

Approved Support Courses for the BSACM Emphasis in **Applied Math**

Note: To preregister for engineering courses, you need to be an engineering major

	8 units Lower Division Support	6 units Upper Division Support	Additional Prerequisites
Astrophysics	Phys 50, 51, 52, 53; Chem 1A	Astr 117A, B	Eligibility for Engl 1A; Math 30 or 30P; 31
Biology: Genetics	Biol 1, 2, 3; Chem 1A, 1B	Biol 115 and one of Biol 117, 118 or 119	Eligibility for Engl 1A; Biol 6
Biology: Ecology	Biol 1, 2, 3	Biol 155 or 156; Biol 160	Biol 5, 6
Computer Science	Phys 50; and Phys 51 or 52; or 6 units of additional upper division CS courses from the list to the right	CS 146 and one of CS 116A, 151, 155, 157A or 159	CS 46A, 46B; Math 30 or 30P; 31, 32, 42, 129A
Economics	Econ 1A, 1B	Two of Econ 101, 102, 103, 104, 106, 137A, 138, 139	
Electrical Engineering: Digital Signal Processing	Phys 50, 51; EE 98	EE 101, 112, 153	Math 30 or 30P; 31, 32, 133A
Electrical Engineering: Electromagnetic Fields	Phys 50, 51, 52; EE 98	EE 140, 142	Engl 1A; Math 30 or 30P; 31, 32, 133A
Electrical Engineering: Network Analysis & Linear Systems	Phys 50, 51; EE 98	EE 101, 110, 112	Engl 1A; Math 30 or 30P; 31, 32, 133A
Industrial and Systems Engineering: Operations Research	Phys 50; and one of: Phys 51, Phys 52, or Math 177	ISE 167, 170	Math 30 or 30P; 31, 42, 129A, 161A; CS 46A
Industrial and Systems Engineering: Process Control & Design of Experiments	Phys 50; Phys 51 or 52	ISE 131, 135	Math 30 or 30P; 31, 161A
Mathematics	Phys 50; Phys 51 or 52	6 units of approved upper division math	Math 30 or 30P; Math 31
Mechanical Engineering	CE 99; Phys 50; Phys 51 or 52;	Two of ME 101, 111, 113, 114	Math 30 or 30P; 31, 32, 133A
Meteorology	Metr 50, 51, 61	Metr 121A, B	Math 30 or 30P; 31, 32, 133A; Phys 50, 51
Physical Chemistry	Chem 1A, 1B, 55; Phys 50, 52, 53	Chem 161A, B	Eligibility for Engl 1A; Math 30 or 30P; 31, 32
Physics: Electricity & Magnetism	Phys 50, 51	Phys 110A, B	Math 30 or 30P; 31, 32, 133A, 112
Physics: Mechanics	Phys 50; Phys 51 or 52	Phys 105A, B	Math 30 or 30P; 31, 32, 133A
Physics: Quantum Mechanics	Phys 50, 52	Phys 122, 163	Math 30 or 30P; 31, 32, 133A