



# UNIVERSITY OF THE PACIFIC

## School of Engineering and Computer Science

### *College of the Redwoods Articulation Sheet*

| Pacific Requirement              | fulfilled by                    | College of the Redwoods*         |
|----------------------------------|---------------------------------|----------------------------------|
| <b>Mathematics</b>               |                                 |                                  |
| MATH 51                          | Calculus I                      | Mathematics 50A                  |
| MATH 53                          | Calculus II                     | Mathematics 50B                  |
| MATH 55                          | Calculus III                    | Mathematics 50C                  |
| MATH 57                          | Differential Equations          | Mathematics 55                   |
| <b>Basic Sciences</b>            |                                 |                                  |
| BIOL 51                          | Principles of Biology I (7)     | To be determined                 |
| BIOL 61                          | Principles of Biology II (7)    | To be determined                 |
| CHEM 25                          | General Chemistry               | Chemistry 1A                     |
| CHEM 27                          | General Chemistry (8)           | Chemistry 1B                     |
|                                  | Basic Science Elective (5)      | (Many options available)         |
| PHYS 53-55                       | Principles of Physics           | Physics 4A-4B-4C                 |
| <b>Engineering Science</b>       |                                 |                                  |
| ENGR 20                          | Engineering Mechanics I         | ENGR 35                          |
| ENGR 45                          | Material Science (1)            | (No comparable course available) |
| ELEC/ENGR 41                     | Electrical Circuits/Science (2) | ENGR 17                          |
| ELEC/ENGR 41L                    | Electrical Science Lab (2)      | (No comparable course available) |
| CIVL 22                          | Surveying (3)                   | (No comparable course available) |
| <b>Other Engineering Courses</b> |                                 |                                  |
| ENGR 5                           | Introduction to Engineering     | (No comparable course available) |
| ENGR 15                          | Engineering Graphics (1)        | ENGR 23                          |
| (Varies)                         | Computer Programming (6)        | CIS 16 and 16L                   |
| MECH100                          | Manufacturing Processes (4)     | (No comparable course available) |

### **General Education**

We at Pacific will accept any Community College Transfer General Education program as satisfying our own, with at most one additional class being required. (See next page.)

Students who present a transcript showing satisfactory completion of the above listed core requirements will be able to enroll with full junior standing. Completion of the Bachelors degree can be done in two additional years plus twelve months of Cooperative Education. Pacific does not require a minimum number of completed units for community college students to transfer to University of the Pacific.

- (1) **NOT REQUIRED** for Bioengineering, Electrical, Computer and Engineering Physics majors.
- (2) If the student has not completed this requirement, the student should contact the School of Engineering and Computer Science for summer school information.
- (3) **REQUIRED** only for Civil majors.
- (4) **REQUIRED** only for Mechanical majors.
- (5) **NOT REQUIRED** for Engineering Physics or Bioengineering majors. Most Bio., Chem., Geology, and Physics classes acceptable (e.g., Chemistry 1B).
- (6) C++ programming required for Electrical and Computer majors.
- (7) **REQUIRED** only for Bioengineering.
- (8) **REQUIRED** only for Civil students with environmental emphasis and Bioengineering. Elective for CpE, EE, ME, and other CE majors.

**School of Engineering and Computer Science**  
**University of the Pacific**

**Students wishing to complete the entire General Education requirements at the School of Engineering and Computer Science at the University of the Pacific should:**

- 1. Take a minimum of three social sciences and three humanity classes totaling a minimum of 18 semester units.**
- 2. One class should be taken from each of the three different sub-groups in each discipline (See list of typical courses below).**

**Social Sciences**

**Individual & Interpersonal Behavior**

Communicative Disorders: An Overview  
Intro. to Interpersonal Communication  
Intro. to Microeconomics  
Literature & Psychology  
Intro. to Human Development  
Child Development  
Intro. to Psychology  
Sex Roles & Sexuality  
Psychoactive Drugs & Behavior  
Abnormal Psychology  
Adolescence & Young Adulthood  
Criminology  
Human Sexuality

**International or Intercultural Studies**

(Any non-U.S. History classes).  
(Any non-U.S. Political Science classes).  
Cultural Anthropology  
Intro. to Music of the World's People  
Women Across Culture

**Society and Culture in the U.S.**

Intro. to Mass Communication  
Economic Principles and Problems  
Intro. to Macroeconomics Theory & Policy  
U.S. History I & II  
The Civil War Era  
Women in U.S. History  
African-American History  
American Democracy  
U.S. National Government  
Mass Media & Political Participation  
Intro. to Sociology  
Social Problems & Policy  
Sports in America  
Recreation & American Society  
Music, Entertainment in U.S. Society  
The Mexican American in Contemporary Society

**Humanities**

**Literature, Letters & Language**

(Any foreign language classes)  
(Any foreign literature classes)  
Public Speaking  
Intro to Argumentation

**Fundamental Human Concerns**

History of Western Civilization I & II  
Intro. to Philosophy  
Fundamentals of Ethics  
History of Modern Philosophy  
Key Ideas of the Old Testament  
Life and Teaching of Jesus  
Nature of the Christian Faith  
Religion and American Culture  
Intro. to Religion

**Practice & Perspective in the Visual & Performing Arts**

Visual Arts Exploration  
Survey of Western Art to 1400  
Survey of Western Art after 1400  
History of the Theater  
Aesthetics of Film  
Religion & Cinema  
Music Appreciation  
Performing Ensembles  
Opera Literature

**Engineering Degrees Available**

Bioengineering (BE)  
Civil Engineering (CE)  
Computer Engineering (CpE)  
Electrical Engineering (EE)  
Engineering Management (EMgt)  
Engineering Physics (Eph)  
Mechanical Engineering (ME)