# Program Strand: Database and Programming Essentials

Students who choose a career in Database and Information Management organize, track, and store information for businesses and other organizations. They also design and coordinate database security systems.

# 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 <i>MJJ</i> Vocational Wheel 1 <i>BU 800020012</i> Semester Courses: Business Keyboarding <i>820011011</i> Comp App in Bus 1 <i>8200220111</i> Comp App in Bus 2 <i>820021011</i> Comp App in Bus 3 <i>820021111</i> <sup>2</sup> Comp App in Bus 3 <i>8200212112</i> Bus Lead Skills <i>820012012</i> <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
	Computing for College and Careers 820902001 or Intro. to IT 820731001 or Key and Bus Skills 820032011 and Comp and Bus Skills 820033011	Business Computer Programming 1 820601003	Database Fundamentals 820641003 (H) and Data Control and Functions 820642003 (H)	<i>Specialized Programming 820643002(H) and Specialized Database Applications 820644002 (H)</i>
	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* <u>http://ssr.dadeschools.net/acad\_tally\_schls.pdf</u> Internship Opportunities Student Organizations / Clubs Farn Upon Completion

<ul> <li>Internship</li> <li>Cooperative Education</li> <li>Job Shadowing</li> </ul>	<ul> <li>Future Business Leaders of America (FBLA)</li> </ul>	<ul> <li>For more information on the Florida Department of Education Bright Futures Scholarship Programs: Florida Academic Scholars Award (FAS), Florida Medallion Scholars Award (FMS),</li> </ul>
School-Based Enterprise     Service Learning     Dual Enrollment <u>Portal to CEO</u>		<ul> <li>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 guidance counselor.</li> </ul>

## POSTSECONDARY OPTIONS

Certification Programs	Community College (A.A./A.S.) or Proprietary Programs		Four-Year College and University Programs
<ul> <li>Internet and Computing Core (IC3)</li> <li>Oracle</li> </ul>	<ul> <li>Database Development /Administration</li> <li>Computer Office Applications / Technology</li> <li>Data Communication Systems</li> <li>Computer Engineering Technology</li> <li>Computer Information Administrator</li> <li>Computer Programming &amp; Analysis</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 Programming</li> <li>Computer Science</li> <li>Database Management</li> <li>Information Science</li> <li>Information Technology</li> <li>Management Information Systems</li> <li><u>DeVry University</u></li> </ul>

## CAREER OPTIONS

Entry Level	After Post-Secondary Education	
<ul> <li>Database clerk</li> <li>Data Entry and Information</li></ul>	<ul> <li>Computer and Information Systems</li></ul>	
Processing Clerks <li>Database Programmer</li> <li>Independent Business Owner</li>	Manager <li>Computer Programmers</li> <li>Database Administrator</li> <li>Management Consultants</li> <li>Network Administrators</li>	