

**Energy and Climate (EC)
 Sample Program of Study (POS) Form**

*****First year MESM students use the POS Form to plan a program of study at Bren.
 Second year MESM students will revise the POS Form AND complete a GRAD CHECK FORM prior
 to meeting with your specialization advisor.*****

NAME: _____ **PERM # (required) :** _____

SPECIALIZATION(S): _____

- A **MINIMUM of 80 units** of completed (approved) coursework is required.
- Students may count a **MAXIMUM of 4 units** of ESM 596 towards their POS unit count.
- Students may count a **MAXIMUM of 8 units** of UPPER DIVISION undergraduate coursework as approved their advisor(s) towards their POS unit count. Note: LOWER DIVISION coursework can never be counted.
- Students may count a **MAXIMUM of 4 units** of 400-level coursework (in addition to 401ABC) towards their POS unit count.
- If a CORE course is waived, the units need to be made up with additional electives.

CORE REQUIREMENTS:

CORE COURSES	QTR/YR COMPLETED <small>Write waived if waiver approved and do not count the units</small>	UNITS	GRADE
ESM 201 Ecol. of Managed Ecosystems		4	
ESM 202 Environmental Biogeochemistry		4	
ESM 203 Earth Systems Science		4	
ESM 204 Econ. Environmental Management		4	
ESM 206AB Stats & Data Analysis		4	
ESM 207 Environmental Law & Policy		4	
ESM 210 Business & the Environment		4	
ESM 241 Environmental Politics & Policy		2	
ESM 251 Intro to Env. Policy Analysis		2	

GROUP PROJECT OR ECO-ENTREPRENEURSHIP PROJECT (CORE REQUIREMENT)

GROUP PROJECT (CORE REQUIREMENT)	UNITS	GRADE
ESM 401A (Spring of 1 st year)	4	
ESM 401B (Fall of 2 nd year)	4	
ESM 401C (Winter of 2 nd year)	4	

OR

ECO-ENTREPRENEURSHIP PROJECT	UNITS	GRADE
ESM 402A (Spring of 1 st year)	4	
ESM 402B (Fall of 2 nd year)	4	
ESM 402C (Winter of 2 nd year)	4	

Total CORE Units	44 – waived units =	
-------------------------	---------------------	--

POS ELECTIVE UNITS:

- Minimum POS elective units = 80 Units - # CORE Units.
- Unless you have waived a course this will be 80 - 44 = 36 minimum POS elective units.
- POS elective units consist of coursework that builds depth in the student's specified area of specialization.
- Students may take *up to 8 units* of POS elective coursework as P/NP (undergraduate course numbers 100-199) or S/U (grad course numbers 200 and above)
- Students may wish to take additional elective units that are not included in the POS. All of these units may be taken S/U or P/NP.

The POS is designed specifically for the chosen specialization **and** the student's particular background and goals. An acceptable POS includes courses that build depth in a particular area of specialization and also develop technical skills. MESM students are encouraged to identify different areas they wish to gain more knowledge and skill.

POS Elective COURSES: Please list all courses you are considering taking.

Please visit <http://bren.ucsb.edu/academics/MESM.html#specializations> and click on the accompanying link to view course work recommended for your specialization.

Please visit <http://bren.ucsb.edu/services/student/index.html> to see sample POS Forms for each specialization.

ESSENTIAL: RECOMMENDED TO TAKE THIS COURSE

COURSE #	COURSE TITLE	QTR/YR COMPLETED	UNITS	GRADE
ESM 229	Science, Economics and Policy of Climate Change		4	

Add rows as needed

Total Section 1 ELECTIVE Units	4
---------------------------------------	---

CLIMATE AND ENERGY: RECOMMENDED TO TAKE AT LEAST 12 UNITS

COURSE #	COURSE TITLE	QTR/YR COMPLETED	UNITS	GRADE
ESM 237	Climate Changes Impacts and Adaptation		4	
ESM 238	Climate Change Agreements and Politics		4	
ESM 239	Energy Economics and Policy		2	
ESM 271	Carbon Footprint and Carbon Accounting		2	
ESM 272	Energy and Resource Productivity		4	
ESM 288	Energy, Technology and the Environment		4	

