
FIN 1050	3	FIN 1380	1
ENGL 1010	3	CS 1030	3
MKTG 1010	2	CS (31, 32, or 33)	1
TOTAL	17	TOTAL	16