NARRATIVE TEMPLATE for a (credit) Traditional Associate Degree:

Information Systems Associate in Science Degree (A.S.)

Item 1. Program Goals and Objectives

The Information Systems Program is designed for students who are pursuing a career in the computer and information technology field. The Program offers both a certificate and an Associate Degree. Careers are available in data communications and networking, computer software engineering, database administration, computer systems analysis and design. Upon completion of this program, students will be able to:

- Demonstrate a comprehensive understanding of various types of information systems and their roles in our economy and society.
- Exhibit proficiency in using common computer hardware, software, and the Internet.
- Design, construct, and troubleshoot computer programs.
- Design, construct, and implement data communications networks.
- Demonstrate an understanding of the systems development process.
- Plan, analyze, design, and implement information systems.
- Discuss social, ethical, privacy, and security issues involved in the use of information systems.

Item 2. Catalog Description

The Information Systems Program is designed for students who are pursuing a career in the computer and information technology field. The Program offers both a certificate and an Associate Degree.

Careers are available in data communications and networking, computer software engineering, database administration, computer systems analysis and design.

Required (12 units)
INFS P100 - Introduction to Information Systems 3 units
INFS P113 - Structured Programming (Visual Basic) 3 units
INFS P210 - Systems Analysis and Design 3 units
INFS P220 - Data Communications and Networking 3 units
Electives (7 units)
BSAD P101 - Introduction to Business 3 units
INFS P010 - Introduction to Word Processing (Word) 2 units
INFS P020 - Introduction to Spreadsheet (Excel) 2 units
INFS P030 - Introduction to Database (Access) 2 units
INFS P052 - Introduction to Web Design 3 units
INFS P055 - Internet Research 2 units

Item 3. Program Requirements

Nineteen (19) units are required from the following two groups:

Required (12 units)
INFS P100 - Introduction to Information Systems 3 units
INFS P113 - Structured Programming (Visual Basic) 3 units
INFS P210 - Systems Analysis and Design 3 units
INFS P220 - Data Communications and Networking 3 units
Electives (7 units)
BSAD P101 - Introduction to Business 3 units
INFS P010 - Introduction to Word Processing (Word) 2 units
INFS P020 - Introduction to Spreadsheet (Excel) 2 units
INFS P030 - Introduction to Database (Access) 2 units
INFS P052 - Introduction to Web Design 3 units
INFS P055 - Internet Research 2 units

A.S. Information Systems

Requirements	Dept. Name/#	Name	Units	Sequence
Required Core (12 units)	INFS P100	Introduction to Information Systems	3	Yr 1, Fall
	INFS P113	Structured Programming (Visual Basic)	3	Yr 2, Fall
	INFS P210	Systems Analysis and Design	3	Yr 2, Spring
	INFS P220	Data Communications and Networking	3	Yr 1, Fall
Electives (7 units)	BSAD P101	Introduction to Business	3	Yr 1, Spring
	INFS P010	Introduction to Word Processing (Word)	2	Yr 1 Spring
	INFS P020	Introduction to Spreadsheet (Excel)	2	Yr 2, Fall
	INFS P030	Introduction to Database (Access)	2	Yr 2, Spring
	INFS P052	Introduction to Web Design	3	Yr 1, Fall
	INFS P055	Internet Research	2	Yr 1, Spring

Required Major Total	19 units
Completion of PC GE pattern:	33 units
(Possible double counting):	3 units
or	
Completion of CSU-GE Breadth or IGETC pattern:	37-39 units
Transferable electives (as needed to reach 60 units)	2-11
Total Units:	60 units

Proposed Sequence:
Year 1, Fall = 9 units
Year 1, Spring = 7 units

Year 2, Fall = 5 units
Year 2, Spring = 5 units

TOTAL UNITS: 26 units (Only 19 of these are required – 12 Core and 7 elective)

Item 4. Master Planning

Between 2012 and 2014, the Information Systems Program offered an average of 36 sections of classes annually with an average enrollment of 1,083 per year (approximately 22% of the CTE enrollment and 4.4% of overall campus enrollment. The following is a table summary of enrollment data and related performance indicators:

		Sections	Enrollment	FTES/FTEF	Number Retained	Percent Retained	Percent Succeeded
INFS Program	***2012-13***	**37**	**1,178**	**28**	**14.3**	**80.0%**	**62%**
	2013-14	**35**	**989**	**26**	**13.5**	**77.0%**	**56%**
CTE Division	***2012-13***	**173**	**5,034**	**28**	**17.7**	**85.0%**	**70%**
	2013-14	**160**	**4,694**	**29**	**17.7**	**86.0%**	**73%**
College-wide	***2012-13***	**776**	**24,607**	**31**	**16.7**	**87.0%**	**69%**
	2013-14	**817**	**24,184**	**30**	**15.7**	**87.0%**	**70%**

Item 4. Master Planning (cont.)

