

**California State University Channel Islands  
New Course Proposal**

Program Area: Computer Science

**1. Catalog Description of the Course.**

**IT 402 ADVANCED IT PROGRAMMING (3)**

Three hours of lecture in the lab per week

Prerequisites: IT 280

Covers a variety of programming languages, including java, c, c++, perl, asp, and php. This course focuses on building applications that are useful to IT professionals, such as applications for network security, maintenance and surveillance.

**2. Mode of Instruction.**

	<u>Units</u>	<u>Hours per Unit</u>	<u>Benchmark Enrollment</u>
Lecture	3	1	24
Seminar	0	0	0
Laboratory	0	0	0
Activity	0	0	0

**3. Justification and Learning Objectives.**

Justification: BSIT elective.

Learning Objectives:

Student who successfully complete this course will:

- 1.Be able to program in unix shell languages such as awt.
- 2.Be able to program in web sever scripting languages such as asp, php and perl.
- 3.Be able to analyze requirements for an IT software application.
- 4.Be able to design IT components into a software application.
- 5.Be able to program simple distributed network applications.

**4. Is this a General Education Course?**

No.

**5. Course Content in Outline Form.**

Topics:

- 1.Unix Shell Programming.
- 2.Pperl Programming.
- 3.Python Programming.
- 4.Javascript Programming.
- 5.ASP Programming.
- 6.PHP Programming.
- 7.JSP Programming.
- 8.AWT Programming.

**6. Cross-listed Courses.**

None.

**7. References.**

<u>Title</u>	<u>Author</u>	<u>Publisher</u>	<u>Year</u>	<u>ISBN</u>
1. Unix System Programming (2nd ed)	Haviland, Gray and Salama	Addison-Wesley	1998	0201877589
2. Unix network programming (2nd ed)	Stevens	Prentice-Hall	1998	013490012X
3. Advanced Linux Programmig	CodeSourcery LLC	New Riders Publishing	2001	0-7357-1043-0
4. Advanced Perl Programming	Sriram Srinivasan	O'Reilly	1997	1565922204

**8. Faculty Qualified to Teach This Course.**

Qualified Faculty: Smith,Wolfe

**9. Frequency.**

Projected semesters to be offered: Fall, Spring

**10. New Resources Required.**

- a. New Equipment needs: Use of existing computer lab.
- b. New Library needs: none
- c. New Space/Facilities needs: none

**11. Program Modifications.**

None.

**12. Proposer of Course.**

Proposer: Smith, Wolfe Date: 7/13/2004