Database Administrator

About my job:
I use professional software to store and organize data, which may include financial information and customer shipping records. I ensure that data is available to users but remains secure from unauthorized access.

What I do every day:
• Try out programs or databases, correct errors and make the required modifications
• Establish and oversee database operations and infrastructure
• Modify existing database management systems and direct programmers and analysts
• Coordinate and implement security measures to secure computer files against accidental or unauthorized damage, modification or disclosure
• Work with colleagues as a team to coordinate database development and determine project scope and limitations
• Develop and code logical and physical database descriptions and specify identifiers of database to management system
• Specify users and user access levels for each segment of database
• Schedule and supervise improvements to computer systems such as the installation of new databases
• Establish guidelines for the use and acquisition of software and to protect information

What makes my job great?
Job growth:
Employment of database administrators is projected to grow 15 percent from 2012 to 2022.

Short-term training:
Database administrators usually have a bachelor’s degree in an information- or computer-related subject. Before becoming an administrator, these workers often work in a related field.

Good pay:
The median salary is $61,100 a year. (That means 50 percent earn less than this number, and the other 50 percent earn more.) High-level database administrators involving management positions can earn approximately $100,000 per year.

Benefits:
Most database administrators work full time with benefits that may include:
• Healthcare
• Paid vacation
• Tuition reimbursement
• Opportunities to work from home
How can you become a database administrator?

**Academic/training credentials:**
Bachelor’s degree in information or computer science is required, as well as certificates from product vendors.

**Other credentials:**
Some software vendors offer certification programs that can provide advantages for job seekers as well as for advancement. These include:
- Oracle Database Administrator Certification
- Microsoft SQL Server Certification

**Work experience/internships:**
Work and internship experience is not required but will advance your job search. Many companies are looking for interns/apprentices. To find out more about local opportunities, contact Lakeland Career Services at 440.525.7222.

**Skills and requirements:**
- Database administrators usually work full time
- Ability to work off hours, including nights and evenings
- Analytical thinking skills
- Problem-solving skills

**Where you can find jobs:**
- Online job boards
- Career fairs
- Department of Career Services at colleges
- Company websites
- Social media
- Computer user groups

**Potential job titles:**
- Database administrator (DBA)
- Database analyst
- Database administration manager
- Database coordinator
- Database programmer
- Information systems manager
- Management information systems director (MIS director)
- Programmer analyst, systems manager

**Potential local employers:**
- Cornerstone IT
- Federal Reserve
- Randstad Technologies
- Key Bank
- Local small businesses
- Parker-Hanniflin
- Progressive Insurance
- Sherwin-Williams
- Steris
Local educational opportunities

Two-year institutions:

- Lakeland Community College: Associate of Applied Business in IT and Computer Science (database administrator concentration)
  - IT specialist certificate
  - IT professional certificate
  - Contact Lakeland Information Technology & Computer Science Department Chair at 440.525.7265
- Cuyahoga Community College: Associate of Applied Business in Information Technology Programming and Technology

Four-year institutions:

- Holden University Center of Lakeland Community College/Kent State University: Bachelor of Technical and Applied Studies, Computer Technology General Concentration
- Cleveland State University: Bachelor of Science in Computer and Information Science
- Kent State University: Bachelor of Science in Computer Science
- University of Akron: Bachelor of Science in Computer Science

### Coursework per educational entity:

<table>
<thead>
<tr>
<th>Secondary pathway: Information Technology</th>
<th>Postsecondary program: Database Administrator</th>
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</thead>
<tbody>
<tr>
<td>An Example of Course with Secondary and Postsecondary Credits</td>
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</tbody>
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### High School Tech Prep:

- A-TECH: computer information systems program
- Auburn Career Center: information support and services
- Lake Shore Compact: computer information systems program
- Excel TECC: information technology and programming program
- Contact your high school guidance office

#### Coursework per educational entity:

<table>
<thead>
<tr>
<th>Year 1 1st Semester</th>
<th>Business Communications</th>
<th>Moss Hat Academy System Administration I</th>
<th>Survey of College Mathematics</th>
<th>Introduction to SQL</th>
<th>Oracle PL/SQL Programming</th>
<th>Windows Configuration</th>
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</thead>
<tbody>
<tr>
<td>Year 1 2nd Semester</td>
<td>Java Programming I</td>
<td>Microsoft SQL Concepts</td>
<td>Oracle Database Administration</td>
<td>Installing and Configuring Windows Server 2012</td>
<td>Health Fitness</td>
<td>Arts and Humanities Elective</td>
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<tr>
<td>Year 2 1st Semester</td>
<td>Microsoft SQL Server Administration</td>
<td>Information and Computer Science Capstone</td>
<td>Business Statistics I</td>
<td>Natural Science Elective</td>
<td>Social and Behavioral Science Elective</td>
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#### High School Courses for Postsecondary Credit (including Apprenticeship Hours) and the Corresponding Postsecondary Courses:

- **Required Courses**
  - **Recommended Electives**
How can I grow my career?

The majority of database administrators earn a bachelor’s degree in computer science or information technology. Many go on to earn post-graduate certificates to gain expertise in a specific area or software program.

Where could I focus or specialize in my career?

- Data analyst
- Database developer
- Database administrator

- IT project manager
- Computer and information systems manager

The career ladder

Pre-IT training
- College technical prep program
- Worksite visits
- Job shadowing

2-year database administration degree
- Database developer
- Data analyst
- $45,000 annual salary

4-Year IT/CS degree
- Database administrator
- Database manager
- $70,000 annual salary

Graduate degree
- IT or business
- IT project manager
- Computer system manager
- $100,000 annual salary

Sources/References:

O*Net Online-Summary Report, Ohio Labor Market Information