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

- [ ] 1. New course with supporting documents
- [ ] 2. Add existing course
- [ ] 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
- [ ] 8. Change in instructional hours
- [ ] 9. Change in course description
- [ ] 10. Change in course requisites
- [ ] 11. Change in semesters offered
- [ ] 12. Transfer from one department to another

### PROPOSED:

**Subject Abbreviation:** CE  
**Course Number:** 577  
**Long Title:** Analysis of Plates and Shells  
**Short Title:** Plates and Shells

Abbreviated title will be entered by the Office of the Registrar if omitted. (22 CHARACTERS ONLY)

### CREDIT TYPE

<table>
<thead>
<tr>
<th>1. Fixed Credit: Cr. Hrs.</th>
<th>2. Variable Credit Range:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Minimum Cr. Hrs: 3</td>
</tr>
<tr>
<td></td>
<td>Maximum Cr. Hrs:</td>
</tr>
</tbody>
</table>

### COURSE ATTRIBUTES:

- Pass/Not Pass Only
- Satisfactory/Unsatisfactory Only
- Repeatable
- Maximum Repeatable Credit: 100
- Credit by Examination
- Designator Required
- Special Fees

### TERMS OFFERED

- Summer
- Spring
- Fall

### CAMPUS (ES) INVOLVED

- Calumet
- Indianapolis
- W. Lafayette
- Tech Statewide

### INSTRUCTORS

- Instructor

### COURSE DESCRIPTION (INCLUDE REQUISITES):

Sem 1 or 2, Class 3, Cr. 3.  
Prerequisite: CE 270 and MA 262.  
Authorized equivalent courses or consent of instructor may be used in satisfying course prerequisites.

Kirchhoff plates bending theory, classical solution of rectangular plates by Navier and Levy methods, and by approximate techniques of strip theory, Rayleigh-Ritz, finite difference, and finite element methods. Special topics in plate analysis. Analytical solution of shells of revolution based on membrane and bending theories, and numerical solution by the finite element method.

### Approval Signatures

- Office of the Registrar
- Calumet Undergrad Curriculum Committee Date
- Fort Wayne Department Head Date
- Indianapolis Department Head Date
- North Central Department Head Date
- West Lafayette Department Head Date
- Graduate Council Area Committee Chair Date
- Calumet Department Head Date
- Fort Wayne School Dean Date
- Indianapolis School Dean Date
- North Central Chancellor Date
- West Lafayette College/School Dean Date
- Graduate Dean Date
- Calumet School Dean Date
- Fort Wayne Chancellor Date
- Undergrad Curriculum Committee Date
- Date Approved by Graduate Council
- West Lafayette Registrar Date

**Print Form**
TO: The Faculty of the College of Engineering  
FROM: The Faculty of the School of Civil Engineering  
RE: Changes in CE 577 Course Description and Schedule

From:  

CE 577 – Analysis of Plates and Shells  
Sem. 1, Class 3, Cr. 3.  
Prerequisite: CE 270 and MA 262. Authorized equivalent courses or consent of instructor may be used in satisfying course prerequisites.

Kirchhoff plate bending theory, analytical solution of circular plates, classical solution of rectangular plates by Navier and Levy methods, and by numerical techniques of Rayleigh-Ritz, finite difference and finite element methods. Analytical solution of shells of revolution based on membrane and bending theories, and numerical solution by the finite element method.

To:  

CE 577 – Analysis of Plates and Shells  
Sem. 1 or 2, Class 3, Cr. 3.  
Prerequisite: CE 270 and MA 262. Authorized equivalent courses or consent of instructor may be used in satisfying course prerequisites.

Kirchhoff plates bending theory, classical solution of rectangular plates by Navier and Levy methods, and by approximate techniques of strip theory, Rayleigh-Ritz, finite difference and finite element methods. Special topics in plate analysis. Analytical solution of shells of revolution based on membrane and bending theories, and numerical solution by the finite element method.

Reason: To provide an updated course description and course offering schedule.

APPROVED FOR THE FACULTY  
OF THE SCHOOLS OF ENGINEERING  
BY THE COMMITTEE ON  
FACULTY RELATIONS  

CFR Minutes 10/7
Date 4/7/06
Chairman CFR [Signature]