TO: The Faculty of the College of Engineering

FROM: Dr. Michael Harris, Associate Dean for Undergraduate Education

RE: Change in requisites to accommodate the inclusion of PHYS 17200 is the new curriculum of the Honors Engineering courses, ENGR 16100 and 16200

To facilitate the changes in the courses which require PHYS 17200 as a requisite, this Fast-Track EFD is being submitted on behalf of the schools listed below.

AAE 20300

From: (Undergraduate level PHYS 17200 Minimum Grade of D- or (Undergraduate level PHYS 16200 Minimum Grade of D- and Undergraduate level PHYS 16300 Minimum Grade of D-) ) and (Undergraduate level MA 26100 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 26300 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 17200 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 18200 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 27100 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 17400 Minimum Grade of D- [may be taken concurrently])

To: (Undergraduate level PHYS 17200 Minimum Grade of D- or (Undergraduate level PHYS 16200 Minimum Grade of D- and Undergraduate level PHYS 16300 Minimum Grade of D-) or Undergraduate level ENGR 16200) and (Undergraduate level MA 26100 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 26300 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 17200 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 18200 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 27100 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 17400 Minimum Grade of D- [may be taken concurrently])

ABE 20500

From: (Undergraduate level ENGR 12600 Minimum Grade of C- or Undergraduate level ENGR 12100 Minimum Grade of C- or Undergraduate level ENGR 13200 Minimum Grade of C- or Undergraduate level ENGR 13300 Minimum Grade of C- or Undergraduate level ENGR 14200 Minimum Grade of C-) and Undergraduate level PHYS 17200 Minimum Grade of C- [may be taken concurrently]

To: To: (Undergraduate level ENGR 12600 Minimum Grade of C- or Undergraduate level ENGR 12100 Minimum Grade of C- or Undergraduate level ENGR 13200 Minimum Grade of C- or Undergraduate level ENGR 13300 Minimum Grade of C- or Undergraduate level ENGR 14200 Minimum Grade of C- or Undergraduate level ENGR 16200 Minimum Grade of C-) and (Undergraduate level PHYS 17200 Minimum Grade of C- [may be taken concurrently] or Undergraduate level ENGR 16200 Minimum Grade of C-)
ABE 21000

From: (Undergraduate level CHM 11500 Minimum Grade of D- and Undergraduate level PHYS 17200 Minimum Grade of D-)

To: Undergraduate level CHM 11500 Minimum Grade of D- and (Undergraduate level PHYS 17200 Minimum Grade of D- or Undergraduate level ENGR 16200 Minimum Grade C-)

CE 29700

From: (Undergraduate level MA 26100 Minimum Grade of C- [may be taken concurrently] or Undergraduate level MA 27100 Minimum Grade of C- [may be taken concurrently] or Undergraduate level MA 18200 Minimum Grade of C- [may be taken concurrently] or Undergraduate level MA 26300 Minimum Grade of C- [may be taken concurrently] or Undergraduate level MA 17400 Minimum Grade of C- [may be taken concurrently]) and (Undergraduate level PHYS 17200 Minimum Grade of D- or Undergraduate level PHYS 15200 Minimum Grade of D- or (Undergraduate level PHYS 16200 Minimum Grade of D- and Undergraduate level PHYS 16300 Minimum Grade of D-))

To: (Undergraduate level MA 26100 Minimum Grade of C- [may be taken concurrently] or Undergraduate level MA 27100 Minimum Grade of C- [may be taken concurrently] or Undergraduate level MA 18200 Minimum Grade of C- [may be taken concurrently] or Undergraduate level MA 26300 Minimum Grade of C- [may be taken concurrently] or Undergraduate level MA 17400 Minimum Grade of C- [may be taken concurrently]) and (Undergraduate level ENGR 16200 Minimum Grade of C- or Undergraduate level PHYS 17200 Minimum Grade of D- or Undergraduate level PHYS 15200 Minimum Grade of D- or (Undergraduate level PHYS 16200 Minimum Grade of D- and Undergraduate level PHYS 16300 Minimum Grade of D-))

