### I. Program Productivity and Efficiency

**FGCU Fall Enrollments by Major and Year**

<table>
<thead>
<tr>
<th>Major</th>
<th>Fall 2009</th>
<th>Fall 2010</th>
<th>Fall 2011</th>
<th>Fall 2012</th>
<th>Fall 2013</th>
<th>Fall 2014*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FGCU Degrees Awarded by Major and Year**

<table>
<thead>
<tr>
<th>Major</th>
<th>Fall 2009-10</th>
<th>Fall 2010-11</th>
<th>Fall 2011-12</th>
<th>Fall 2012-13</th>
<th>Fall 2013-14</th>
<th>5-Year Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Information Systems</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>10</td>
</tr>
</tbody>
</table>

### Average Cost Per Student Credit Hour (SCH) By Selected Programs

<table>
<thead>
<tr>
<th>Major</th>
<th>Average Cost Per Credit Hour</th>
<th>Percent of University Average</th>
<th>Percent Lower Level SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Undergraduate</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anthropology</td>
<td>124.20</td>
<td>88.73</td>
<td>80.94</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>229.66</td>
<td>226.047</td>
<td>277.66</td>
</tr>
<tr>
<td>Economics</td>
<td>134.82</td>
<td>106.64</td>
<td>97.41</td>
</tr>
<tr>
<td>Journalism</td>
<td>84.57</td>
<td>109.57</td>
<td>91.51</td>
</tr>
<tr>
<td>Music</td>
<td>176.81</td>
<td>165.11</td>
<td>131.71</td>
</tr>
<tr>
<td>Philosophy</td>
<td>48.14</td>
<td>45.52</td>
<td>42.90</td>
</tr>
<tr>
<td>Sociology</td>
<td>41.25</td>
<td>36.43</td>
<td>35.56</td>
</tr>
<tr>
<td>Theatre</td>
<td>111.38</td>
<td>145.15</td>
<td>162.28</td>
</tr>
<tr>
<td><strong>Graduate</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>113.39</td>
<td>136.07</td>
<td>95.52</td>
</tr>
</tbody>
</table>

**Management Information Systems**

<table>
<thead>
<tr>
<th>Major</th>
<th>Average Cost Per Credit Hour</th>
<th>Percent of University Average</th>
<th>Percent Lower Level SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems</td>
<td>325.46</td>
<td>223.71</td>
<td>251.62</td>
</tr>
<tr>
<td><strong>Total University</strong></td>
<td>96.67</td>
<td>101.38</td>
<td>103.66</td>
</tr>
</tbody>
</table>
II. Post-Graduation Outcomes for Information Systems Alumni

Current employment outside Florida includes:

- Digital Marketing Strategist at Women for Women International, Washington D.C.
- Director of Software Development at PlayMaker CRM, Nashville TN
- Agency Data & Analytics Manager at First American Title, Nashville TN
- Chief, Medical Expeditionary, IM/IT, USAF

Typical occupations graduates of this program usually enter:

- IS/IT Entrepreneur
- Project Manager
- Business Analyst
- Systems Administrator

Florida Education & Training, Placement Information Program (FETPIP)

The graphs on the next page include only those graduates who stay in Florida for employment and/or further education.
No data value given for % of graduate degrees granted

Mgmt. Info. Systems/Busi Data Pr. (521201) 2012-13 FT Avg Qtrly Earnings Master's - No FGCU Data

0.7% of undergraduate degrees granted


III. Potential Impact Upon Performance Funding Metrics

- FGCU Performance Metric 8A is “Graduate Degrees Awarded in Strategic Areas of Emphasis (STEM).
- *The Bureau of Labor Statistics (BLS)* estimates that STEM-related jobs is expected to grow to more than 9 million from 2012 to 2022.
- The BLS has listed Computer and Information Systems Managers and other computer occupations as a STEM occupation.
- The MSIS program in one of FGCU’s STEM programs.
IV. **Prospective Cost Benefits or Disadvantages Associated with Program Discontinuance**

The most recent academic year for which faculty productivity data were available was 2013-14. During this period, the faculty in the MSIS Program generated 2721 student credit hours (the vast majority at the undergraduate level). The tuition and fee revenue generated by these primary faculty at $204 per credit yielded a total revenue to the University of $555,084 for this program. The total direct cost of instruction (i.e., faculty salary) for these primary faculty was $682,406. Thus the direct return to the University was a net loss of $127,322.

