**PURDUE UNIVERSITY**

**REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF A COURSE**

**DEPARTMENT** ECE  
**EFFECTIVE SESSION** Fall 2006

**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:**

<table>
<thead>
<tr>
<th>Subject Abbreviation</th>
<th>ECE</th>
<th>Course Number</th>
<th>573</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Title</td>
<td>Compilers and Translator Writing Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short Title</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

**CREDIT TYPE**

<table>
<thead>
<tr>
<th>Instructional Type</th>
<th>Minutes Per Mtg</th>
<th>Meetings Per Week</th>
<th>Weeks Offered</th>
<th>% of Credit Allocated</th>
<th>Delivery Method</th>
<th>Delivery Medium/Audio, Internet, Live, Text-Based, Video</th>
</tr>
</thead>
</table>

**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. Designator Required
7. Registration Approval Type
   - Department
   - Instructor
8. Variable Title
9. Remedial
10. Honors
11. Full Time Privilege
12. Off Campus Experience

**TERMS OFFERED**

Check All That Apply:

- Summer
- Spring
- Fall

**CAMPUS(ES) INVOLVED**

<table>
<thead>
<tr>
<th>Campus</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calumet</td>
<td>Ft. Wayne</td>
</tr>
<tr>
<td>Indianapolis</td>
<td>N. Central</td>
</tr>
<tr>
<td>W. Lafayette</td>
<td>Cont Ed</td>
</tr>
<tr>
<td>Tech Statewide</td>
<td></td>
</tr>
</tbody>
</table>

**COURSE DESCRIPTION (INCLUDE REQUISITES):**

**Cross-Listed Courses**


**OFFICE OF THE REGISTRAR**

[Signatures and dates from the form are present but not transcribed.]
TO: The Faculty of the College of Engineering

FROM: The Faculty of the School of Electrical and Computer Engineering

RE: Title Changes to Graduate-Level Course of ECE 573

The faculty of the School of Electrical and Computer Engineering has approved the following title changes of a graduate-level course. This action is now submitted to the Engineering Faculty with a recommendation for approval.

From: ECE 573 Compilers And Translator Writing Systems

To: ECE 573 Optimizing Compilers

ECE 573 Optimizing Compilers
Class 3, Lab 0, Credit 3
Sem. 1
Prerequisites: none

Course Description: This course presents the concepts and techniques to design and implement an optimizing compiler. The course includes topics in the use of tools for parsing and lexical analysis, semantic routines, program parallelization and scalar optimizations.

Reason: The title of this course was changed to better reflect the evolving course content.

Course History: The course has been and continues to be offered every fall.

Mark J.T. Smith
Professor and Head

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

CFR Minutes 13
Date 1/18/07
Chairman CFR [Signature]

Course Outcomes:

A student who successfully fulfills the course requirements will have demonstrated an ability to understand and use

i. An understanding of how to use parser generator tools and lexical analysis tools to parse a program source;
ii. An understanding of the terminology and techniques of semantic processing, code generation, and optimization;
iii. Third outcome an ability to design and implement a compiler, translator or interpreter for a small language based on their knowledge of (i) and (ii).

Assessment Methods:

There will be at least one midterm and a final exam. 50% of the final grade will reflect the performance on a class project that each student will propose and conduct.
PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF A GRADUATE COURSE
(500-600 LEVEL)

DEPARTMENT: ECE
EFFECTIVE SESSION: F07

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

☐ 1. New course with supporting documents (complete proposal form)
☐ 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
☐ 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: 
Course Number: 
Long Title: Optimizing Compilers
Short Title: 

EXISTING:
Subject Abbreviation: ECE
Course Number: 573

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

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

Abbreviated title will be approved by the Office of the Registrar if unlisted. (22 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
4. Thesis 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. Designator Required
6. Special Fees
7. Registration Approval Type
8. Vartable Title
9. Remedial
10. Honors
11. Full Time Privilege
12. Off Campus Experience

Institutional Type
Lecture
Recitation
Presentation
Laboratory
Lab Prep
Studio
Distance
Clinic
Experiential
Research
Ind. Study
Prac/Observ

Minutes Per Mgr.
Meetings Per Week
Weeks Offered
% of Credit Allocated
Delivery Method (Async. Or Synch.)
Delivery Medium (Audio, Internet, Live, Text-Based, Video)

Cross-Listed Courses

COURSE DESCRIPTION (INCLUDE REQUIREMENTS)
From: ECE 573 Compilers And Translator Writing Systems
To: ECE 573 Optimizing Compilers

Calumet Department Head Date Calumet School Dean Date Calumet Undergrad Curriculum Committee Date

Fort Wayne Department Head Date Fort Wayne School Dean Date

Indianapolis Department Head Date Indianapolis School Dean Date

North Central Department Head Date North Central Chancellor Date

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

Graduate Area Committee Convener Date Graduate Dean Date

OFFICE OF THE REGISTRAR
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FROM: The Faculty of the School of Electrical and Computer Engineering

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