CE 35000/EEE 35000

From: (Undergraduate level MA 16200 Minimum Grade of D- or Undergraduate level MA 16600 Minimum Grade of D- or Undergraduate level MA 17300 Minimum Grade of D- or Undergraduate level MA 22200 Minimum Grade of D- or Undergraduate level MA 22400 Minimum Grade of D- or Undergraduate level MA 16020 Minimum Grade of D- or Undergraduate level MA 16400 Minimum Grade of D- or Undergraduate level MA 16900 Minimum Grade of D- or Undergraduate level MA 18100 Minimum Grade of D-) and (Undergraduate level CHM 11200 Minimum Grade of D- or Undergraduate level CHM 11600 Minimum Grade of D- or Undergraduate level CHM 13600 Minimum Grade of D- or Undergraduate level CHM 12600 Minimum Grade of D- or Undergraduate level CHM 12400 Minimum Grade of D- or Undergraduate level CHM 12901 Minimum Grade of D- or (Undergraduate level CHM C1060 Minimum Grade of D- and Undergraduate level CHM C1260 Minimum Grade of D-) or (Undergraduate level CHEM C1020 Minimum Grade of D- and Undergraduate level CHEM C1220 Minimum Grade of D-) ) and (Undergraduate level PHYS 17200 Minimum Grade of D- or Undergraduate level PHYS 15200 Minimum Grade of D- or Undergraduate level PHYS 22000 Minimum Grade of D- or Undergraduate level PHYS 15200 Minimum Grade of D- or Undergraduate level PHYS 23300 Minimum Grade of D-)

To: From: (Undergraduate level MA 16200 Minimum Grade of D- or Undergraduate level MA 16600 Minimum Grade of D- or Undergraduate level MA 17300 Minimum Grade of D- or Undergraduate level MA 22200 Minimum Grade of D- or Undergraduate level MA 22400 Minimum Grade of D- or Undergraduate level MA 16020 Minimum Grade of D- or Undergraduate level MA 16400 Minimum
Grade of D- or Undergraduate level MA 16900 Minimum Grade of D- or Undergraduate level MA 18100 Minimum Grade of D-) and (Undergraduate level CHM 11200 Minimum Grade of D- or Undergraduate level CHM 11600 Minimum Grade of D- or Undergraduate level CHM 13600 Minimum Grade of D- or Undergraduate level CHM 12600 Minimum Grade of D- or Undergraduate level CHM 12400 Minimum Grade of D- or Undergraduate level CHM 12901 Minimum Grade of D- or (Undergraduate level CHM C1060 Minimum Grade of D- and Undergraduate level CHM C1260 Minimum Grade of D-) or (Undergraduate level CHEM C1020 Minimum Grade of D- and Undergraduate level CHEM C1220 Minimum Grade of D-) and (Undergraduate level ENGR 16200 Minimum Grade of D- or Undergraduate level PHYS 17200 Minimum Grade of D- or Undergraduate level PHYS 22000 Minimum Grade of D- or Undergraduate level PHYS 15200 Minimum Grade of D- or Undergraduate level PHYS 23300 Minimum Grade of D-)

CHE 20500

From: (Undergraduate level ENGR 12600 Minimum Grade of D- or Undergraduate level ENGR 12100 Minimum Grade of D- or Undergraduate level ENGR 13100 Minimum Grade of D- or Undergraduate level ENGR 19500 Minimum Grade of D- or Undergraduate level ENGR 14100 Minimum Grade of D-) and Undergraduate level PHYS 17200 Minimum Grade of D- or (Undergraduate level PHYS 16200 Minimum Grade of D- and Undergraduate level PHYS 16300 Minimum Grade of D-) and (Undergraduate level MA 16100 Minimum Grade of D- or Undergraduate level MA 16700 Minimum Grade of D- or Undergraduate level MA 16300 Minimum Grade of D- or Undergraduate level MATH 16300 Minimum Grade of D- or Undergraduate level MA 16500 Minimum Grade of D-) and (Undergraduate level CHM 11600 Minimum Grade of D- [may be taken concurrently] or Undergraduate level CHM 13600 Minimum Grade of D- [may be taken concurrently] or Undergraduate level CHM 12400 Minimum Grade of D- [may be taken concurrently] or Undergraduate level CHM 12600 Minimum Grade of D- [may be taken concurrently] or Undergraduate level CHM 11000 Minimum Grade of D- [may be taken concurrently])Minimum Grade of D- [may be taken concurrently])