Add rows as needed

Total Section 2 ELECTIVE Units	18-20
---------------------------------------	-------

OTHER SUPPORTING ELECTIVES

COURSE #	COURSE TITLE	QTR/YR COMPLETED	UNITS	GRADE
ESM 243	Environmental Policy Analysis		4	
ESM 283	Environmental Negotiation		4	
ESM 293	Zurich Distinguished Visitor Courses (2 x 3)		6	
ESM 294	Advanced Topics: International Environmental Law		2	
ESM 294	Advanced Topics: Climate Change Law and Policy		2	
ESM 296	Advanced Topics: Energy Regulation		2	

Add rows as needed

Total Section 3 ELECTIVE Units	14-16
---------------------------------------	-------

400-LEVEL ELECTIVES: A MAXIMUM OF 4-UNITS MAY COUNT TOWARDS 80 UNIT MINIMUM

COURSE #	COURSE TITLE	QTR/YR COMPLETED	UNITS	GRADE
ESM 437	Writing for Environmental Professionals		2	

Add rows as needed

Total Section 4 ELECTIVE Units	2
---------------------------------------	---

ADD ADDITIONAL SECTIONS ABOVE AS APPROPRIATE FOR YOUR POS

Total POS ELECTIVE Units	<i>Minimum of 36</i>
---------------------------------	----------------------

TOTAL (CORE + POS ELECTIVE) UNITS = _____
(must be at least 80)

ECO-ENTREPRENEURSHIP FOCUS (OPTIONAL)

Students pursuing an eco-entrepreneurship (Eco-E) focus, must complete 10 units of Eco-E primary courses and at least 4 units of Eco-E elective courses. Students pursuing Eco-E Projects should record ESM 402A under both Core Requirements and Eco-E Focus. Students should record Eco-E primary courses and electives in Sections 1-3, etc., of your POS elective courses if the courses also will be counted toward your specialization.

ECO-E FOCUS: PRIMARY COURSES

COURSE #	COURSE TITLE	QTR/YR COMPLETED	UNITS	GRADE
ESM 256A	Intro to Entrepreneurship and New Venture Creation		2	
ESM 256B	New Venture Opportunity Analysis		4	
ESM 402A	Eco-E Project: New Venture Formation		4	

Eco-E PRIMARY COURSE Units	10
-----------------------------------	----

ECO-E FOCUS: ELECTIVES (TAKE AT LEAST 4 UNITS)

COURSE #	COURSE TITLE	QTR/YR COMPLETED	UNITS	GRADE
ESM 230	Strategic Planning for Non-Profit Ventures		4	
ESM 269	Survey Research Design and Evaluation		2	
ESM 285	Environmental Markets		4	
ENGR 240	Business Strategy and Leadership Skills*		4	
ENGR 241	Managing for Innovation*		4	
ENGR 244	Entrepreneurial Marketing*		2	
ENGR 246	New Venture Finance*		2	
ENGR 250	Managing Operations		2	
ENGR 251	Legal and IP Issues in New Ventures		2	
ENGR 255	New Product Development*		4	

*Several electives for the Eco-E focus (noted with an asterisk above) also are part of the curriculum for the Graduate Program in Management Practice (GPMP), a UC-recognized certificate offered by the Technology Management Program (TMP).

Eco-E ELECTIVE Units At least 4 units	
---	--

**TOTAL ECO-E FOCUS UNITS
(PRIMARY COURSE + ELECTIVE) =**

_____ (must be at least 14)

FACULTY SIGNATURES (Required):

Faculty specialization advisor(s) must review and sign the completed POS Form prior to submittal to the Student Affairs Office.

Reviewed and approved by: _____ **Date:** _____
(Signature of Faculty Advisor for Specialization)

Reviewed and approved by: _____ **Date:** _____
(2nd Faculty Advisor Signature for Double Specialization, if applicable)