## PURDUE UNIVERSITY

**REQUEST FOR ADDITION, EXPIRATION, OR REVISION OF AN UNDERGRADUATE COURSE**

**DEPARTMENT**

**Computer and Electrical Engineering Technology & Information Systems and Technology**

**EFFECTIVE SESSION**

**Fall 2010**

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

- [x] 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

### PROPOSED:

- **Subject Abbreviation**: IST
- **Course Number**: 360
- **Long Title**: Enterprise Systems
- **Short Title**: Enterprise Systems

### EXISTING:

- **Subject Abbreviation**:
- **Course Number**:
- **Long Title**:
- **Short Title**: Enterprise Systems

### TERMS OFFERED

- **Check All That Apply**
  - [x] Summer
  - [x] Fall
  - [x] Spring

### CAMPUS(ES) INVOLVED

- [ ] Calumet
- [ ] Cont Ed
- [ ] Tech Statewide
- [ ] Ft. Wayne
- [ ] W. Lafayette
- [ ] Indianapolis

### CREDIT TYPE

1. **Fixed Credit Cr. Hrs.**: 3.0
2. **Variable Credit Range**:
   - Minimum Cr. Hrs.: [ ]
   - 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. Variable Title
9. Remedial
10. Honors
11. Full Time Privilege
12. Off Campus Experience

### Instructional Type

- **Lecture**: 75
- **Recitation**: 2
- **Presentation**:
- **Laboratory**:
- **Lab Prep**:
- **Studio**:
- **Distance**:
- **Clinic**:
- **Experiential**:
- **Research**:
- **Intern. Study**:
- **Pract/Observe**:

### Course Description

**P: IST 260.** This course is designed to provide students with an understanding of the theoretic and practical issues related to the application of Enterprise Systems within organizations. The main focus of this course is to demonstrate how Enterprise Systems integrate information and organizational processes across functional areas, and global operations, with a unified system comprised of a single database and shared reporting tools. Example software will be used to illustrate how Enterprise systems work.

### OFFICE OF THE REGISTRAR
**Learning objectives**

Students will:

1. Understand the fundamentals of Enterprise Systems and issues associated with their implementation.
2. Learn to evaluate the costs and benefits of implementing an Enterprise System.
3. Understand how enterprise systems integrate functional areas into one enterprise-wide information system.
4. Learn to explain how “best practices” are incorporated in Enterprise Systems.
5. Learn to recognize how an organizational process often spans different functional areas.
6. Learn to describe the role of Enterprise Systems in carrying out processes in an organization.
7. Learn to integrate key concepts from functional-oriented courses, such as accounting, marketing, and organizational behavior, to promote the development of integrative skills.
8. Learn to explain how integrated information sharing increases organizational efficiencies.
9. Learn to identify, describe, and evaluate the major Enterprise System software providers and their packaged systems.

**Topics**

- Business processes and business process integration
- Making the case for acquiring and implementing Enterprise Systems
- Analyzing business requirements for selecting and implementing an Enterprise System
- Selection of Enterprise Systems software
- Challenges associated with the implementation of global Enterprise Systems applications
- Organizational change
- Strategic alignment
- User commitment
- Communications
- Training
- Job redesign
- Governance of processes and data
- Post-implementation issues
- Enterprise System processes
- Order processing
- Purchasing
- Production logistics
- Accounting
- Planning & Control
- Human resource functions
- How Enterprise Systems support e-business

**Discussion**

- The course specification intentionally leaves Enterprise System software unspecified. Institutions have to make the decision of whether and how to provide students with experience with actual Enterprise System software. It is, however, preferable that the
course include exposure to and hands-on use of one of the two large Enterprise System vendors in the market place, SAP or Oracle, or one of the several smaller vendors such as SSA Global, Microsoft (Axapta, Great Plains and Solomon), Intuit, or Minicom, to name a few. The importance of actual use is clear. Enterprise System software is in place in a majority of large organizations and increasing in use in small and medium sized organizations.

• A group project is highly recommended to assess both practical/applied aspects and the conceptual/theoretical content of the course. For example, a group project could require students to study a real-world organization and evaluate the suitability of SAP R/3 or another software solution. This evaluation would then be compared with other Enterprise System software products in terms of product functionality, support and flexibility for configuration and customization, architecture and technology compatibility, web-based functionality, ease of interfacing with other legacy systems, and implementation costs. If software resources permit, the group could then design and configure a simple workable integrated Enterprise System, using SAP R/3 for example, that demonstrates the integration of information from several modules, such as accounts receivable, sales, manufacturing/production, procurement, accounts payable, or general ledger. Student groups would analyze the functional areas in a real-world organization and map them into SAP R/3. Students would create an enterprise structure, relevant master data in the software, transactions that demonstrate integration of core processes, and provide documentation. Students thereby apply specialist skills and knowledge drawn from other traditional disciplines to an actual organization and demonstrate the development of skills such as analytical skills, communication, critical thinking, problem solving, and teamwork.

• The course provides a pedagogical basis for a change in the delivery of education from a functional orientation to a process orientation, leading to the integration of curriculum across functions.