To: (Undergraduate level ENGR 12600 Minimum Grade of D- or Undergraduate level ENGR 12100 Minimum Grade of D- or Undergraduate level ENGR 13100 Minimum Grade of D- or Undergraduate level ENGR 19500 Minimum Grade of D- or Undergraduate level ENGR 14100 Minimum Grade of D- or Undergraduate level ENGR 16100 Minimum Grade of D-) and Undergraduate level PHYS 17200 Minimum Grade of D- or (Undergraduate level PHYS 16200 Minimum Grade of D- and Undergraduate level PHYS 16300 Minimum Grade of D-) or (Undergraduate level ENGR 16200 Minimum Grade of D-) and (Undergraduate level MA 16100 Minimum Grade of D- or Undergraduate level MA 16700 Minimum Grade of D- or Undergraduate level MA 16300 Minimum Grade of D-) and (Undergraduate level CHM 11600 Minimum Grade of D- [may be taken concurrently] or Undergraduate level CHM 13600 Minimum Grade of D- [may be taken concurrently] or Undergraduate level CHM 12400 Minimum Grade of D- [may be taken concurrently] or Undergraduate level CHM 12600 Minimum Grade of D- [may be taken concurrently] or Undergraduate level CHM 11000 Minimum Grade of D- [may be taken concurrently])minimum Grade of D- [may be taken concurrently])
EEE 35000/CE 35000

From: (Undergraduate level MA 16200 Minimum Grade of D- or Undergraduate level MA 16600 Minimum Grade of D- or Undergraduate level MA 17300 Minimum Grade of D- or Undergraduate level MA 22200 Minimum Grade of D- or Undergraduate level MA 22400 Minimum Grade of D- or Undergraduate level MA 16020 Minimum Grade of D- or Undergraduate level MA 16400 Minimum Grade of D- or Undergraduate level MA 16900 Minimum Grade of D- or Undergraduate level MA 18100 Minimum Grade of D-) and (Undergraduate level CHM 11200 Minimum Grade of D- or Undergraduate level CHM 11600 Minimum Grade of D- or Undergraduate level CHM 13600 Minimum Grade of D- or Undergraduate level CHM 12600 Minimum Grade of D- or Undergraduate level CHM 12901 Minimum Grade of D-) or (Undergraduate level CHEM C1220 Minimum Grade of D- and Undergraduate level CHEM C1020 Minimum Grade of D-) or (Undergraduate level CHEM C1060 Minimum Grade of D- and Undergraduate level CHEM C1260 Minimum Grade of D-) and (Undergraduate level PHYS 17200 Minimum Grade of D- or Undergraduate level PHYS 15200 Minimum Grade of D- or Undergraduate level PHYS 23300 Minimum Grade of D-)

To: (Undergraduate level MA 16200 Minimum Grade of D- or Undergraduate level MA 16600 Minimum Grade of D- or Undergraduate level MA 17300 Minimum Grade of D- or Undergraduate level MA 22200 Minimum Grade of D- or Undergraduate level MA 22400 Minimum Grade of D- or Undergraduate level MA 16020 Minimum Grade of D- or Undergraduate level MA 16400 Minimum Grade of D- or Undergraduate level MA 16900 Minimum Grade of D- or Undergraduate level MA 18100 Minimum Grade of D-) and (Undergraduate level CHM 11200 Minimum Grade of D- or Undergraduate level CHM 11600 Minimum Grade of D- or Undergraduate level CHM 13600 Minimum Grade of D- or Undergraduate level CHM 12600 Minimum Grade of D- or Undergraduate level CHM 12901 Minimum Grade of D-) or (Undergraduate level CHEM C1220 Minimum Grade of D- and Undergraduate level CHEM C1020 Minimum Grade of D-) or (Undergraduate level CHEM C1060 Minimum Grade of D and Undergraduate level CHEM C1260 Minimum Grade of D-) and (Undergraduate level ENGR 16200 Minimum Grade of D- or Undergraduate level PHYS 17200 Minimum Grade of D- or Undergraduate level PHYS 22000 Minimum Grade of D- or Undergraduate level PHYS 15200 Minimum Grade of D- or Undergraduate level PHYS 23300 Minimum Grade of D-)

