Enterprise Wide Information Systems

ISE 583 (4 Units)
Spring 2025

Description This course is designed to provide the student with a thorough understanding of both the role that Enterprise Resource Planning Systems (ERPs) play in an organization and the challenging task of managing the Information Systems (IS) function. During the semester, homework will be assigned that afford the student the opportunity to work through many real-life business situations using the SAP S/4HANA system and explore the interaction among the different business processes. SAP is the world's leading provider of Enterprise software designed to integrate every aspect of a company's operation. The hands-on exercises, coupled with the in-class discussions of ERPs, will prepare the student with the knowledge sought by businesses looking to use technology to maintain their competitive edge in the marketplace.

Objectives At the completion of the course, students will be able to
- Describe the role of an ERP in carrying out business processes in a company
- Explain how 'best business practices' are incorporated in an ERP
- Execute an entire business process chain in the following areas
  - Sales
  - Materials Planning
  - Procurement
  - Production
  - Accounting
- Strategize pricing, production, and sales in a competitive commodity market
- Analyze sales data in an ERP to dynamically respond to changing market conditions to maximize profits
- Expedite production planning and control using tools provided in an ERP (e.g. MRP)
- Report on the reasons for the success (or failure) of their production and sales strategy

Instructor Nitin Kalé, Professor of Engineering Practice, Viterbi School of Engineering

Contact Info kale@usc.edu

Professor Office Hours Will be posted on Brightspace

Lecture 10 am – 11:50am TTh

Lecture Room OHE 100D

Course Producers TBD

CP Office Hours	Will be posted on Bs

Course Website   *Brightspace.usc.edu*
Students can access all recorded lectures, lecture notes, assignments, discussions and all other course related content through Brightspace course management system.

Simulation Game   An ERPSimulation Game will be played during the semester at various times during lecture. Game will be played (live) by all students. Participation in the game is **mandatory** for all students. If you have a conflict with your other commitments on game days, please reconsider your enrollment in this course. Refer to the Lecture schedule in this syllabus for game days.

Textbook

- ERP Simulation Game: *Manufacturing Game Participant's Manual* (ebook) will be available for purchase online (cost $55 CAD payable online by credit card, details to be announced the first week of the semester)

Software

- SAP is the leading vendor of Enterprise Resource Planning Systems in the world. USC Viterbi has had an Academic Alliance with SAP University Alliances Program for the past 28 years. Several Viterbi ISE and ITP courses utilize the SAP software as a tool and platform for hands-on learning.

- Students will receive instructions for installing SAP software (SAP GUI for both Windows and MAC) to connect to the SAP S/4HANA server so that they can work from their own laptops (does not work on phones or tablets).

- You will also need Microsoft Excel for analyzing the data from the ERPSimulation Game. https://itservices.usc.edu/office/

Grading   The weight of graded material during the semester is listed below.

Homework	25%
ERPSim Game	
Peer evaluation (individual)	5%
Intro Game Performance (team)	5%
Intro Game Analysis (individual)	5%
Extended Game performance (team)	5%
Extended Game Analysis (team)	5%
Exam I	25%
Exam II	25%
Total	100%

Final letter grade is based strictly on total percentage earned and the distribution curve of the class. NO EXCEPTIONS! *No extra credit assignments will be offered.*

Discussion Board

To get help on homework, follow these simple steps

- Read the homework instructions carefully

- Review the "Discussion Forum" section of the class website for other student questions and comments or post a question yourself to begin the forum.

- If you cannot find an answer above, email the TA and me

Policies

- Homework turned in after the deadline will automatically have 25% points per day deducted.
- No make-up exams (except for medical or family emergencies) will be offered
- You will be granted three total 'grace' days for assignments. No grace days for Extended Game Analysis (final project).

