

# UNIVERSITY FACULTY SENATE FORMS

## Academic Program Approval

This form is a routing document for the approval of new and revised academic programs. Proposing department should complete this form. Detailed instructions for the proposal should be followed. A checklist is available to assist in the preparation of a proposal. For more information, call the Faculty Senate Office at 831-2921.

Submitted by: Raymond Scattone phone number: 786-473-9314

Department: Energy and Environmental Policy Program (ENEP) email rayscatt@udel.edu

Date: October 21, 2016

Action: Add 4+1 Program  
(Example: add major/minor/concentration, delete major/minor/concentration, revise major/minor/concentration, academic unit name change, request for permanent status, policy change, etc.)

Effective term: 17F  
(use format 04F, 05W)

Current degree: We have a BS and MS degree in ENEP  
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed change leads to the degree of: No New degree just accelerating the MS degree  
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed name: ENEP 4+1  
Proposed new name for revised or new major / minor / concentration / academic unit (if applicable)

### Revising or Deleting:

Undergraduate major / Concentration: NA  
(Example: Applied Music – Instrumental degree BMAS)

Undergraduate minor: NA  
(Example: African Studies, Business Administration, English, Leadership, etc.)

Graduate Program Policy statement change: NA  
(Must attach your Graduate Program Policy Statement)

Graduate Program of Study: NA  
(Example: Animal Science: MS Animal Science: PHD Economics: MA Economics: PHD)

Graduate minor / concentration: NA

**Note: all graduate studies proposals must include an electronic copy of the Graduate Program Policy Document, either describing the new program or highlighting the changes made to the original policy document.**

**Provide a brief summary of the proposed program changes and describe the rationale for the change(s):**

The proposed change does not alter either our BS or MS program in any substantive way. Instead it provides an additional option for qualified ENEP students in the form of a 4+1 program to accelerate the process of students obtaining a graduate degree in the growing field of energy and environmental policy.

Undergraduate students in the ENEP program are currently required to complete 125 credits for graduation. Graduate students are currently required to complete 36 credits. Neither of those or the core requirements of either degree would change. However, our program felt the need to address the fact that many of our undergraduates are interested in developing greater knowledge and expertise in the field of energy and environmental policy that would give them an edge with other undergraduates. Our students asked us to consider a 4+1 program as an option to help exceptional students obtain that edge.

This program allows qualified students in the ENEP BS degree to begin taking classes that will count towards an ENEP MS degree in their junior year. Students will be able to take a maximum of 12 credits that can be double-counted (to apply to both the BS and MS degrees) and an additional 3 credits at the graduate level (that will only count for graduate credit) while pursuing their undergraduate degree. The remaining graduate work would need to be completed after they have graduated with their initial BS degree in ENEP.

We expect this program to be small and targeted to our exceptional students. We also plan to have these students get special advisement from our faculty in order to complete the ENEP 4+1 program.

**List new courses required for the new or revised curriculum. How do they support the overall program objectives of the major/minor/concentrations)?**

(Be aware that approval of the curriculum is dependent upon these courses successfully passing through the Course Challenge list. If there are no new courses enter "None")

None

**Supply support letter from the Library, Dean, and/or Department Chair if needed**

(all new majors/minors will need a support letter from the appropriate administrator.)

Attached letter/email of support from ENEP Program Director, Dr. Ismat Shah

Attached letter/email of support from Associate Dean CAS, Dr. David Wilson

**Supply a resolution for all new majors/programs; name changes of colleges, departments, degrees; transfer of departments from one college to another; creation of new departments; requests for permanent status. See example of resolutions.**

None

**Explain, when appropriate, how this new/revised curriculum supports the 5 goals of undergraduate education: <http://www2.udel.edu/gened/>**

Although the ENEP 4+1 program does not alter curriculum it reinforces many of the goals and objectives of undergraduate education that are already embodied in our interdisciplinary undergraduate degree, the bachelor of science degree in Energy and Environmental Policy. By allowing exceptional undergraduates to take graduate ENEP classes we believe it will better promote:

- Critical reading and writing skills;
- Citizen engagement in energy and environmental policy issues;
- An appreciation for energy and environmental policy concerns and circumstances across different socioeconomic groups and different countries;
- Collaboration in relation to resolving the major energy and environmental problems that