NUCL 20000

From: (Undergraduate level MA 16200 Minimum Grade of D- or Undergraduate level MA 16900 Minimum Grade of D- or Undergraduate level MA 16600 Minimum Grade of D- or Undergraduate level MA 16400 Minimum Grade of D- or Undergraduate level MA 17100 Minimum Grade of D- or Undergraduate level MA 17300 Minimum Grade of D- or Undergraduate level MATH 16400 Minimum Grade of D- or Undergraduate level MATH M2160 Minimum Grade of D- or Undergraduate level MA 18100 Minimum Grade of D-) and (Undergraduate level PHYS 15200 Minimum Grade of D- or Undergraduate level PHYS 17200 Minimum Grade of D-) or (Undergraduate level PHYS 16200 Minimum Grade of D- and Undergraduate level PHYS 16300 Minimum Grade of D-)

To: (Undergraduate level MA 16200 Minimum Grade of D- or Undergraduate level MA 16900 Minimum Grade of D- or Undergraduate level MA 16600 Minimum Grade of D- or Undergraduate level
MA 16400 Minimum Grade of D- or Undergraduate level MA 17100 Minimum Grade of D- or Undergraduate level MA 17300 Minimum Grade of D- or Undergraduate level MATH 16400 Minimum Grade of D- or Undergraduate level MATH M2160 Minimum Grade of D- or Undergraduate level MA 18100 Minimum Grade of D-) and (Undergraduate level PHYS 15200 Minimum Grade of D- or Undergraduate level PHYS 17200 Minimum Grade of D-) or (Undergraduate level PHYS 16200 Minimum Grade of D- and Undergraduate level PHYS 16300 Minimum Grade of D-) or (Undergraduate level ENGR 16200 minimum grade of D-)
PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

DEPARTMENT Nuclear Engineering
EFFECTIVE SESSION Fall 2017

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

1. New course with supporting documents
2. Add existing course offered at another campus
3. Expiration of a course
4. Change in course number
5. Change in course title
6. Change in course credit/type
7. Change in course attributes (department head signature only)
8. Change in instructional hours
9. Change in course description
10. Change in course requisites
11. Change in semesters offered (department head signature only)
12. Transfer from one department to another

PROPOSED:  
Subject Abbreviation NUCL 20000
Course Number
Long Title Introduction to Nuclear Engineering
Short Title

EXISTING:  
Subject Abbreviation NUCL 20000
Course Number
Long Title Introduction to Nuclear Engineering
Short Title

Abbreviated title will be entered by the Office of the Registrar if omitted. (90 CHARACTERS ONLY)

CAMPUS(ES) INVOLVED
- Calumet
- Cont Ed
- Ft. Wayne
- N. Central
- Tech Statewide
- Indianapolis
- W. Lafayette

TERMS OFFERED
Check All That Apply:
- Fall
- Spring
- Summer

CREDIT TYPE
1. Fixed Credit: Cr. Hrs.
2. Variable Credit Range:
   Minimum Cr. Hrs. (Check One) To
   Maximum Cr. Hrs. Yes No
3. Equivalent Credit: Yes No

COURSE ATTRIBUTES
- Pass/Not Pass Only
- Satisfactory/Unsatisfactory Only
- Repeatable
- Maximum Repeatable Credit:
- Credit by Examination
- Instructor
- Registration Approval Type
- Variable Title
- Honors
- Full Time Privilege
- Off Campus Experience

Include comment to explain fee

Schedule/Type
- Lecture
- Recitation
- Presentation
- Laboratory
- Lab Prep
- Studio
- Distance
- Clinic
- Experiential
- Research
- Ind. Study
- Pract/Observe

Minutes Per Mtg
Meetings Per Week
Weeks Offered % of Credit Allocated

Cross-Listed Courses

COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):
(Write your course description here)

*COURSE LEARNING OUTCOMES:

