Implementation Form – Graduate / Professional Certificates

Name of Graduate / Professional Certificate: Energy Analysis and Policy
Faculty Program Director: Paul Wilson (3-year cycle)
Primary Faculty/Staff Contact: Richard Shaten
Home Department/Academic Unit (Name/UDDS): Nelson Institute/A40
Approval Date: circa 1980
School/College: Nelson Institute
Approval Date: circa 1980
GFEC Approval Date: circa 1980
UAPC Approval Date: circa 1980
Implementation Term (typically the fall term after UAPC approval): circa 1980
Year that first program review is scheduled (usually 5 years after implementation): 2012-2013

Plan Code (assigned by the Registrar’s Office): GCRT310
Plan Descr (assigned by the Registrar’s Office): Energy Analysis and Policy Grd Crt
CIP Code (assigned by Academic Planning and Analysis): 301501
Primary Divisional Disciplinary Assignment (assigned by APA for analysis purposes only): SOC

Curriculum:

______Included in detail in the proposal

X A list of required and elective courses is attached

Credit total required (should be between 9 and 12): 18 credits
Credits required to be taken in residence at UW-Madison (must be at least 50%): 12 credits
Confirm that all core/required courses are approved through Divisional Committee: Yes
Confirm that courses in curriculum are offered on a regular basis and have space for students in this program: Yes

Projected enrollment:
The EAP program current enrollment is 32.
Over the past 10 years the average enrollment has been 12/year and average completion has been 9/year.

What provisions have you made in the admissions process to gain consent from students’ degree/major program(s) to participate in the certificate program?

Students must request that their home departments forward original graduate application materials, including transcript and GRE scores. This way the home department has established a link with the EAP academic coordinator and is aware that a student has applied to EAP.
Confirm that all courses numbered 300 or above  
Yes

Confirm that courses taken as pass/fail or audit are not allowed  
Yes

Confirm that special topics courses are only used if all instances count for the certificate:  
Special topics courses must be approved on a case by case basis by the faculty chair of the program.

Will you use the typical minimum GPA requirement of 3.0 for all course work for the certificate?  
The average grade point average in EAP classes must be 3.0 however the BC grade is acceptable in single courses.

Are courses taken Credit/No Credit allowed?  
No

Will exceptions to requirements be allowed?  
Yes

The department/program has a process in place to monitor student progress and to notify the Registrar’s Office when students complete the certificate requirements  
Yes

Program faculty and staff understand that a student’s graduation should not be delayed to complete the certificate.  
Yes

Specify overlap provisions – name degree/major or certificate programs that may not be earned along with the certificate.  Note that majors take priority over certificates.  (Students may not earn a graduate certificate if they are also earning a post-baccalaureate major/degree or PhD minor with the same name.)

Assessment plan – confirm that the proposal includes a plan that describes how the faculty will regularly evaluate student learning.
Curriculum for EAP graduate certificate program

Students may select courses from the list below to satisfy the requirements. Course substitutions must be approved by the EAP faculty chair. The list of courses is updated to reflect both new curriculum options and courses that are no longer listed. Each EAP student must complete six courses (18 credits) including:

- an introductory seminar (3 credits) and a capstone seminar (3 credits)
- three credits each in: policy, economics/business, technology, and environmental studies

PROGRAM SEMINARS

- EnvSt/URPL/PubAff 809, Introduction to Energy Analysis and Policy. Fall semester
- EnvSt/URPL/PubAff 810, Energy Analysis Seminar - Capstone Seminar. Spring semester

ENERGY TECHNOLOGY

- Geol 411, Energy Resources.
- NEEP 571, Economic and Environmental Aspects of Nuclear Energy.
- BSE/EnvSt 367, Renewable Energy Systems. Instructor:
- ME/ChE 567, Solar Engineering of Thermal Processes.
- CBE 562 Energy and Sustainability
- BSE 460 Biorefining – Energy and Products from Renewable Resources

ENERGY ECONOMICS AND BUSINESS

- AAE/Econ/EnvSt/TranPU/URPL 671, Energy Economics.
- AAE/Econ/PubAff 881, Benefit Cost Analysis.
- NEEP 571, Economic and Environmental Aspects of Nuclear Energy.
- Econ/TranPU 725, Public Utilities.
- AAE 760 Dynamic Natural Resource Economics.

ENERGY POLICY

- EnvSt/PubAff 866, Global Environmental Governance.
- EnvSt 539, Air Resources Science & Policy.
- EnvSt/AOS 535, Atmospheric Dispersion & Air Pollution.
- AAE/Econ/EnvSt/PubAff 881, Benefit Cost Analysis.
- Econ/TranPU 725, Public Utilities
- URPL/EnvSt 449, Government and Natural Resources

ENVIRONMENTAL STUDIES

- Agronomy 875, Agroecosystems and Global Change.
- EnvSt/AOS 535, Atmospheric Dispersion & Air Pollution.
- EnvSt 539, Air Resources Science & Policy.
- Agronomy/Entom/EnvTox/WLEcol 630, Ecotoxicology: Toxicant Effects on Ecosystems
- Envir St/Prev Med 502, Air Pollution and Human Health.
- CEE423/ME466, Air Pollution Effects, Measurements and Controls
- EnvSt/EnvTox/Prev Med 507, People, Chemicals, Environment
- NEEP 571, Economic and Environmental Aspects of Nuclear Energy.
- PopHealth/EnvSt 740 Health Impact Assessment of Global Environmental Changes