Most recent job statistics and projection data (2010-2020) published by the U.S. Department of Labor indicate that computer and information technology careers are still among the highest paying jobs ($46,260-$100,660). Careers in computer engineering, programming, support, security, database, network, and web development are also among the fastest growing in demand (10%-31%).

Item 5. Enrollment and Completer Projections

The anticipated enrollment for this program is 1000 students per year with an anticipated completion rate of 80%, 800 students. This is based on past completions of students taking Information Systems courses, classroom size, and availability. Student enrollment trends have been dipped slightly over the past 5 years due to an extreme difficulty in finding qualified instructors in the greater Porterville area. Success and retention rates have also remained consistent for the past five years. Success rates have ranged from 53% in 2009 to 62% in 2013. Retention rates have ranged from 82% in 2010 to 77% in 2014. (Data obtained from Porterville College Research website)

Item 6. Place of Program in Curriculum/Similar Programs

The Information Systems program is offered through the Career and Technical Education Division. Currently the program is not directly related to any other programs within the college

Item 7. Similar Programs at Other Colleges in Service Area

There are three Information Systems programs that host certificates and/or degrees within Tulare and Kern Counties; Bakersfield College (60 miles), Cerro Coso College (278 miles), and College of The Sequoias (45 miles).

Information Systems Advisory Board

Meeting Minutes

February 25, 2015

Attendance sheet attached

1. Mr. Smithey and Synder from Monache High School discussed program changes on their campus to better align with the Porterville College Information Systems degree. They discussed a recent conference in Visalia, Ca. The conference discussed strategies in regard to Work Based Learning and how to better reach the community.

2. Granite Hills High School representative, Kelsey Simpson, discussed the Digital Design and Communication Pathway on their campus. The goal is for the DDC pathway to offer another strand that will closely align with high demand/high wage jobs in the area. This can be achieved by aligning curriculum with the college and promoting this partnership to students.

3. Porterville College Information Systems instructor, Jim Carson, discussed lowering the unit value of the popular course Intro to Info Systems from 4 units to 3. The board discussed impact on both college and high school students. It was agreed that this move to lower units is necessary to better articulate with 4 year schools that offer similar courses in a 3 unit format.

4. PUSD discussed an upcoming Mentor's Conference on April 17th, 2015 at the Port Naz facility in Porterville. The event will run from 9:00-1:10 and is targeted at high school sophomores.

5. Porterville College discussed the need for qualified INFS instructors and the qualifications required to obtain one of these positions.

6. Porterville College agreed to meet with Monache High School on Tuesday, March 3 to discuss the alignment of curriculum.

Occupation Overview

EMSI Q1 2016 Data Set

March 2016

Porterville College

100 E. College Avenue
Porterville, California 93257
559.791.2459

Parameters

Occupations

Code	Description
11-3021	Computer and Information Systems Managers
15-1121	Computer Systems Analysts
15-1141	Database Administrators
15-1142	Network and Computer Systems Administrators
15-1151	Computer User Support Specialists
15-1152	Computer Network Support Specialists
15-1199	Computer Occupations, All Other
43-4171	Receptionists and Information Clerks
43-9011	Computer Operators

Regions

Code	Description
6029	Kern County, CA
6107	Tulare County, CA

Timeframe

2001 - 2020

Datarun

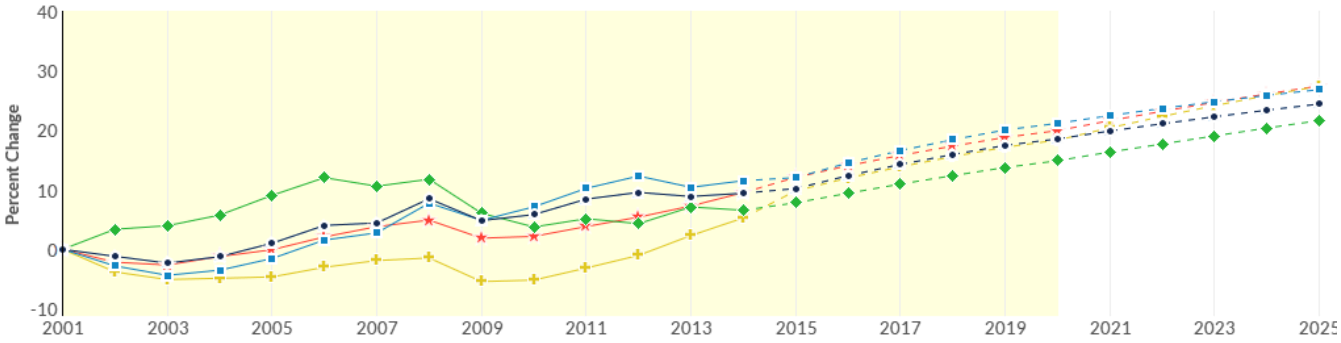
2016.1 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