Calumet Department Head Date
Calumet School Dean Date

Ft. Wayne Department Head Date
Ft. Wayne School Dean Date

Indianapolis Department Head Date
Indianapolis School Dean Date

North Central Faculty Senate Chair Date

West Lafayette Department Head Date
West Lafayette College/School Dean Date
West Lafayette Registrar Date
### PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

**DEPARTMENT**: Environmental and Ecological Engineering  
**EFFECTIVE SESSION**: Fall 2017

**INSTRUCTIONS**: Please check the items below which describe the purpose of this request.

- [ ] New course with supporting documents
- [ ] Add existing course offered at another campus
- [ ] Expiration of a course
- [ ] Change in course number
- [ ] Change in course title
- [ ] Change in course credit/credit type
- [ ] Change in course attributes (department head signature only)
- [ ] Change in Instructional hours
- [ ] Change in course description
- [ ] Change in course requisites
- [ ] Change in semesters offered (department head signature only)
- [ ] Transfer from one department to another

### PROPOSED:
- **Subject Abbreviation**: EEE
- **Course Number**: 35000
- **Long Title**: Introduction To Environmental And Ecological Engineering
- **Short Title**: Introduction To Environmental And Ecological Engineering

Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)

### CREDIT TYPE

1. Fixed Credit: 
   - Cr. Hrs.

2. Variable Credit Range:
   - Minimum Cr. Hrs.
   - Maximum Cr. Hrs.
   - (Check One)
     - To
     - Or
     - Or
   - Equivalent Credit: 
     - Yes
     - No

### COURSE ATTRIBUTES: Check All That Apply

- 1. Pass/Not Pass Only
- 2. Satisfactory/Unsatisfactory Only
- 3. Repeatable
- 4. Maximum Repeatable Credit:
- 5. Credit by Examination
- 6. Registration Approval Type
- 7. Variable Title
- 8. Honors
- 9. Full Time Privilege
- 10. Off Campus Experience

### TERMS OFFERED

- Check All That Apply:
  - [ ] Fall
  - [ ] Spring
  - [ ] Summer

### CAMPUS(ES) INVOLVED

- Calumet
- Cont Ed
- Ft. Wayne
- Tech Statewide
- Indianapolis
- N. Central
- W. Lafayette

### SCHEDULE TYPE

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### COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):

See attached sheet of paper

### *COURSE LEARNING OUTCOMES:

- Calumet Department Head: [Name]  
  - Date: [Date]
  
- Calumet School Dean: [Name]  
  - Date: [Date]

- Fort Wayne Department Head: [Name]  
  - Date: [Date]
  
- Fort Wayne School Dean: [Name]  
  - Date: [Date]

- Indianapolis Department Head: [Name]  
  - Date: [Date]
  
- Indianapolis School Dean: [Name]  
  - Date: [Date]

- Fort Wayne Faculty Senate Chair: [Name]  
  - Date: [Date]

- Office of the Registrar: [Name]  
  - Date: [Date]

- West Lafayette Registrar: [Name]  
  - Date: [Date]
PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)
### PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

**DEPARTMENT:** Civil Engineering  
**EFFECTIVE SESSION:** Fall 2017

**INSTRUCTIONS:** Please check the items below which describe the purpose of this request.

- [ ] 1. New course with supporting documents
- [ ] 2. Add existing course offered at another campus
- [ ] 3. Expiration of a course
- [ ] 4. Change in course number
- [ ] 5. Change in course title
- [ ] 6. Change in course credit/type
- [ ] 7. Change in course attributes (department head signature only)
- [ ] 8. Change in instructional hours
- [ ] 9. Change in course description
- [ ] 10. Change in course requisites
- [ ] 11. Change in semesters offered (department head signature only)
- [ ] 12. Transfer from one department to another

#### PROPOSED:
- **Subject Abbreviation:**
- **Course Number:**
- **Long Title:** Introduction To Environmental And Ecological Engineering
- **Short Title:**

#### EXISTING:
- **Subject Abbreviation:** CE 35000
- **Course Number:**

**Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)**

#### CREDIT TYPE
- **1. Fixed Credit:** Cr. Hrs.  
- **2. Variable Credit Range:** Minimum Cr. Hrs.  
  (Check One) To  
  Maximum Cr. Hrs.  
- **3. Equivalent Credit:** Yes  
  No