- confront society; and
- Methodological and analytical skills to better analyze and evaluate energy and environmental policy issues;

**Identify other units affected by the proposed changes:**

(This would include other departments/units whose courses are a required part of the proposed curriculum. Attach permission from the affected units. If no other unit is affected, enter "None")

The School of Public Policy and Administration has a 4+1 MA program in Urban Affairs and Public Policy. Letters/emails of support are attached from SPAA Director Maria Aristigueta and 4+1 Program Director Danilo Yanich

Other programs classes with classes that might be affected include Geogrpahy and Wildlife Ecology with letters/emails of support provided

Delphis Levia Chair of the Department of Geography  
Daniel Bowman, Chair Department of Entomology and Wildlife Ecology

**Program Requirements:**

(Show the new or revised curriculum as it should appear in the Course Catalog. If this is a revision, be sure to indicate the changes being made to the current curriculum and **include a side-by-side comparison** of the credit distribution before and after the proposed change.) See example of side by side.

This would not make changes to the current curriculum of either the ENEP BS or MS degree. All it would do is allow for the possibility of a 4+1 program which would allow BS students to begin their graduate students while they are completing their undergraduate requirements.

The only change required in the course catalog would be to have a short blurb and a link of a 4+1 option which would send the user to the ENEP website for further information regarding the ENEP 4+1 program.

Here is what we envision an additional tab in both the list of undergraduate and graduate sections

4+1 ENEP B.S./MS degree

Qualified students in the ENEP Bachelor of Science degree may apply for the combined ENEP 4+1 B.S./M.S. degree. Whereas the traditional program for the Bachelor of Science degree involves 4 years of undergraduate work and the Masters' of Science degree requires an additional 2 years of graduate work, the ENEP 4+1 B.S./M.S. Program allows students to earn both degrees within a 5-year period. After completing 60 credits of undergraduate work towards the Bachelor of Science degree, well-qualified Energy and Environmental Policy majors may be considered for the 4+1 Program. Students admitted to the 4+1 program will complete all of the requirements for the B.S. in Energy and Environmental Policy, but follow a plan of study that includes advanced sections of the courses needed to complete the major and provide advanced standing for the graduate degree. Application program requirements are available at the ENEP Program website <https://publish.enep.udel.edu/undergraduate/undergraduate-programs/enep-4+1-program>

**ROUTING AND AUTHORIZATION:**

(Please do not remove supporting documentation.)

Department Chairperson: *Sue D. [Signature]* Date 10/22/2016

Dean of College: *George Watson* Date 21 Feb 2017

(By signing above, the Dean confirms that their college policies and bylaws have been followed correctly during consideration of the request described in this form.)

The approval actions that were taken at the college level were (check all that apply):

\_\_\_\_\_ college faculty vote; \_\_\_\_\_ college curriculum approval  college senate approval

Chairperson, College Curriculum Committee: *[Signature]* Date 2-6-17

Chairperson, Senate Com. on UG or GR Studies \_\_\_\_\_ Date \_\_\_\_\_

Chairperson, Senate Coordinating Com. \_\_\_\_\_ Date \_\_\_\_\_

Secretary, Faculty Senate \_\_\_\_\_ Date \_\_\_\_\_

Date of Senate Resolution \_\_\_\_\_ Date to be Effective \_\_\_\_\_

Registrar \_\_\_\_\_ Program Code \_\_\_\_\_ Date \_\_\_\_\_

Vice Provost for Academic Affairs & International Programs \_\_\_\_\_ Date \_\_\_\_\_

Board of Trustee Notification \_\_\_\_\_ Date \_\_\_\_\_

Here is a side to side view.

