SAN FRANCISCO STATE UNIVERSITY CIVIL ENGINEERING STUDENT PLANNING WORKSHEET

This worksheet centralizes information pertaining to your progress towards graduation, including contact information, course planning, and transfers. It is intended to be used as a guideline for advising purposes. See SFSU Academic Bulletin for most recent major curriculum, course information & prerequisites. You should keep an updated copy of this worksheet in your folder in the engineering office. Privacy note: *By law, all student information and grades are kept strictly confidential and are only accessed by authorized personnel of the School of Engineering*. **Student Information**

Student ID #:		
Name:		
LAST	FIRST	MI
Main address to which official mail m	nay be sent:	
STREET		
CITY		
STATE	ZIP	
()		
PHONE	E-MAIL	
Term/Year entered SFSU:	Term/Year you expect to graduate:	
☐ Transfer Student?	☐ If yes, are your transfer credits evaluat☐ Graduation plan O.K.?	ted?
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Advising Information

Advisor Name	Approval Signature	Term	Year	Comments

Required Courses

- 15 units of required mathematics, 12 units of physics, and 3 units of chemistry.
- 18 units of required lower division engineering courses and 31 units of required upper division courses
- 12 units of engineering elective courses, and 36 units of General Education courses
- Course prerequisites are strictly enforced. Students not meeting the prerequisites are subject to being administratively dropped.

Required Math and Science Lower Division Courses

Course Number	Course Name	Units	Grade	SFSU or Transfer	Term Yr	Prerequisite
CHEM 180	Chemistry for the Energy and the Environment	3				Category I or II placement for QR/Math or Cat. III or IV need MATH 197© (see bulletin for full details)
MATH 226	Calculus I	4				MATH 198© or 199© or equivalent or etc, (see bulletin for full details)
MATH 227	Calculus II	4				MATH 226©
MATH 228	Calculus III	4				MATH 227©
MATH 245	Elementary Differential Equations & Linear Algebra	3				MATH 228©
PHYS 220/222	General Physics with Calculus I & Lab	4				High school physics or equivalent; MATH 226© & PHYS 222♥ & MATH 227♥
PHYS 230/232	General Physics with Calculus II & Lab	4				PHYS 220© & MATH 227© & PHYS 232♥ (MATH 228♥ recommended)
PHYS 240/242	General Physics with Calculus III & Lab	4				PHYS 220© & MATH 227© & PHYS 242♥ (MATH 228♥ recommended)

Required Lower Division Courses for Civil Engineering

ENGR	Course Name	Units	Grade	SFSU or	Term Yı	Prerequisite
				Transfer		
100	Introduction to Engineering	1				High school algebra and trigonometry
101	Engineering Graphics	1				ENGR 100♥
102	Statics	3				MATH 227 & PHYS 220
200	Materials of Engineering	3				CHEM 180 or CHEM 115
201	Dynamics	3				ENGR 102
205	Electric Circuits	3				PHYS 230 & MATH 245♥
235	Surveying	3				ENGR 100 & MATH 226©
271	Intro to MATLAB	1				MATH 226©

Required Upper Division Courses for Civil Engineering

ENGR	Course Name	Units	Grade	SFSU or	Term	n Yr	Prerequisite
				Transfer			
300	Engineering Experimentation	3					ENGR 200©- & 205©-
302	Experimental Analysis	1					ENGR 300 & ENGR 304♥ & ENGR 309
304	Mechanics of Fluids	3					ENGR 201, PHYS 240
309	Mechanics of Solids	3					ENGR 102 ENGR 200♥
323	Structural Analysis	3					ENGR 309
425	Reinforced Concrete Structures	3					ENGR 323♥
429	Construction Management	3					ENGR 235
430	Soil Mechanics	3					ENGR 309
434	Prin. of Environmental Engr.	3					ENGR 304♥ & CHEM 180 or CHEM 115
436	Transportation Engineering	3					ENGR 235 & ENGR 430 ♥
696	Engineering Design Project I	1					Senior standing with 21 upper-division units in engineering & ENGR 300 or ENGR 301 (see SFSU Bulletin for GWAR information)
697	Engineering Design Project II	2					ENGR 696©

^{♥ =} Course must either be completed or taken concurrently

^{© =} Course must have been passed with a grade of C or better

^{©- =} Engineering Course must have been passed with a grade of C- or better

Elective Courses

- 12 upper division engineering elective units are required.
- Upper division courses must have been taken within 10 years of graduation.
- The courses selected should conform to focus area (Construction management, Geotechnical, Structural, or Environmental Engineering) curriculum recommendations.