Currently this program is under suspension to address many of the concerns that have been raised through this process. Notwithstanding, the program faculty generate training grant activity that more than offsets deficits in tuition revenue generation and generates a net profit to the University. The program faculty devote most of their instructional effort to the highly successful undergraduate program. Allowing the opportunity to restructure the graduate program so it is in line with regional market needs and demands should increase its attractiveness. Eliminating the program would have a major impact on other graduate programs within the College of Business as well.

While the MSIS Program may generate a modest number of graduates, the primary faculty of the program clearly have an impact on the overall annual undergraduate student credit hour production at FGCU.
V. Potential Impact Discontinuance of Information Systems Might Have on the University

Impact on the delivery of University General Education

There should be no specific impact on the delivery of University General Education Courses.

Faculty Retention and Recruitment

Faculty members in the ISOM Department must possess high-level academic and professional credentials in order to teach graduate courses.

The MSIS degree program is a source of great pride within both the ISOM Department and the Lutgert College of Business. The College only has three masters-level degree programs. Additionally, the MS in IS and BS in CIS are the only STEM degree programs in the Lutgert College of Business.

Elimination of the MSIS would severely hurt morale within both the ISOM Department and the College.

IS faculty may choose to leave the College if the MSIS degree program is eliminated.

It will be extremely difficult to recruit high quality IS faculty to the College because applicants will be very reluctant to apply to a College that has eliminated its MSIS degree and top faculty are attracted to institutions with graduate programs in their field.

It will be difficult to recruit business faculty to the College because applicants will view the elimination of the MSIS as a “first step” in the potential elimination of other graduate and undergraduate programs.

The cost to replace faculty that choose to leave the University would be very expensive.

Loss of Courses Used by Other Programs

An estimated half of the MSIS degree course are used as electives in the Master of Business Administration (MBA) program.

The loss in student enrollment in these MBA elective courses may lead to small class sizes that could not be supported by the College.

The College may have to eliminate the MSIS courses – adversely impacting the offerings and quality of the MBA program.
Reaction of Alumni

The College has 57 alumni with MSCIS and MSIS degrees working in companies throughout the region and the state.

There is the potential that MSIS alumni will react negatively to the news that the degree they worked hard to earn is no longer be offered by FGCU. Two students currently in the MSIS program are transferring to other programs in Florida, fearing that the current suspension of the MSIS program will cause a MSIS degree from FGCU to be viewed as worthless.

There is the potential of the following negative impacts:

1. The reputation of the College will be adversely impacted by all organizations and businesses that employ disgruntled MSIS degree holders.

2. It may be difficult to recruit businesspeople to serve on the IS Advisory Board.

3. It may be difficult to obtain donations and funding from organizations and businesses that employ disgruntled MSIS degree holders.

4. It may be difficult to find jobs and internships for undergraduate students if employers see the elimination of the MSIS as a “first step” in eliminating all IS degree programs.

Grants and Sponsored Awards

The largest grant in the history of the College ($12 million) was awarded to Dr. Rodriguez – a senior IS faculty member.

Dr. Rodriguez uses his grant funding to support the operation of the Institute for Technological Innovation – an institute within the College.

Dr. Rodriguez is developing a new grant submission for his Institute.

The elimination of this graduate degree would threaten his potential ability to receive additional grants and may result in the closing of the Institute.

Philanthropy

Donors like to give to degree programs that they believe have the support of the University.

The elimination of the MSIS will signal to donors that FGCU does not place a high value on supporting IS programs or STEM.

It will be almost impossible to convince potential donors to provide resources to support any IS program within the College.

This is extremely problematic because the curriculum in the undergraduate and graduate programs require students learn the most current software applications (e.g., SAP, Terradata, Mobile Applications, etc.). The absence of donor funding will mean the University will be required
to cover the complete costs of all degree program software out of its operational budget – since the University has promised not to increase course fees.

**Public Opinion**

On April 30, 2015, the LCOB Business Advisory Council (see Attachment 1) met to discuss a variety of topics including the possible elimination of the MSIS degree.

All Council members were unanimously against the elimination of the MSIS degree. They provided the following rationale:

- A key to most large industries coming to southwest Florida will be the availability of a talented pool of qualified employees to staff their new facility. Large businesses simply do not operate without significant IS personnel resources. Elimination of the MSIS may be a factor in businesses choosing not to come to southwest Florida.

- One of the major industries in the region is healthcare. It is projected that all organizations and businesses operating in the healthcare sector will require significant IS support over the next decade. Elimination of the MSIS will hurt the region’s ability to attract and keep IS talent.

