Associate in Science Degree
ENGINEERING
A Path To University TRANSFER
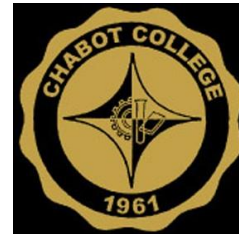
FRESHMAN YEAR	FALL	SPRING
Engineering 25 (Computational Methods for Engineers and Scientists)	(3)	3
Chemistry 1A (General College Chemistry)	5	(5)
Mathematics 1 (Calculus I)	5	(5)
Mathematics 2 (Calculus II)	(5)	5
Physics 4A (General Physics I)	(5)	5

SOPHOMORE	FALL	SPRING
Engineering 36 (Engineering Mechanics - Statics)	3	
Engineering 43 (Electrical Circuits and Devices)		4
Engineering 45 (Materials of Engineering)	3	
Physics 4B (General Physics II)	5	(5)

Plus One (1) Course from the following:

	FALL	SPRING
Biology 2A* (Principles of Biology)	5	(5)
Chemistry 1B† (General College Chemistry	(5)	5
Engineering 10 (Introduction to Engineering)	2	(2)
Engineering 11 (Engineering Design and Analysis)	(2)	2
Engineering 22‡ (Engineering Design Graphics)	3	(3)
Mathematics 4§ (Elementary Differential Equations)	3	(3)
Mathematics 6⁴ (Elementary Linear Algebra)	(3)	3
Physics 4C (General Physics III)	(5)	5

Total.. **40-43**

General Education Units for A.S. Degree **19**

For specific A.S. General Education courses refer to catalog section on A.S. Graduation Requirements

    General Education Courses (Areas A-E) 16

    Engineering GE Requirement: 3

        Complete a minimum of 3 units from:

            Business 40 (International Business)

            Computer Science 14 (Intro to Structured Programming in C++)

            Economics 1 (Principles of Microeconomics)

            Communications 1 (Fundamentals of Speech Communications)

Total minimum units required.. **60**

---

* *Bio Engineering, Biomedical Engineering, and Biomechanical Engineering majors should take Biology 2.*

† *Chemical Engineering and Materials Engineering majors should take Chemistry 1B.*

‡ *Civil, Industrial, and Mechanical Engineering majors should take Engineering 22.*

§ *Engineering Science majors, and students interested in applied-mathematics, should take Mathematics 4 and 6.*

Typical Engineering Study Plan for a Chabot College Student Intending to Transfer in Aerospace, Civil, Chemical, Electrical, Industrial, or Mechanical Engineering

	Fall: Course Title	Course No.	Units	Spring: Course Title	Course No.	Units
Year 1	Calculus-I	MTH 1	5	Calculus-II	MTH 2	5
	Reading & Composition[5]	ENGL 1A	3	General Physics I	PHYS 4A	5
	General Chemistry	CHEM 1A	5	Structured Programming in C++[6]	CSCI 14	4
	Engineering Design Graphics	ENGR 22	3	Computational Methods	ENGR 25	3
	Introduction to Engineering	ENGR 10	2	Engineering Design & Analysis	ENGR 11	2
	Total Units		**18**	**Total Units**		**19**

	Fall: Course Title	Course No.	Units	Spring: Course Title	Course No.	Units
Year 2	MultiVariable Calculus	MTH 3	5	Elementary Differential Equations	MTH 4	3
	General Physics II	PHYS 4B	5	Elementary Linear Algebra	MTH 6	3
	Engineering Mechanics - Statics	ENGR 36	3	General Physics III[7]	PHYS 4C	5
	Engineering Materials	ENGR 45	3	Engineering Circuits & Devices	ENGR 43	4
	Critical Think/Write[8]	ENGL 7	3	American History[9]	HIST 7	3
	Total Units		**19**	**Total Units**		**18**

Very Easily Moved to Other Terms = ENGR22, CSCI14, HIST7, ENGL7

Print Date/Time = 25-Jan-17/08:00

---

[5] Chabot GE Requirement A.1 for English Composition (A.2 for Communication and Analytical-Thinking Satisfied by MTH 1; B for Natural Sciences Satisfied by PHYS 4A)

[6] Satisfies the Program-based General Education Requirement

[7] Satisfies A.S. Degree Elective Requirement

[8] A second English Composition course is required by almost all University of California (UC) Colleges/Schools of Engineering

[9] Chabot GE Requirement D for Social and Behavioral Sciences