# Academy of Information Technology Career Cluster: Information Technology

### **Program Strand: Business Computer Programming** Students who choose a career in Business Computer Programming write, test, and maintain the detailed instructions, called programs, that computers must follow to perform their

Students who choose a career in Business Computer Programming write, test, and maintain the detailed instructions, called programs, that computers must follow to perform their functions. They also conceive, design, and test logical structures for solving problems by computer. Business Computer Programming apply the principles and techniques of computer science, engineering, and mathematical analysis to the design, development, testing, and evaluation of the software and systems that enable computers to perform their many applications.

## Secondary Career Academy Development Timetable Academy classes are listed in bold type.

Pre-Academy Grades 6 – 8	Grade 9	Grade 10	Grade 11	Grade 12
6 <sup>th</sup> grade—Middle Moves 7 <sup>th</sup> grade—Career Preparation Requirement 8 <sup>th</sup> grade—Transition Tools M/J Vocational Wheel 1 <i>BU 800020012</i> Semester Courses: Business Keyboarding <i>820011011</i> Comp App in Bus 1 <i>820022011</i> Comp App in Bus 2 <i>820021011</i> Comp App in Bus 3 <i>820021011</i> Comp App in Bus 3 <i>820021111</i> Comp App in Bus 3 <i>8200212111</i> Bus Lead Skills <i>820012001</i> <sup>2</sup> <sup>1</sup> Recommended for 7 <sup>th</sup> grade <sup>2</sup> Recommended for 8 <sup>th</sup> grade	English I	English II	English III	English IV
	Algebra or higher	Geometry or higher	Algebra II or higher	Pre-calculus or Other Mathematics Course
	Earth & Space Science or Biology	Biology or Chemistry	Chemistry or Physics or Physical Science	Science Elective or Other Elective
	World History	Elective	American History	American Government / Economics
	9 <sup>th</sup> Grade Transition	Foreign Language or Other Elective	Foreign Language or Other Elective	Foreign Language or Other Elective
	820902001 or Intro. to IT 820731001 or Key and Bus Skills 820032011 and Comp and Bus Skills 820033011	Business Computer Programming 1 820601003	Business Computer Programming 2 820602003	Business Computer Programming 3 820603003
	Elective	Elective	Elective	Elective
	Elective	Elective	Elective	Elective

Suggested Electives:

• Students may in their Junior or Senior year opt to participate in the Career Experience Opportunity (CEO) internship program using the following course numbers: Workplace Essentials – 83003101A (Honors .5) and CEO internship – 0500330CE (Honors .5).

- Students may complete more than one program within the Academy of Information Technology providing courses are offered at the school site.
- In addition, students can choose to enroll in Business and Entrepreneurial Principles, Legal Aspects Business, and Business Cooperative Education classes to enhance their marketability.

#### To find a Miami-Dade County Public High School with this Program Strand, please link to http://ssr.dadeschools.net/acad\_tally\_schls.pdf

To find a miani Dade county				
Internship Opportunities	Student Organizations / Clubs	Earn Upon Completion		
<ul> <li>Internship</li> <li>Cooperative Education</li> <li>Job Shadowing</li> <li>School-Based Enterprise</li> <li>Service Learning</li> <li>Dual Enrollment</li> <li><u>Portal to CEO</u></li> </ul>	Future Business Leaders of America (FBLA)	<ul> <li>Industry Title &amp; FLDOE OCP's correlated to the individual areas.</li> <li>For more information on the Florida Department of Education Bright Futures Scholarship Programs: Florida Academic Scholars Award (FAS), Florida Medallion Scholars Award (FMS), and Florida Gold Seal Vocational Scholars Award (GSV) please contact a guidance counselor or visit: <u>http://www.floridastudentfinancialaid.org/ssfad/factsheets/BF.htm</u>.</li> <li>For more information on advanced standing at local public and private post secondary institutions as established per articulation agreements please contact a quidance counselor.</li> </ul>		

### POSTSECONDARY OPTIONS

Certification Programs	Community College (A.A.	Four-Year College and University Programs	
Internet Computing Core (IC3) <u>The English Center</u>	<ul> <li>Computer Office Applications / Technology</li> <li>Systems Project Manager</li> <li>Computer Information Administrator</li> <li>Operating Systems Specialist</li> <li>Internet Services Technology</li> </ul>	Miami Dade College-CIS Miami Dade College-MCDBA Miami Dade College-MCSE Miami Dade College-MCSD Miami Dade College-ET	<ul> <li>Computer Science</li> <li>Software engineering</li> <li>Computer Information Systems</li> <li>Systems Design</li> <li>Game Design and Development</li> <li>Florida International University- Computer</li> <li>Florida International University- Computer Science</li> <li>Florida International University- Information Technology</li> <li>DeVry University</li> </ul>

### CAREER OPTIONS

Entry Level		After Post-Secondary Education	
<ul><li>Webmaster</li><li>Computer System Support</li><li>Software Application Support</li><li>Software Architect</li></ul>	<ul> <li>Independent Business Owner</li> <li>Wireless Installer</li> <li>Software Quality Assurance Specialist</li> </ul>	<ul> <li>Computer and Information Systems Manager</li> <li>Computer Software Engineers</li> <li>Computer Hardware Engineers</li> </ul>	<ul><li>Researcher</li><li>Network Administrators</li><li>Computer Software Engineer</li></ul>