Companies of all types are relying on “big data” – the gathering and interpreting of large data sets from which business trends can be identified. Jobs in this sector include those who gather data such as researchers and statisticians, and those who manage and protect it such as database administrators.

**KEY FINDINGS**

- The management of organization data is a faster-growing field with a more positive outlook than data researchers.
- Educational background is flexible in data-related occupations, with some requiring professional certificates over bachelor’s degrees.
- Orange County’s growth is outpacing occupation-wide growth rates, and is fast becoming an essential resource across industries.

**MOST IMPORTANT TASKS AND DUTIES**

1. Test programs or databases, correct errors, and make necessary modifications.
2. Modify existing databases and database management systems or direct programmers and analysts to make changes.
3. Plan, coordinate and implement security measures to safeguard information in computer files against accidental or unauthorized damage, modification or disclosure.
4. Work as part of a project team to coordinate database development and determine project scope and limitations.
5. Write and code logical and physical database descriptions and specify identifiers of database to management system or direct others in coding descriptions.

**KEY TRAITS**

- Conveying Findings from Data
- Oral Comprehension
- Attention to Detail
- Active Learning
- Initiative
- Complex Problem Solving
- Inductive Reasoning
- Active Listening
- Adaptability/Flexibility
- Monitoring
- Logical Reasoning
- Dependability
- Integrity
- Critical Thinking
- Getting Information
- Maintaining Security

**TOP SKILL SETS**

- Computers and Electronics
- Customer and Personal Service
- English Language
- Mathematics
- Critical

**EDUCATIONAL LEVEL BY TYPE**

- Bachelor’s, 60%
- Associate’s, 15%
- Some College, 20%
- Other, 5%

**EMPLOYMENT OVERVIEW**

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**RELATIONSHIP COURSEWORK**

- Big Data Specialized Studies Program
- Predictive Analytics Certificate Program
- Web Intelligence Certificate Program

- Introduction to Python for Data Analytics
- Business Intelligence and Data Warehousing Specialized Studies Program

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* "Bright Outlook" occupations are expected to grow rapidly; the next decade will have large numbers of job openings, or are newer/warping occupations according to the U.S. Department of Labor.