## Considerations for Florida Polytechnic University Academic Program Planning August 1, 2012

### Strategies to achieve SACS COC accreditation in the least amount of time:

- 1. Limit the number of initial programs (6-8)
- 2. Focus on high demand and competitive niche programs
- 3. Focus on core disciplines around which departments and other programs can be developed
- 4. Focus on programs that are interrelated enough to share faculty
- 5. Avoid programs that are expensive to implement
- 6. Avoid programs that require specialized accreditation
- 7. Implement initial baccalaureates as 2+2 programs
- **1. Limit the number of initial programs (6-8)** To achieve SACS COC accreditation it will be necessary to develop the curriculum, student support services, student assessments, and instructional resources for each program that is part of the application. This can best be achieved by limiting the number of initial offerings and focusing institutional resources on developing a small number of high-quality well planned degree programs. At least one master's level program should be included.
- **2. Focus on high demand and competitive niche programs –** As a start up university, the Polytechnic will be at a competitive disadvantage for recruiting high-performing students. Implementing degree programs for which there is a demonstrated workforce demand and/or that are underrepresented in the State University System or independent postsecondary education sector will provide some competitive edge for student recruitment. A successful inaugural graduating class will help the institution achieve regional accreditation; whereas an unsuccessful inaugural class will likely delay final accreditation.
- **3. Focus on core disciplines around which departments and other programs can be developed –** Initial academic program offerings should serve as the core for future program development and research. Consideration should be given to implementing initial programs that can spin off new tracks and academic programs.
- **4. Focus on programs that are interrelated enough to share faculty –** Recruiting high-quality faculty to a non-accredited startup university may be challenging. Accreditation standards for faculty numbers and credentials are linked to academic program offerings, so to the extent that faculty recruited can teach across multiple programs there will be an initial strategic advantage and cost savings. This also begins to lay the groundwork for the polytechnic model of interdisciplinary curriculum.

- **5. Avoid programs that are expensive to implement -** Accreditation standards require that the facilities and equipment be appropriate and sufficient for the academic programs offered. Avoiding initial program offerings that require extensive investments in laboratories and equipment may accelerate final accreditation.
- **6. Avoid programs that require specialized accreditation –** Some degree programs require specialized accreditation for graduates to sit for licensure or be competitive in the job market. These specialized accrediting bodies have their own standards and application process. In some cases they require off-site clinical and internship training. All of this will add complexity and costs to the process of achieving SACS COC accreditation.
- **7. Implement initial baccalaureates as 2+2 programs –** Final SACS COC accreditation requires a graduating class. Implementing initial baccalaureate programs as 2+2 for Florida college graduates will produce a graduating class faster than starting with a freshman class, and with less expense. In addition, there will be no need to develop a lower division general education program, which will make completing the accreditation application less complicated.

#### Examples of academic programs that might be considered:

**B.S. in Information Technology (11.0103) -** A program that focuses on the design of technological information systems, including computing systems, as solutions to business and research data and communications support needs. Includes instruction in the principles of computer hardware and software components, algorithms, databases, telecommunications, user tactics, application testing, and human interface design.

SOC Code Crosswalk	
15-1031	Computer Software Engineers, Applications
15-1032	Computer Software Engineers, Systems Software
15-1051	Computer Systems Analysts
15-1081	Network Systems and Data Communications Analysts

**B.S. in Information Technology Project Management (11.1005)** A program that prepares individuals to design, develop, and manage information technology projects in a variety of companies and organizations. Includes instruction in principles of project management, risk management, procurement and contract management, information security management, software management, organizational principles and behavior, communications, quality assurance, financial analysis, leadership, and team effectiveness.

#### SOC Code Crosswalk

11-3021 Computer and Information Systems Managers

11-9199	Managers, All Other
15-1122	Information Security Analysts
15-1199	Computer Occupations, All Other

**B.S. and M.S. Statistics (27.0501) -** A general program that focuses on the relationships between groups of measurements, and similarities and differences, using probability theory and techniques derived from it. Includes instruction in the principles in probability theory, binomial distribution, regression analysis, standard deviation, stochastic processes, Monte Carlo method, Bayesian statistics, non-parametric statistics, sampling theory, and statistical techniques.

#### SOC Code Crosswalk

11-9121	Natural Sciences Managers
15-2041	Statisticians
25-1022	Mathematical Science Teachers, Postsecondary

**B.S. in Informatics (11.0401)** A program that focuses on the theory, organization, and process of information collection, transmission, and utilization in traditional and electronic forms. Includes instruction in information classification and organization; information storage and processing; transmission, transfer, and signaling; communications and networking; systems planning and design; human interfacing and use analysis; database development; information policy analysis; and related aspects of hardware, software, economics, social factors, and capacity.

SOC Code C	<u>Crosswalk</u>
11-3021	Computer and Information Systems Managers
15-1111	Computer and Information Research Scientists
15-1133	Software Developers, Systems Software
15-1199	Computer Occupations, All Other
25-1021	Computer Science Teachers, Postsecondary

**B.S. in Medical Informatics (51.2706) -** A program that focuses on the application of computer science and software engineering to medical research and clinical information technology support, and the development of advanced imaging, database, and decision systems. Includes instruction in computer science, health information systems architecture, medical knowledge structures, medical language and image processing, quantitative medical decision modeling, imaging techniques, electronic medical records, medical research systems, clinical decision support, and informatics aspects of specific research and practice problems.

#### SOC Code Crosswalk

15-1011	Computer and Information Scientists, Research
15-1021	Computer Programmers
15-1031	Computer Software Engineers, Applications

**M.S. in Bioinformatics (26.1103) -** A program that focuses on the application of computer-based technologies and services to biological, biomedical, and biotechnology research. Includes instruction in algorithms, network architecture, principles of software design, human interface design, usability studies, search strategies, database management and data mining, digital image processing, computer graphics and animation, CAD, computer programming, and applications to experimental design and analysis and to specific quantitative, modeling, and analytical studies in the various biological specializations.

#### SOC Code Crosswalk

15-1021	Computer Programmers
15-1031	Computer Software Engineers, Applications
15-1099	Computer Specialists, All Other

**B.S. in Accounting and Computer Science (30.1601)** A program that combines accounting with computer science and/or computer studies.

SOC Code Crosswalk		
13-2011	Accountants and Auditors	
15-1041	Computer Support Specialists	

**B.S. in Logistics, Materials, and Supply Chain Management (52.0203) -** A program that prepares individuals to manage and coordinate all logistical functions in an enterprise, ranging from acquisitions to receiving and handling, through internal allocation of resources to operations units, to the handling and delivery of output. Includes instruction in acquisitions and purchasing, inventory control, storage and handling, just-in-time manufacturing, logistics planning, shipping and delivery management, transportation, quality control, resource estimation and allocation, and budgeting.

# SOC Code Crosswalk

11-3071	Transportation, Storage, and Distribution Managers
13-1081	Logisticians
25-1011	Business Teachers, Postsecondary

**M.S. in Business Statistics (52.1302) -** A program that focuses on the application of mathematical statistics to the description, analysis, and forecasting of business data. Includes instruction in statistical theory and methods, computer applications, data analysis and display, long- and short-term forecasting methods, and market performance analysis.

#### SOC Code Crosswalk

15-2041	Statisticians
25-1011	Business Teachers, Postsecondary
25-1022	Mathematical Science Teachers, Postsecondary