Grading Timeline

Assignments Grading will typically be completed 7 days after submission. Any variations will be announced in class or on Bs. All grading discrepancies must be resolved within a week of grade release.
For grade disputes, contact your grader first. If a resolution is not reached, contact the instructor.

Students with Disabilities

Any Student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m. - 5:00 p.m., Monday through Friday. The phone number for DSP is (213)740-0776."

Policy on Religious Holidays

University policy grants students excused absences from class for observance of religious holy days. Students should contact instructor IN ADVANCE to request such an excused absence. The student will be given an opportunity to make up work missed because of religious observance.

Students are advised to scan their syllabi at the beginning of each course to detect potential conflicts with their religious observances. Please note that this applies only to the sort of holy day that necessitates absence from class and/or whose religious requirements clearly conflict with aspects of academic performance. Please refer to the Holy Days Calendar http://orl.usc.edu/religiouslife/holydays/

Incomplete and Missing Grades

Excerpts for this section have been taken from the University Grading Handbook, located at http://www.usc.edu/dept/ARR/grades/gradinghandbook/index.html. Please see the link for more details on this and any other grading concerns.

A grade of Missing Grade (MG) "should only be assigned in unique or unusual situations… for those cases in which a student does not complete work for the course before the semester ends. All missing grades must be resolved by the instructor through the Correction of Grade Process. One calendar year is allowed to resolve a MG. If an MG is not resolved [within] one year the grade is changed to [Unofficial

Withdrawal] UW and will be calculated into the grade point average a zero grade points.

A grade of Incomplete (IN) "is assigned when work is no completed because of documented illness or other 'emergency' occurring after the twelfth week of the semester (or 12th week equivalency for any course scheduled for less than 15 weeks)."

Course Schedule	
Date	**Lecture Topic(s)**
Week 1	Intro: Course Overview Enterprise Systems/ERP Overview
Week 2	Introduction to ERP Simulation Game
Week 3	Accounting: Financial Accounting
Week 4	Accounting: Managerial Accounting
Week 5	Materials Management
Week 6	Procurement Process
Week 7	Production Process
Week 8	Sales Process
Week 9	Exam I
Week 10	ERP Simulation Game **ERP Sim – Intro Game – Rounds 1,2,3***
Week 11	**ERP Sim – Intro Game – Rounds 4,5,6***
Week 12	ERP Sim – Extended Game Lecture
Week 13	**ERP Sim – Extended Game - Rounds 1,2,3,4,5,6***
Week 14	**ERP Sim – Extended Game - Rounds 7,8,9,10,11,12***
Week 15	Exam II
Week 16	Final Project due

* Live participation is mandatory. No make-up possible. Teams are required to attend class. DEN students can participate remotely.

Assignments, lectures, grades, discussion and all other course materials will be posted on Bs. Please check the course website regularly for course progress and deadlines.

Statement on University Academic and Support Systems

Students and Disability Accommodations:
USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Student Financial Aid and Satisfactory Academic Progress:
To be eligible for certain kinds of financial aid, students are required to maintain Satisfactory Academic Progress (SAP) toward their degree objectives. Visit the Financial Aid Office webpage for undergraduate- and graduate-level SAP eligibility requirements and the appeals process.

Support Systems:
Counseling and Mental Health - (213) 740-9355 – 24/7 on call
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

988 Suicide and Crisis Lifeline - 988 for both calls and text messages – 24/7 on call
The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline consists of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-9355(WELL) – 24/7 on call
Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086
Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - *(213) 740-2500*
Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services (OSAS) - *(213) 740-0776*
OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

USC Campus Support and Intervention - *(213) 740-0411*
Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity, Equity and Inclusion - *(213) 740-2101*
Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - *UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call*
Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - *UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call*
Non-emergency assistance or information.

Office of the Ombuds - *(213) 821-9556 (UPC) / (323-442-0382 (HSC)*
A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

Occupational Therapy Faculty Practice - *(323) 442-2850 or* otfp@med.usc.edu
Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.