<b>MS degree in ENEP</b>	<b>ENEP 4 +1 degree</b>
<b>Required Classes</b>  ENEP 625 (3 credits) ENEP 810 (3)	<b>Completed while pursuing undergrad degree</b>  ENEP 625 (3) dual count ENEP 425 ENEP 810 (3) dual count ENEP 410
<b>Core Requirements</b>  (A) 2 Methodology courses (6) Menu of classes (B) 2 Social Science courses (6) Menu of classes (C) 1 Science, Engineering and Public Policy class (3) Menu of classes  (D) 15 credits of specialization including either a Thesis (6) or an Analytical Paper (3)	<b>Completed while pursuing undergrad degree</b>  1 ENEP class that addresses either (A), (B), or (C) (3) double counted with undergrad 1 Non-ENEP class that addresses either (A), (B), or (C) (3) double counted with undergrad  1 Graduate class that either addresses (A), (B), (C) or (D) (3) NOT double counted with undergrad
	<b>Total Credit Hours completed while pursuing undergrad degree 15</b>
	<b>Total Credit Hours completed after completing undergrad degree 21</b>  All remaining Core Requirements from groups (A), (B), (C), and (D) including either a Thesis or Analytical Paper (21)
<b>Overall Total Credit Hours 36</b>	<b>Overall Total Credit Hours 36</b>

## Checklist for Curriculum Proposals

YES 1. Are all **signatures on the hard copy of the proposal**?

YES 2. Is the **effective date** correct?

YES 3. Is the **rationale** for the proposal consistent with the changes proposed?

YES 4. Does the proposed **number of credits** match the stated number?

YES 5. Have the affected units been identified and contacted? Are required **support letters** attached?

N/A 6. Is a **resolution** necessary? If so, is it attached?

N/A 7. Are all **courses (required or referenced)** in the UDSIS inventory or in the approval process?

N/A 8. Are all **university requirements** correctly specified?

- A. Breadth requirements.
- B. Multi-cultural requirement.
- C. Writing requirement.
- D. DLE requirement.

N/A 9. Are all **college requirements** correctly specified?

YES 10. Is a **side-by-side comparison** provided?



ENERGY AND ENVIRONMENTAL  
POLICY, 278 GRAHAM HALL  
DEPARTMENT OF PHYSICS AND  
ASTRONOMY, DEPARTMENT OF  
MATERIALS SCIENCE AND  
ENGINEERING  
208 DUPONT HALL

University of Delaware  
Newark, Delaware : 9716  
Ph: 302/831-1618  
Fax: 302/831-4545

October 25, 2016

To whom it may concern

I give my full support to the proposal of creating a 4 + 1 MS program in ENEP. We have current students who have inquired about the possibility of such a degree. We will be very selective in admitting students into this program and we will keep the number manageably small to not overload any required or elective classes.

Sincerely,

A handwritten signature in cursive script that reads "Syed Ismat Shah".

S. Ismat Shah, Director  
Energy and Environmental Policy Program  
Professor  
Physics and Astronomy  
Materials Science and Engineering  
208 Dupont Hall  
University of Delaware  
Newark, DE 19716  
302-831-1618  
302-831-4545 FAX  
[Ismat@udel.edu](mailto:Ismat@udel.edu)

**From:** Wilson, David C  
**Sent:** Tuesday, October 25, 2016 1:35 PM  
**To:** Shah, Syed <[ismat@udel.edu](mailto:ismat@udel.edu)>  
**Subject:** Support for 4+1 program

Prof. Shah,

I fully support the application from the ENEP program to create a 4+1 MS degree.

Best,  
David

**David C. Wilson, Ph.D.**

Associate Dean for the Social Sciences  
College of Arts & Sciences  
University of Delaware  
4 Kent Way  
Newark, DE 19716  
Email: [dcwilson@udel.edu](mailto:dcwilson@udel.edu)  
Phone: [302-831-2703](tel:302-831-2703), Fax: [302-831-6308](tel:302-831-6308)

Site: <https://sites.google.com/site/davidcwilsonphd/home>  
HuffPost Blog: <http://www.huffingtonpost.com/david-c-wilson/>  
Twitter: [@dcwilsonphd](https://twitter.com/dcwilsonphd)



**From:** Aristigueta, Maria P  
**Sent:** Monday, October 24, 2016 9:04 AM  
**To:** Shah, Syed <[ismat@udel.edu](mailto:ismat@udel.edu)>  
**Subject:** ENEP 4 plus 1

Dear Syed,  
I am in full support of the application from the ENEP program to create a 4+1 MS degree.  
Best wishes, Maria

Maria P. Aristigueta  
Charles P. Messick Chair in Public Administration  
Director, School of Public Policy and Administration  
Immediate Past-President, American Society for Public Administration  
(302) 831-4570  
[www.sppa.udel.edu](http://www.sppa.udel.edu)  
<http://www.ipa.udel.edu/directory/homepages/aristigueta.html>

