LA SIERRA UNIVERSITY

INFORMATION SYSTEMS

B.S. Degree

Approved by Department. Last updated 7/1/09

2009-2010 CURRICULUM CHECK SHEET is a guide to the requirements of this major. **It is NOT necessary to take these courses in the order given**. Please consult the online Bulletin for specific details (http://www.lasierra.edu/academics/bulletin).

		FALL	WINTER	SPRING
FIRST YEAR	* Introduction to Computer Science (CPTG 121, 122)(8 units)	_____	_____	_____
	* Data Structures (CPTG 244)(4 units)	_____	_____	_____
	* Calculus I (MATH 131)(4 units)			
	Calculus prerequisite satisifies Math Foundational Studies Requirement	_____	_____	_____
	First Year Seminar (UNST 101/100)(2-6 units)	_____	_____	_____
	College Writing (ENGL 111, 112, 113)(9 units) OR (ENGL 124)(4 units)	_____	_____	_____
	Lifetime Fitness (PEAC 120)(2 units)	_____	_____	_____
	Theme IC: Globalization, Identity, & Citizenship. *Choose 1 course from:* SSCI 104, 105, 106, 107 (4 units)	_____	_____	_____
	Theme III: Religious Beliefs & Practice (4 units)	_____	_____	_____
	Electives	_____	_____	_____
SECOND YEAR	* File Processing (CPTG 226)(4 units)	_____	_____	_____
	* Computer Organization and Assembly Language Programming (CPTG 245)(4 units)	_____	_____	_____
	** Financial & Managerial Accounting (ACCT 211, 212)(8 units)	_____	_____	_____
	** Principles of Economics (ECON 254, 255)(8 units) *Meets Theme IA*	_____	_____	_____
	World Language Foundational Requirement *(Proficiency through 153)*	_____	_____	_____
	Theme IIC: Exploring American Culture. *Choose 1 course from:* HUMN 204, 205 (4 units)	_____	_____	_____
	Theme III: Religious Beliefs & Practice (4 units)	_____	_____	_____
	Electives	_____	_____	_____
THIRD YEAR	* Programming Languages (CPTG 324)(4 units)	_____	_____	_____
	* Mathematics Seminar (MATH 485) OR Computing Seminar (CPTG 485) [2 units required](1 unit)	_____	_____	_____
	** Statistics (MATH 155 OR BUAD 341)(4 units)	_____	_____	_____
	** Operations & Research Methods (BUAD 444)(4 units)	_____	_____	_____
	Upper Division Rhetorical Course (requirement met by CPTG 334 and 455)(8 units)	_____	_____	_____
	Theme IIA: History & Appreciation of Arts (4 units)	_____	_____	_____
	Theme IIB: Historical or Contemporary Culture & Context (4 units)	_____	_____	_____
	Theme III: Religious Beliefs & Practice (4 units) *Choose 1 course from*: (RLGN 304, 305)(4 units)	_____	_____	_____
	Theme IVA: Life Science (4 units)	_____	_____	_____
FOURTH YEAR	* Systems Analysis (CPTG 334)(4 units)	_____	_____	_____
	* Database Design and Management (CPTG 424)(4 units)	_____	_____	_____
	* Computer Architecture (CPTG 445)(4 units)	_____	_____	_____
	* Mathematics Seminar (MATH 485) OR Computer Science Seminar (CPTG 485)(.5 unit) [2 units required]	_____	_____	_____
	* Major Electives: 12 remaining units of Upper Division (12 units) Mathematics or Computer Science courses	_____	_____	_____
	** Management & Organizational Behavior (MGMT 304)(4 units)	_____	_____	_____
	** Human Resource Management (MGMT 356)(4 units)	_____	_____	_____
	Theme III: Religious Beliefs and Practice (4 units) *Must be in Scripture, Theme IIIC, unless previously taken*			
	Theme IVB: Physical Science (4 units)	_____	_____	_____
	Theme IVC: Scientific Foundations: *Choose 1 course from:* NSCI 404, 405, 406, 407 (4 units)	_____	_____	_____
	Theme V: Religious, Moral & Social Aspects of Math & Computing (UNST 404T)(4 units)	_____	_____	_____

* Major Requirements (54 units)

** Cognate Requirements

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B.S. Degree

The department provides a curriculum in mathematics and computing sciences as a cultural study for all liberal arts students, as a basic tool for the scientist, and as a preparation for graduate study and teaching.

CAREER OPPORTUNITIES AND RELATED OCCUPATIONS: Information Systems graduates may find jobs in almost any major industry or business occupation. Such persons may become involved in data processing or systems analysis and in computer hardware and software evaluation, implementation or design. Systems analysts must be able to think logically.

EDUCATIONAL QUALIFICATIONS: A Bachelor's degree is sufficient for entry level technical jobs and some systems analysis jobs. However, many professionals find an advanced degree facilitates advancement in research and development and is essential for the growing demand in academia.

JOB OUTLOOK: Employment of computer systems analysts is expected to grow much faster than the average for all occupations through the year 2014 as organizations continue to adopt and integrate increasingly sophisticated technologies. Job increases will be driven by very rapid growth in computer system design and related services, which is projected to be among the fastest-growing industries in the U.S. economy. In addition, many job openings will arise annually from the need to replace workers who move into managerial positions or other occupations or who leave the labor force.

ENTERING SALARY: The National Association of Colleges and Employers for Spring 2008 reports that the national entering wage level average for those with a Bachelor's degree in Information Sciences and Systems was **$62,830** per year.

SOURCES OF ADDITIONAL INFORMATION

Websites:

La Sierra University
http://www.lasierra.edu/

Computer Science
www.lasierra.edu/departments/cs/

Department Contacts:

Chairperson:
Jon Vanderwerff, Ph.D.

Advisors:
Wilton Clarke, Ph.D.
Vernon Howe, Ph.D.
Enoch Hwang, Ph.D.

Location:
Price Science Complex, Rm 247
951-785-2197

Professional Organizations:

Assoc. for Computing Machinery (ACM)
1515 Broadway
New York, NY 10036
http://www.acm.org

Data Processing Management Assoc.
505 Busse Highway
Park Ridge, IL 60068

Institute of Electrical and Electronics Engineers-United States of America
1828 L Street, NW., Suite 1202
Washington, D.C. 20036
http://www.ieee.org

Institute for Certification of Computing Professionals (ICCP)
2200 East Devon Ave., Suite 268
Des Plaines, IL 60018
http://www.iccp.org

Academic Advising
Center for Student Academic Success
Sierra Vista Hall, Room 114
(951) 785-2452

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