CALIFORNIA STATE UNIVERSITY CHANNEL ISLANDS

NEW COURSE PROPOSAL

PROGRAM AREAS _____BIOLOGICAL AND PHYSICAL SCIENCES, MATH AND COMPUTER SCIENCE

1. Catalog Description of the Course. [Include the course prefix, number, full title, and units. Provide a course narrative including prerequisites and corequisites. If any of the following apply, include in the description: Repeatability (May be repeated to a maximum of ______units); time distribution (Lecture ______hours, laboratory ______hours); non-traditional grading system (Graded CR/NC, ABC/NC). Follow accepted catalog format.]

COMP 350. INTRODUCTION TO SOFTWARE ENGINEERING (3)

Three hours of lecture in the lab per week.

Prerequisites: COMP 232 and COMP 262.

Concepts and techniques for systems engineering, requirements analysis, design, implementation and testing of large scale computer systems. Principles of software engineering for production of reliable, maintainable and portable software products. Emphasis on functional analysis and structured design techniques. Topics include unit, integration and systems testing, configuration management, and software quality assurance practices. Participation in group activities involving analysis, design and implementation of a software intensive system. Introduction to Computer Aided Software Engineering (CASE)

2. Mode of Instruction.

Ŧ.	Units	Hours per Unit	Benchmark Enrollment
Lecture	3	1	24
Seminar			
Laboratory			
Activity			

3. Justification and Learning Objectives for the Course. (Indicate whether required or elective, and whether it meets University Writing, and/or Language requirements) [Use as much space as necessary]

The course is a required course for Computer Science majors according to accreditation guidelines.

Through this course, students will be able to

- 1. Create effective documentation for computer code.
- 2. Organize and express ideas clearly and convincingly in oral and written forms
- 3. Construct project plans.
- 4. Identify project life cycle components.
- 5. Create a design document.
- 6. Perform a requirements analysis.
- 7. Create project review presentations.
- 8. Organize and express ideas clearly and convincingly in oral and written forms.

This course is not designed to satisfy the University Writing or Language requirements.

4.	Is this a General Education Course	YES	<u>NO</u>
	If Yes, indicate GE category:		
	A (English Language, Communication, C	ritical Thinking	g)
	B (Mathematics & Sciences)		
	C (Fine Arts, Literature, Languages & Cu	ıltures)	
	D (Social Perspectives)		
	E (Human Psychological and Physiologica	al Perspectives)	

5. Course Content in Outline Form. [Be as brief as possible, but use as much space as necessary]

Project Planning.
Requirements Analysis.
Design Methods.
CASE Tools.
Test Plans.
Professional Documentation Techniques.

6. References. [Provide 3 - 5 references on which this course is based and/or support it.]

Introduction to Software Engineering Shari Pfleeger Prentice Hall 2001 0130290491

7. List Faculty Qualified to Teach This Course.

All Computer Science faculty.

8. Frequency.

a. Projected semesters to be offered: Fall X_ Spring X_ Summer X_

9. New Resources Required.

a. Computer (data processing), audio visual, broadcasting needs, other equipment

Use of existing computer lab.

b. Library needs

none

c. Facility/space needs

none

10. Consultation.

Attach consultation sheet from all program areas, Library, and others (if necessary)

11. If this new course will alter any degree, credential, certificate, or minor in your program, attach a program modification.

Proposer of Course

Date