

2006-2007 SAMPLE CURRICULUM: This outline presupposes completion of required high school mathematics courses, including trigonometry and geometry. It may not be necessary to take these courses in the order given. Please consult your advisor about the selection of courses.

		FALL	WINTER	SPRING
FIRST YEAR	Orientation Seminar (UNST 101)	1	-	-
	College Writing (ENGL 111, 112)	-	3	3
	Introduction to Engineering (ENGR 121, 122, 123)	2	2	2
	** General Chemistry I, II, III (CHEM 111, 112, 113 & Labs)	5	5	5
	** Calculus I, II, III (MATH 131, 132, 133)	4	4	4
	# Social Science Course: Psychology or Sociology	-	4	-
	# Religion Course	-	-	4
	# General Education Elective (Consult Advisor)	4	-	-
	16.0	18.0	18.0	
SECOND YEAR	* General Physics-Calculus Based (PHYS 231B, 232B, 233B & Labs)	5	5	5
	** Introduction to Linear Algebra & Discrete Math (MATH 231, 232, 233)	4	4	4
	** Introduction to Computer Science (CPTG 121)	4	-	-
	# Humanities: Fine Arts or Literature	-	-	4
	# Religion Course	-	4	-
	Lifetime Fitness (PEAC 120)	-	2	-
	Electives (Consult Advisor)			
* Major Requirements				
** Cognate Requirements				
# Please consult the Engineering advisor regarding these courses				

AFFILIATION PROGRAM: La Sierra University supports an affiliation program in engineering with Walla Walla College, College Place, WA. Upon completion of the LSU program, students may transfer to WWC with no loss of credits and complete the ABET accredited Bachelor of Science in Engineering degree. This degree provides emphasis in civil, computer, electrical/electronic or mechanical engineering. AB.S. in bioengineering covering Pre-Med/Pre-Dent requirements is also available.

TRANSFER PROGRAM: The two-year program at LSU also prepares students to transfer to engineering programs such as electrical, mechanical, civil, aeronautical, etc. at University of California and California State University. Individual programs will be tailored to meet specific entrance requirements at the engineering school of the student's choice.

PRE-ENGINEERING

CAREER OPPORTUNITIES AND RELATED OCCUPATIONS:

The primary fields of engineering are civil, electrical, mechanical, chemical, mining/petroleum, and industrial engineering. Subfields include structural, hydro-environmental, communications, computer, aeronautical, metallurgical, geophysical exploration engineering, sales, and administration. Engineers are the backbone of modern industrial society. Even without a formal degree in engineering, many employees receive that title since it is synonymous with “problem solver.”

EDUCATIONAL QUALIFICATIONS: A Bachelor’s degree is generally acceptable for beginning engineering positions. Graduate training is essential for teaching positions.

JOB OUTLOOK: Overall engineering employment is expected to grow about as fast as the average for all occupations over the 2004-14 period. Engineers have traditionally been concentrated in slow-growing manufacturing industries, in which they will continue to be needed to design, build, test and improve manufactured products. However, increasing employment of engineers in faster growing service industries should generate most of the employment growth. Overall job opportunities in engineering are expected to be favorable because the number of engineering graduates should be in rough balance with the number of job openings over this period.

ENTERING SALARY: The National Association of Colleges & Employers reports that for Spring 2006 the national entering wage level of engineering graduates with a Bachelor's degree in Mechanical Engineering averaged **\$51,761** per year; those with a Master's degree and no experience averaged **\$61,591**. Annual earnings depend on the field of engineering branch specialized.

SOURCES OF ADDITIONAL INFORMATION

Websites:

La Sierra University

www.lasierra.edu/

Department of Physics

www.lasierra.edu/departments/physics/

Advisor:

Ivan Rouse
San Fernando Hall
951-785-2137

Walla Walla College

enr.wwc.edu
Marlene Baerg
509-527-2446

Professional Organizations:

JETS-Guidance
1420 King St., Suite 405
Alexandria, VA 22314-2794
<http://www.jets.org>

The Accreditation Board of
Engineering and Technology, Inc.
111 Market Place, Suite 1050,
Baltimore, MD 21202-4012
<http://www.abet.org>

The National Society of Professional
Engineers
1420 King St.
Alexandria, VA 22314-2794
<http://www.nspe.org>

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Administration Building
Room 206
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