- The vast majority businesses in southwest Florida are small businesses. They require a small number of IS professionals with extensive IS experience to run their IT operations. The MSIS programs produce highly educated individuals that possess the variety of requisite skills needed to support small business. Elimination of the MSIS will require these businesses to outsource their IT operations to firms that are outside of southwest Florida.

- Entrepreneurship is quickly becoming the fastest growing market trend in Southwest Florida. Evidence of this growth is the Accelerator in Naples and the new iHub in Estero. Many of the most successful global entrepreneurs launched new products from the IS sector. Elimination of the MSIS will limit opportunities for IS entrepreneurs to launch their own business. This will adversely impact economic growth and expansion in the region.

- The region is looking to diversify their traditional business sectors (e.g., construction, healthcare, hospitality, real estate, golf, banking and financial services) in order to be less dependent on cyclical economic conditions. The growth of IS in the region would provide a new market sector that may attract new businesses to southwest Florida.
**Diversity of Students and Faculty**

For over two decades, U.S. Colleges and Universities have been at the epicenter of the global “technology innovation” explosion, attracting doctoral students from all over the world to both earn their degree in the United States and often stay as faculty members.

The Lutgert College of Business is a perfect example of how the global growth of IS can lead to the establishment of a diverse faculty – 70% of the ten faculty teaching in the MS in IS program are ethnically diverse or foreign born.

Over 28% of the graduates from the MS CIS / MS IS program have been women, higher than the 26% of women comprising the STEM workforce.


FGCU’s MSIS program enrolls minority and international students. Over 19% of the graduates have been from minority groups (Hispanic, Black, Asian). Approximately 5% have been international.

**Degree Program Support – Nationwide**

**Forbes (2013) “Best and Worst Master’s Degrees for Jobs”**.¹

- No. 1 Best Master's Degree for Jobs: Information Systems
- Mid-career median pay: $101,000
  Projected employment increase for common jobs associated with this degree: 30%

**PayScale.com “Best-Paying and Worst-Paying Master’s Degrees”**.²

- **No. 10**: Master’s in Management Information Systems
- **Median Pay**: $95,000
- **Possible Jobs**: Senior software engineer ($105,000), IT manager ($92,600), systems analyst ($82,400)


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Master Information Systems M.S.I.S.

- Study conducted by the National Association of Colleges and Employers (NACE)
- No. 8: Master of Information Sciences & Systems (Just ahead of Logistics & Supply Chain)

Job Outlook: Computer and Information Systems (BLS)
- “The U.S. Bureau of Labor Statistics predicts that employment of computer and information systems managers will grow 15% from 2012 to 2022 – faster than the average for all occupations. A number of jobs is expected to be created in the healthcare industry, which is aggressively implementing information technology. This industry is expected to increase IT use greatly, resulting in job growth. In general medical and surgical hospitals, employment of IT managers is projected to grow 42 percent.”

Job Outlook: Computer and Information Systems (NACE)\(^4\)
- The National Association of Colleges and Employers (NACE) Job Outlook Report 2015 provides the following information:
  - Computer & information systems was identified by employers as the third most “in demand” general graduate degree by field of study – just behind business and engineering.
  - Information sciences & systems was identified as the seventh most “in demand” graduate degree program behind three engineering graduate degree programs and three other business degree programs.

Degree Program Support – Florida

The Florida Department of Economic Opportunity
The following is data points that were collected from various reports developed by the Florida Department of Economic Opportunity Web Site:

2015 State of Florida Job Projection Report
- Position: Computer and Information Systems Manager
- Degree: Undergraduate (Minimum)
- Current Number Employed (2014): 9,792
- Projected Number Employed (2022): 11,016
- Employment Growth: 2,224
- Percent Change in Position: 12.5%
- Projected Total Job Openings: 2,350

2014 State of Florida – Highest Paid Bachelor's Degree Level Occupations (Master's Degree Data Not Available)

- Chief Executives $200,148
- Airline Pilots, Copilots, and Flight Engineers $146,501
- Computer and Information Systems Managers $133,933

Bureau of Labor Statistics Data: Florida

- The job of Computer and Information Systems Manager was identified as the 18th highest paid job in the State of Florida with an annual average salary of $131,300. The first seventeen highest paid positions includes 13 in the field of medicine, judges, airline pilots, physicists, and CEOs.

Degree Program Support – Regional

The October 22, 2014 Workforce Now report, IT Employment in Southwest Florida: Opportunities and Challenges, found that 32% of employers surveyed in the five counties (Charlotte, Collier, Glades, Hendry, and Lee) had difficulty filling IT-related positions. Among the positions most difficult to fill were systems analysts, IT managers and business analysts. These are positions graduates from the MS in IS program are prepared to fill.

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