Industrial Ecology Graduate Certificate Program Course Requirements

*The Industrial Ecology Certificate program consists of **15 credit hours**.*

Students should take one course from each of the five core areas (five courses total):

PROGRAM IN INDUSTRIAL ECOLOGY CORE COURSE (REQUIRED)
- EAS 557/CEE 586: Industrial Ecology (3 credits)

SYSTEM ANALYSIS AND SUSTAINABILITY (CHOOSE ONE)
- EAS 572/EHS 572: Environmental Impact Assessment
- EAS 523: Ecological Risk Assessment
- CHEM 567/CLIMATE 567: Chemical Dynamics
- EAS 550/STRAT 566: Systems Thinking for Sustainable Development and Enterprise
- MECHENG 589: Sustainable Design of Technology Systems
- EAS 597: Environmental Systems Analysis
- EAS 573: Environmental Footprinting and Input-Output Analysis
- EHS 672:Healthy and Sustainable Foods and Products-LifeCycle Assessment

ENERGY SYSTEMS (CHOOSE ONE)
- EAS 615: Renewable Electricity and the Grid
- EAS 574/PUBPOL 519: Sustainable Energy Systems
- CEE 567: Energy Infrastructure Systems

ENVIRONMENTAL POLICY AND ECONOMIC ANALYSIS (CHOOSE ONE)
- EAS 475: Environmental Law
- EAS 512/STRAT 564: Strategies for Sustainable Development I: Enterprise Integration*
- EAS 513/Strategy 565: Strategies for Sustainable Development II: Market Transformation*
- URP 532: Sustainability and Social Change
- EAS 686/PUBPOL 563: The Politics of Environmental Regulation
- EAS 527/BE 527: Energy Markets and Energy Politics
- EHS 508: Principles of Risk Assessment
- EAS 570: Environmental Economics: Quantitative Methods and Tools
- EAS 668/ECON 661: Advanced Natural Resource Economics (Offered next TBD)
- EAS 669/ECON 662: Environmental Economics(Offered next TBD)

*Students must take both EAS 512 & 513 in order to fulfill the Environmental Policy and Economics Analysis requirement

EXPERIENTIAL LEARNING REQUIREMENT**

CHOOSE ONE ACTIVITY TO BE APPROVED BY ONE OF THE CO-(CC DIRECTORS)

- Participate in Sustainability without Borders projects
- Sustainability internship
- Other to be defined with program directors

**One additional course from the above list can be taken to fulfill experiential learning requirement, if approved by one of the co-directors.