#### COURSE ATTRIBUTES: Check All That Apply
- [ ] 1. Pass/Not Pass Only
- [ ] 2. Satisfactory/Unsatisfactory Only
- [ ] 3. Repeatable
- [ ] 4. Credit by Examination
- [ ] 5. Fees: [Coop] [Lab] Rate Request
- [ ] 6. Registration Approval Type
  - Department
  - Instructor
- [ ] 7. Variable Title
- [ ] 8. Honors
- [ ] 9. Full Time Privilege
- [ ] 10. Off Campus Experience

#### Cross-Listed Courses
- EEE 35000

#### COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):
See attached sheet of paper

#### COURSE LEARNING OUTCOMES:

**Calumet Department Head**  
Date  
**Calumet School Dean**  
Date  
**Fort Wayne Department Head**  
Date  
**Fort Wayne School Dean**  
Date  
**Indianapolis Department Head**  
Date  
**Indianapolis School Dean**  
Date  
**North Central Faculty Senate Chair**  
Date  
**Vice Chancellor for Academic Affairs**  
Date  
**West Lafayette Department Chair**  
Date  
**West Lafayette College/School Dean**  
Date  
**West Lafayette Registrar**  
Date

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**OFFICE OF THE REGISTRAR**
PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

DEPARTMENT: Civil Engineering
EFFECTIVE SESSION: Fall 2017

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

- New course with supporting documents
- Add existing course offered at another campus
- Expiration of a course
- Change in course number
- Change in course title
- Change in course credit/type
- Change in course attributes (department head signature only)
- Change in instructional hours
- Change in course description
- Change in course requisites
- Change in semesters offered (department head signature only)
- Transfer from one department to another

PROPOSED:

<table>
<thead>
<tr>
<th>Subject Abbreviation</th>
<th>Subject Abbreviation</th>
<th>CE 29700</th>
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</thead>
<tbody>
<tr>
<td>Course Number</td>
<td>Course Number</td>
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</tbody>
</table>

Long Title: Basic Mechanics I (Statics)

Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)

TERM OFFERED
Check All That Apply:
- Fall
- Spring
- Summer

CAMPUS(ES) INVOLVED
- Calumet
- Cont Ed
- Ft Wayne
- Tech Statewide
- Indianapolis
- W. Lafayette

CREDIT TYPE
1. Fixed Credit: Cr. Hrs: ______________________
2. Variable Credit Range: Minimum Cr. Hrs: ________
   Maximum Cr. Hrs: ________
   (Check One) To ________ Or ________
3. Equivalent Credit: Yes ________ No ________

COURSE ATTRIBUTES: Check All That Apply
- 1. Pass/Not Pass Only
- 2. Satisfactory/Unsatisfactory Only
- 3. Repeatable
- 4. Credit by Examination
- 5. Fees: ________ Coop ________ Lab ________ Rate Request
  Include comment to explain fee
- 6. Registration Approval Type
  Department ________ Instructor ________
- 7. Variable Title
- 8. Honors
- 9. Full Time Privilege
- 10. Off Campus Experience

SCHEDULE TYPE
- Lecture
- Recitation
- Presentation
- Laboratory
- Lab Prep
- Studio
- Distance
- Clinic
- Experiential
- Research
- Ind. Study
- Prac/Observ

Weeks Offered
% of Credit Allocated

COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):
See attached sheet of paper

*COURSE LEARNING OUTCOMES:

Calumet Department Head: ______________________ Date: ___________
Calumet School Dean: ______________________ Date: ___________

Fort Wayne Department Head: ______________________ Date: ___________
Fort Wayne School Dean: ______________________ Date: ___________

Indianapolis Department Head: ______________________ Date: ___________
Indianapolis School Dean: ______________________ Date: ___________

Vice Chancellor of Academic Affairs: ______________________ Date: ___________

OFFICE OF THE REGISTRAR

[Signature]
[Signature]
PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

DEPARTMENT: Agricultural and Biological Engineering
EFFECTIVE SESSION: Fall 2017

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

☐ 1. New course with supporting documents
☐ 2. Add existing course offered at another campus
☐ 3. Expiration of a course
☐ 4. Change in course number
☐ 5. Change in course title
☐ 6. Change in course credit/ type
☐ 7. Change in course attributes (department head signature only)
☐ 8. Change in instructional hours
☐ 9. Change in course description
☐ 10. Change in course requisites
☐ 11. Change in semesters offered (department head signature only)
☐ 12. Transfer from one department to another