9 Occupations in 2 Counties

Occupation Summary for 9 Occupations

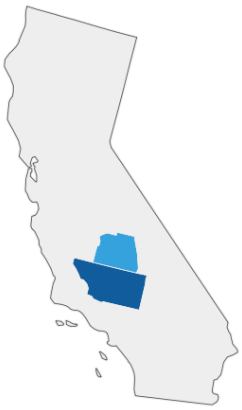
7,298	18.6%	$25.72/hr
Jobs (2015)	**% Change (2001-2020)**	**Median Hourly Earnings**
41% below National average	Nation: 20.0%	Nation: $29.63/hr

Regional Trends



	Region	2001 Jobs	2020 Jobs	Change	% Change
●	Region	6,622	7,852	1,230	18.6%
●	Kern County, CA	4,871	5,903	1,032	21.2%
●	Kern and Tulare	6,622	7,852	1,230	18.6%
●	Porterville LABOR MKT	1,919	2,204	285	14.9%
●	California	424,178	502,059	77,881	18.4%
●	United States	3,441,649	4,128,620	686,971	20.0%

Regional Breakdown



County	2020 Jobs
Kern County, CA	5,903
Tulare County, CA	1,949

Job Postings Summary

429	3 : 1
Unique Postings (Jan 2016)	**Posting Intensity (Jan 2016)**
1,282 Total Postings	Regional Average: 4 : 1

There were **1,282** total job postings for 9 Occupations in January 2016, of which **429** were unique. These numbers give us a Posting Intensity of **3-to-1**, meaning that for every 3 postings there is 1 unique job posting.This is lower than the Posting Intensity for all other occupations and companies in the region (4-to-1), indicating that companies may not be trying as hard to hire this position.

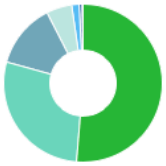
Occupation Gender Breakdown

	Gender	2015 Jobs	2015 Percent
●	Males	3,341	45.8%
●	Females	3,958	54.2%

Occupation Age Breakdown

	Age	2015 Jobs	2015 Percent
●	14-18	66	0.9%
●	19-24	857	11.7%
●	25-34	1,847	25.3%
●	35-44	1,632	22.4%
●	45-54	1,511	20.7%
●	55-64	1,019	14.0%
●	65+	366	5.0%

Occupation Race/Ethnicity Breakdown



	Race/Ethnicity	2015 Jobs	2015 Percent
●	White	3,744	51.3%
●	Hispanic or Latino	2,044	28.0%
●	Asian	962	13.2%
●	Black or African American	380	5.2%
●	Two or More Races	110	1.5%
●	American Indian or Alaska Native	43	0.6%
●	Native Hawaiian or Other Pacific Islander	15	0.2%

Occupational Programs

13	335	216
Programs (2014)	Completions (2014)	Openings (2014)

CIP Code	Program	Completions (2014)
52.0408	General Office Occupations and Clerical Services	239
11.0701	Computer Science	29
11.0103	Information Technology	28
11.1006	Computer Support Specialist	24
11.0101	Computer and Information Sciences, General	15

Industries Employing 9 Occupations

Industry	Occupation Group Jobs in Industry (2015)	% of Occupation Group in Industry (2015)	% of Total Jobs in Industry (2015)
Offices of Physicians (except Mental Health Specialists)	697	9.6%	8.3%
Federal Government, Civilian, Excluding Postal Service	394	5.4%	4.1%
Elementary and Secondary Schools (Local Government)	357	4.9%	0.9%
Corporate, Subsidiary, and Regional Managing Offices	305	4.2%	6.8%
Local Government, Excluding Education and Hospitals	302	4.1%	1.4%

Appendix A - Data Sources and Calculations

Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

Occupation Data

EMSI occupation employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry.

Completers Data

The completers data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Industry Data

EMSI industry data have various sources depending on the class of worker. (1) For QCEW Employees, EMSI primarily uses the QCEW (Quarterly Census of Employment and Wages), with supplemental estimates from County Business Patterns and Current Employment Statistics. (2) Non-QCEW employees data are based on a number of sources including QCEW, Current Employment Statistics, County Business Patterns, BEA State and Local Personal Income reports, the National Industry-Occupation Employment Matrix (NIOEM), the American Community Survey, and Railroad Retirement Board statistics. (3) Self-Employed and Extended Proprietor classes of worker data are primarily based on the American Community Survey, Nonemployer Statistics, and BEA State and Local Personal Income Reports. Projections for QCEW and Non-QCEW Employees are informed by NIOEM and long-term industry projections published by individual states.

Staffing Patterns Data

The staffing pattern data in this report are compiled from several sources using a specialized process. For QCEW and Non-QCEW Employees classes of worker, sources include Occupational Employment Statistics, the National Industry-Occupation Employment Matrix, and the American Community Survey. For the Self-Employed and Extended Proprietors classes of worker, the primary source is the American Community Survey, with a small amount of information from Occupational Employment Statistics.

State Data Sources

This report uses state data from the following agencies: California Labor Market Information Department