Elective Upper Division Courses for Civil Engineering

ENGR	Course Name		Units		Grade	SFSU or	Year	Semester	Prerequisite	
			Tot	ES	ED		Transfer	Taken	Offered	
426	Steel Structure	es	3	0	3				S	ENGR 323♥
427	Wood Structures		3	0	3				F	ENGR 323♥
431	Foundation En	gineering	3	0	3				F	ENGR 430
435	Environmental	Engineering Design	3	1	2				S	CHEM 115 or CHEM 180
438	Transportation		3						F	ENGR 271 & MATH 245
439	Construction Engineering		3	1.5	1.5				F	ENGR 309 & ENGR 430
441	Fundamentals of Composite Materials		3	1	2				S	ENGR 309 & Math 245
461	Mechanical and Structural Vibrations		3	2.5	0.5				F	ENGR 201, 309, MATH 245
468	Applied Fluid Mechanics and Hydraulics		3	2	1				S	ENGR 304
610	Engineering C	ost Analysis	3						F,S	ENGR 103 or ENGR 213 & Math 227 ♥
823	Introduction to	Seismology •	3	2	1					Graduate standing and consent of instructor
826	Seismic Hazar	ds Analysis 🔸	3	2	1				Check schedule for	ENGR 425 or 426
827		gn for Fire Safety ◆	3	2	1				course	ENGR 323 & 425 or 426
828	Dissipation ♦	ion and Energy	3	3	0				availability	ENGR 461
829	Advanced Topics in Structural Engineering ◆		3	3	0					ENGR 323 * ENGR 461
831	Advanced Concrete Structures ◆		3	1	2					ENGR 425
832	Advanced Topics in Seismic Engineering		3	2	1					ENGR 425, 426, 461
833	Principles of Earthquake Engineering ◆		3	2	1					ENGR 461
835	Advanced Steel Structures ◆		3	1	2					ENGR 426
836	Structural Design for Earthquakes •		3	0	3					ENGR 425, 426
837	Geotechnical Earthquake Engineering ◆		3	1.5	1.5					ENGR 430, 461♥
838	Smart Structur	es Technology	3							Grad./Civil or consent of instructor
	1	Units Completed					Ī	Ī		L

♦ = GPA of 3 or better and consent of instructor are required to take graduate courses (in addition to prerequisites listed)

♥ = Course must be completed or taken concurrently

Minimum Required

Program Planning

Term	Year	Course Numbers	Course Numbers									

Transferred Courses

Students wishing to transfer Math, Science and Engineering courses from other institutions *must* see the Program Head of Civil Engineering in their first term of residence at SFSU. If you haven't yet done your transfer credit evaluation with the Program Head, you may not be able to enroll for courses, *so do it now!* Students transferring from California institutions just need to bring in their transcripts and this worksheet. Transfers of courses from other institutions are evaluated on a case-by-case basis. Students from these institutions should bring all relevant supporting material, including course syllabi, books, etc.

lame:			ID #				
Course Number	Course Name	Institution	Course	Units†	Term/Year	Grade	Approva
CHEM 115 or CHEM 180	General Chemistry I: Essential Concepts of Chemistry						
MATH 226	Calculus I						
MATH 227	Calculus II						
MATH 228	Calculus III						
MATH 245	Elementary Differential Equations & Linear Algebra						
PHYS 220/222	General Physics with Calculus I & Lab						
PHYS 230/232	General Physics with Calculus II & Lab						
PHYS 240/242	General Physics with Calculus III & Lab						
ENGR 100	Introduction to Engineering						
ENGR 101	Engineering Graphics						
ENGR 102	Statics						
ENGR 200	Materials of Engineering						
ENGR 201	Dynamics						
ENGR 205	Electric Circuits						
ENGR 235	Surveying						
ENGR 271	MATLAB						
Express as semeste	er units. Each quarter unit = 2	/3 semester units					
	1				Date:		