PROPOSED:
Subject Abbreviation: 
Course Number: 21000
Long Title: Thermodynamics Principles Of Engineering And Biological Systems
Short Title: Thermo Prin Of Eng & Bio Sys

EXISTING:
Subject Abbreviation: ABE
Course Number: 
Long Title: 
Short Title: 

TERMS OFFERED: Check All That Apply:
☐ Fall  ☑ Spring  ☐ Summer

CAMPUS(ES) INVOLVED:
Calumet  Cont Ed  N. Central  Ft. Wayne  Tech Statewide  W. Lafayette  Indianapolis

Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)

CREDIT TYPE
1. Fixed Credit: Cr. Hrs. 
2. Variable Credit Range: Minimum Cr. Hrs. To Maximum Cr. Hrs.
3. Equivalent Credit: Yes  No

COURSE ATTRIBUTES: Check All That Apply
1. Pass/Not Pass Only
2. Satisfactory/Unsatisfactory Only
3. Repeatable
4. Credit by Examination
5. Fees: Coop  Lab  Rate Request
6. Registration Approval Type
7. Variable Title
8. Honors
9. Full Time Privilege
10. Off Campus Experience

Schedule Type:
- Lecture
- Recitation
- Presentation
- Laboratory
- Lab Prep
- Studio
- Distance
- Clinic
- Experiential
- Research
- Ind. Study
- Pract/Observ

Minutes Per Mtg  Meetings Per Week  Weeks Offered  % of Credit Allocated

Cross-Listed Courses:

COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):
Application of thermodynamic principles to the design and operation of biological and engineering systems. The focus is on mass and energy balances for non-reacting processes and on the second law of thermodynamics. These principles are applied to biological and agricultural engineering systems. Specific topics include refrigeration systems, power cycles, energy conversion systems, and environmental impacts of energy production.

Undergraduate level: C/4.0, Minimum Grade of B, and Undergraduate level: PHY 17500: Minimum Grade of C.

*COURSE LEARNING OUTCOMES:

Calumet Department Head  Date
Calumet School Dean  Date

Fort Wayne Department Head  Date
Fort Wayne School Dean  Date

Indianapolis Department Head  Date
Indianapolis School Dean  Date

North Central Faculty Senate Chair  Date

West Lafayette Department Head  Date
West Lafayette College/School Dean  Date

West Lafayette Registrar  Date

OFFICE OF THE REGISTRAR
PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

DEPARTMENT Agricultural and Biological Engineering
EFFECTIVE SESSION Fall 2017

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

☐ 1. New course with supporting documents
☐ 2. Add existing course offered at another campus
☐ 3. Expiration of a course
☐ 4. Change in course number
☐ 5. Change in course title
☐ 6. Change in course credit/type
☐ 7. Change in course attributes (department head signature only)
☐ 8. Change in instructional hours
☐ 9. Change in course description
☐ 10. Change in course requisites
☐ 11. Change in semesters offered (department head signature only)
☐ 12. Transfer from one department to another

PROPOSED:
Subject Abbreviation ABE
Course Number 20500
Long Title Computation for Engineering Systems
Short Title Computation Engr Sys

EXISTING:
Subject Abbreviation
Course Number
Long Title
Short Title

TERMS OFFERED
Check All That Apply:
☐ Fall ☐ Spring ☐ Summer

CAMPUS(ES) INVOLVED
☐ Calumet
☐ Cont Ed
☐ N. Central
☐ Tech Statewide
☐ Ft. Wayne
☐ W. Lafayette
☐ Indianapolis

Abbreviated title will be entered by the Office of the Registrar if omitted. (50 CHARACTERS ONLY)

CREDIT TYPE
1. Fixed Credit: Cr. Hrs.
2. Variable Credit Range: Minimum Cr. Hrs. (Check One) To Or
Maximum Cr. Hrs.
3. Equivalent Credit: Yes ☐ No ☐

