

MINOR IN TECHNOLOGY (FOR NON-ENGINEERING MAJORS)

Minor in Technology (For Non-Engineering Students Only)

Engineering and technology are integral parts of many careers and fields of study. As “technology” has become so prevalent in our lives and careers, more and more companies are demanding that their employees have a working knowledge in such areas as design, graphics, communications, hardware and software advances, etc. Consequently, college students majoring in non-technical disciplines are well advised to consider taking advantage of technology-related courses to bolster their skills, knowledge, and awareness in any of these areas. In order to provide a structure and formal recognition towards this end, the School of Engineering and Computer Science offers a Minor in Technology.

Minor in Technology Requirements

Students must complete a minimum of 20 units and 5 courses with a Pacific minor grade point average of 2.0 in order to earn a minor in technology.

1. Students must not major in engineering.
2. Students must complete a program that consists of a minimum of twenty units with a minimum of five courses from the list of approved courses. A minimum of twelve units must be taken at Pacific.
3. Courses towards a minor cannot be taken on a “pass/no credit” basis.
4. Students must maintain a minimum GPA of 2.0 in a minor program.

Course requirements include:

Students must complete a minimum of three courses from the School of Engineering & Computer Science (i.e., CIVL, ECPE, EMGT, ENGR, or MECH department prefixes) which add up to a minimum of eight units. (It is strongly recommended that students take ENGR 010 as one of these three classes. This course is intended for the freshman year.)

Students must take at least one, and no more than two of the “Computing Classes”.

Technology Minor Application: The student submits a Change of Program Form which is available on the registrar’s website.

Approved Courses for the Technology Minor

Engineering Classes

CIVL 015	Civil Engineering Graphics	3
CIVL 022	Geomatics	3
CIVL 132	Environmental Engineering	4
CIVL 171	Water and Environmental Policy	3
COMP 041	Great Ideas in Computing	4
ECPE 041	Circuits	3
ECPE 041L	Circuits Laboratory	1
ECPE 071	Digital Design	3
ECPE 071L	Digital Design Lab	1
EMGT 170	Project Decision Making	4
EMGT 172	Engineering Economy	3
EMGT 174	Engineering Project Management	3
ENGR 010	Dean’s Seminar	1
ENGR 020	Engineering Mechanics I (Statics)	3

ENGR 025	Professional Practice Seminar	1
ENGR 181	Professional Practice	1-16
ENGR 182	Professional Practice	1-16
ENGR 183	Professional Practice	1-16
ENGR 184	Professional Practice	1-18
MECH 015	Mechanical Engineering Graphics	3
MECH 100	Manufacturing Processes	3

General Technology Classes

BIOL 035	Environment: Concepts and Issues	4
COMP 041	Great Ideas in Computing	4
PHIL 035	Environmental Ethics	4
RELI 146	Technology, Ethics, and Religion	4

Computing Classes

Select at least one and no more than two of the following:		3-8
BUSI 100	Management Information Systems	
COMP 025	Computers and Information Processing	
COMP 051	Introduction to Computer Science	
ENGR 019	Computer Applications in Engineering	
MCOM 019	Music and Computer Technology	

Basic Math and Science Classes

Select no more than two of the following: *		4-10
CHEM 024	Fundamentals of Chem	
CHEM 025	General Chemistry	
MATH 041	Pre-calculus	
MATH 045	Introduction to Finite Mathematics and Calculus	
MATH 051	Calculus I	
MATH 053	Calculus II	
MATH 055	Calculus III	
PHYS 053	Principles of Physics I	

* These courses serve as prerequisites for some of the above courses.

Courses are numbered in accordance with the general University system.

Courses labeled “ENGR” are intended for all engineering students, while courses labeled “BENG,” “CIVL,” “ECPE,” “EMGT” or “MECH” are primarily intended for majors in the Bioengineering, Civil (CE), Electrical and Computer (ECE), Engineering Management (EMGT), and Mechanical (ME) departments. Courses labeled “COMP” are taught in the Computer Science Department.

All engineering and computer science course prerequisites must be passed with a C- or higher grade.

* *Fundamental skills are a prerequisite to all upper-division engineering and computer science courses.*

* *Note: Transfer courses must be graded C or better.*