

Syracuse University
Energy and its Impacts Integrated Learning Major
 Plan of Study

1 Background Information:

Name	
SUID	
Email Address	
Home College	
Primary Major(s)	
Minor(s)	
Expected Date of Graduation	
Date of Application to Major	

2 Foundations, Elective Courses and Seminars:

Foundations & Seminars	Course Number	Semester	Grade	Upper Div. Credits	Social Sci. Elective?	Upper Div. & Primary Major?
<i>Science of Energy*</i>						
<i>Environmental Science*</i>						
<i>Social Science*</i>						
<i>Junior Seminar</i>	PHY 398			1		
<i>Senior Seminar</i>	PHY 498			3		
<i>Elective 1</i>						
<i>Elective 2</i>						
<i>Elective 3</i>						
<i>Elective 4</i>						
<i>Elective 5*</i>						
				Totals:		

3 Notes:

(1) Foundations and elective courses are listed on the back of this sheet; (2) at least 18 credits must be at 300 level or higher; (3) at most 6 credits can be double-counted with the upper division requirement of your primary major; (4) at least one elective must be in social science. *Only 4 electives are required if a course used to satisfy one of the first three foundations requirements is 300-level or above.

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Course List

Foundations Courses:

Science of Energy:

One course from the following list.

- CHE 103 Chemistry in the Modern World
- CHE 116 General Chemistry
- MAE 251 Thermodynamics (LCS)
- PHY 101 Major Concepts in Physics
- PHY 531 Thermodynamics and Statistical Mechanics

Environmental Science:

One course from the following list. Exception: this requirement is waived for students with BIO 121, 123 and at least one upper-division biology course from the electives list.

- BIO 115 Ecological Problems and Society
- EAR 110 Dynamic Earth
- EAR 111 Climate Change Past and Present
- EAR 203 Earth System Science
- GEO 215 Global Environmental Change

Social Science:

One course from the following list.

- ECN 203 Economic Ideas and Issues
- GEO 103 America and the Global Environment
- PSC 318 Technology, Politics, and Environment
- SOC 300 Sociology of the Environment

Elective Courses:

*Four or five courses from the following list. No more than two can be in any one department. At least one must be in social science (eligible courses are marked with *). Some courses are offered by ESF or LCS (engineering) and the remainder are in Arts and Sciences.*

- BIO 415 Conservation Biology
- BIO 451 General Ecology
- BPE 441 Biomass Energy (ESF)
- CHE 346 Physical Chemistry
- CHE 400 The Chemistry of Global Energy and Carbon Utilization (offered irregularly)
- CIE 551 Energy Conversion (LCS)
- EAR 305 Earth Science of Energy (was EAR 300)
- EAR 405 Global Change: The Geological Record (was EAR 345)
- ECN 437 Environmental and Resource Economics (*)
- ENS 335 Renewable Energy (ESF, was ESC 335)
- ENS 422 Energy Markets and Regulation (ESF, was ESC 422)
- EST 427 Environmental and Energy Auditing (ESF)
- GEO 300 Geography of Oil (*)
- GEO 326 Geography of Climate and Weather
- GEO 327 Geography of Coastal Environments
- GEO 430 Energy, History, and Society (*) (was GEO 400)
- MAE 551 Energy Conversion (LCS)
- MAE 587 Design of Solar Energy Systems (LCS)
- PAF 451 Environmental Policy (*)
- PHY 305 Solar Energy Science and Architectures
- PSC 302 Environmental Politics and Policy (*)

Approved by petition:

- PSC 300 Climate Change, Communications and Policy

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BEN/CEN 400 Biofuels