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 Scatone 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)?
(If 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 Geography 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/ene4+1-program
ROUTING AND AUTHORIZATION:  (Please do not remove supporting documentation.)

Department Chairperson: ___________________________ Date: 10/22/2016

Dean of College: ___________________________ Date: 24 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: ___________________________ 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:

Revised 9/22/2015/khs
Here is a side to side view.

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

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

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

S. Ismat Shah, Director
Energy and Environmental Policy Program
Professor
Physics and Astronomy
Materials Science and Engineering
208 Du Pont Hall
University of Delaware
Newark, DE 19716
302-831-1618
302-831-4545 FAX
ismat@udel.edu
From: Wilson, David C  
Sent: Tuesday, October 25, 2016 1:35 PM  
To: Shah, Syed <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: dkwilson@udel.edu  
Phone: 302-831-2703, Fax: 302-831-6308

Site: https://sites.google.com/site/davidcwilsonphd/home  
Twitter: @dcwilsonphd
From: Aristigueta, Maria P
Sent: Monday, October 24, 2016 9:04 AM
To: Shah, Syed <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.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

From: Raymond Scattone <rayscatt@udel.edu>
Date: Wednesday, October 26, 2016 at 3:12 PM
To: "Yanich, Danilo" <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
Hi Ismat,

Your proposal is fine by us (Geography).

Good luck,
Delphis (Del) Levi

Delphis F. Levi, 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> wrote:
Hello Delphus-
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>  
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

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  
Fax: (302) 831-8889  
Email: jlbowman@udel.edu

From: Shah, Syed  
Sent: Wednesday, October 12, 2016 2:19 PM  
To: Bowman, Jacob L <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