COURSE ATTRIBUTES: Check All That Apply
6. Registration Approval Type
☐ Department ☐ Instructor
7. Variable Title
8. Honors
9. Full Time Privilege
10. Off-Campus Experience

Schedule Type
Lecture
Recitation
Presentation
Laboratory
Lab Prep
Studio
Distance
Clinic
Experimental
Research
Ind. Study
Pract/Observ

Minutes Per Mtg
Meetings Per Week
Weeks Offered
% of Credit Allocated

Cross-Listed Courses

COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):
Development of engineering problem solving and design skills. Use of Excel, Matlab, and MathCad for problem solving, data analysis, numerical modeling, and statistics.
(Reaction level ENGR 12600 Minimum Grade of C- or Undergraduate level ENGR 12100 Minimum Grade of C- or Undergraduate level ENGR 13200 Minimum Grade of C-
or Undergraduate level ENGR 13300 Minimum Grade of C- or Undergraduate level ENGR 14200 Minimum Grade of C- or Undergraduate level ENGR 16200 Minimum Grade of C-)

*COURSE LEARNING OUTCOMES:

Calumet Department Head Date
Calumet School Dean Date

Fort Wayne Department Head Date
Fort Wayne School Dean Date

Indianapolis Department Head Date
Indianapolis School Dean Date

North Central Faculty Senate Chair Date

West Lafayette Department Head Date
West Lafayette College School Dean Date

West Lafayette Registrar Date

OFFICE OF THE REGISTRAR
PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

DEPARTMENT: Aero & Astro Engineering  EFFECTIVE SESSION: Fall 2017

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

1. New course with supporting documents
2. Add existing course offered at another campus
3. Expiration of a course
4. Change in course number
5. Change in course title
6. Change in course credit type
7. Change in course attributes (department head signature only)
8. Change in instructional hours
9. Change in course description
10. Change in course requirements
11. Change in semesters offered (department head signature only)
12. Transfer from one department to another

PROPOSED:

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<th>Existing: AAE</th>
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<td>Course Number</td>
<td>Course Number</td>
<td>20300</td>
</tr>
<tr>
<td>Long Title</td>
<td>Aeronautics I</td>
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TERMS OFFERED: Check All That Apply:

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<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
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CAMPUS(ES) INVOLVED:

- Calumet
- Cont Ed
- Pl. Wayne
- Tech Statewide
- Indianapolis
- W. Lafayette

CREDIT TYPE:

- Fixed Credit: Cr. Hrs. [ ]
- Variable Credit Range:
  - Minimum Cr. Hrs. (Check One) [ ]
  - To [ ]
  - Or [ ]
  - Maximum Cr. Hrs. [ ]
- Equivalent Credit: Yes [ ] No [ ]

COURSE ATTRIBUTES: Check All That Apply

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<th>4. Credit by Examination</th>
<th>5. Fees:</th>
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Include comment to explain fee

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CROSS-LISTED COURSES:

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COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):

(Undergraduate level: PHYS 17200 Minimum Grade of D- or Undergraduate level PHYS 18300 Minimum Grade of D-) or Undergraduate level ENGR 16200 and (Undergraduate level MA 26100 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 26300 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 17200 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 18200 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 27101 Minimum Grade of D- [may be taken concurrently] or Undergraduate level MA 17430 Minimum Grade of D- [may be taken concurrently].)

COURSE LEARNING OUTCOMES:

1. Compute velocities and accelerations for any type of motion.
2. Compute angular velocities and accelerations of rigid bodies.
4. Model forces and solve general statics of bodies problems.

Calumet Department Head: [Signature] Date: [Date]
Calumet School Dean: [Signature] Date: [Date]

Fort Wayne Department Head: [Signature] Date: [Date]
Fort Wayne School Dean: [Signature] Date: [Date]

Indianapolis Department Head: [Signature] Date: [Date]
Indianapolis School Dean: [Signature] Date: [Date]

North Central Faculty Senate Chair: [Signature] Date: [Date]
Vice Chancellor for Academic Affairs: [Signature] Date: [Date]

West Lafayette Department Head: [Signature] Date: [Date]
West Lafayette College School Dean: [Signature] Date: [Date]

OFFICE OF THE REGISTRAR