

Energy Science and Engineering Major Program Proposal

Courses taken to fulfill the requirements of the major must be taken for a letter grade, if the option is offered. Any changes must be approved by the student's major advisor prior to enrolling in the course. See [Stanford Bulletin](#) for degree requirements.

Core Program Requirements

Term Format (AUT 23-24)

Course No.	Title	Units	Term
ENERGY 101	Energy and the Environment	3	
ENERGY 104	Sustainable Energy for 9 Billion	3	
ENERGY 110	Engineering Economics	3	
ENERGY 120	Mass and Energy Transport in Porous Media	3	
ENERGY 160	Uncertainty Quantification in Data-Centric Simulations	3	
ENERGY 199	Senior Project and Seminar in Energy Science and Engineering	3	

Cognate Math

Course No.	Title	Units	Term
MATH 19	Calculus	3	
MATH 20	Calculus	3	
MATH 21	Calculus	4	
		5	
		5	
		5	

**CME series recommended*

Cognate Science

Course No.	Title	Units	Term
PHYSICS 41	Mechanics	4	
PHYSICS 43	Electricity and Magnetism	4	
PHYSICS 45	Light and Heat	4	
PHYSICS 46	Light and Heat Laboratory	1	

**EPS 2 recommended*

Cognate Engineering

Course No.	Title	Units	Term
ENGR 14	Intro to Solid Mechanics	3	
ME 30	Engineering Thermodynamics	3	
CS 106A	Programming Methodology		
CS 106B	Programming Abstractions		
OR CS106X	Programming Abstractions (Accelerated)		

Earth and Energy Depth

Course No.	Title	Units	Term

Total Units:

Expected Graduation Term & Year:

Student Signature

Major Advisor Name

Advisor Signature

Student Services Signature