**Yanich, Danilo**

Ray,  
Sounds good to me. Congratulations on the program.  
--danilo

Danilo Yanich, PhD  
Director, MA Program in Urban Affairs & Public Policy  
School of Public Policy & Administration  
Center for Community Research & Service  
University of Delaware  
Newark, DE 19716  
302/ 831-1710  
[dyanich@udel.edu](mailto:dyanich@udel.edu)

**From:** Raymond Scattone <[rayscatt@udel.edu](mailto:rayscatt@udel.edu)>  
**Date:** Wednesday, October 26, 2016 at 3:12 PM  
**To:** "Yanich, Danilo" <[dyanich@udel.edu](mailto:dyanich@udel.edu)>  
**Subject:** ENEP 4+1 program

Hi Danilo, hope all is well. This is just to touch base on the ENEP 4+1 program I was talking to you about the other day. Since you are the director of the 4+1 program for UAPP I wanted to make sure you were okay with the program and would be okay with a few ENEP students taking UAPP grad courses. Thanks in advance.

Ray S

**From:** Delphis Levia [mailto:[dlevia@udel.edu](mailto:dlevia@udel.edu)]  
**Sent:** Wednesday, October 12, 2016 3:12 PM  
**To:** Shah, Syed <[ismat@udel.edu](mailto:ismat@udel.edu)>  
**Subject:** Re: ENEP 4 + 1

Hi Ismat,

Your proposal is fine by us (Geography).

Good luck,  
Delphis (Del) Levia

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Delphis F. Levia, Ph.D.  
Professor of Ecohydrology  
Chair, Department of Geography  
Joint Appt., Department of Plant & Soil Sciences  
University of Delaware, Newark, DE 19716-2541, USA  
Series Editor, Ecological Studies- Analysis and Synthesis (Springer-Verlag)  
Associate Editor, *Journal of Plant Nutrition and Soil Science* (Wiley)  
Skype: del.levia; Tel: (302) 831-3218; Fax: (302) 831-6654

On Wed, Oct 12, 2016 at 3:03 PM, Shah, Syed <[ismat@udel.edu](mailto:ismat@udel.edu)> wrote:

Hello Delphis-

Hope all is well with you.

ENEP is proposing a 4+1 MS program. One or more geography courses are listed as possible courses that the students could take. We are not expecting a huge number of students who might be taking these courses, perhaps 1-3. The senate requires an OK from all the programs that are listed in the possible course list (attached). I am requesting an e-mail from you stating that you have no problem/concern with ENEP 4+1 MS application.

I will greatly appreciate it.

Thanks,

Ismat Shah

**From:** Bowman, Jacob L  
**Sent:** Wednesday, October 12, 2016 2:38 PM  
**To:** Shah, Syed <[ismat@udel.edu](mailto:ismat@udel.edu)>  
**Subject:** RE: 4 + 1

Ismat,

Congrats on the new director position! ENWC413 is fine to list just know that it is often has more requests than open seats. We **will** do our best to accommodate your students.

Take care,  
Jake

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Jacob L. Bowman, Ph.D.  
Certified Wildlife Biologist®  
Department Chair  
Professor Wildlife Ecology  
250 Townsend Hall  
Department of Entomology and Wildlife Ecology  
University of Delaware  
Newark, DE 19716-2160  
Office: [\(302\) 831-4621](tel:(302)831-4621)  
Fax: [\(302\) 831-8889](tel:(302)831-8889)  
Email: [jlbowman@udel.edu](mailto:jlbowman@udel.edu)

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**From:** Shah, Syed  
**Sent:** Wednesday, October 12, 2016 2:19 PM  
**To:** Bowman, Jacob L <[jlbowman@udel.edu](mailto:jlbowman@udel.edu)>  
**Subject:** 4 + 1

Hello Jake-

I hope all is well with you.

I am now the new Director of Energy and Environmental Policy program. We are proposing a 4+1 MS program in ENEP. At least one of ENWC course is listed in possible courses that the students could take. We are not expecting a huge number of students who might be taking these courses, perhaps 1-3. The senate requires an OK from all the programs that are listed in the possible course list (attached). I am requesting an e-mail from you stating that you have no problem/concern with ENEP 4+1 MS application.

I will greatly appreciate it.

Thanks,  
Ismat Shah