Technology Pathway

Database Management Pathway

**Database Architects**
Bachelor’s degree
$22-$72 per hour; $46k-$149k per year

**Database Administrators**
Bachelor’s degree
$27-$73 per hour; $55k-$151k per year

**Data Warehousing Specialists**
Bachelor’s degree
$22-$72 per hour; $46k-$149k per year

**Computer Operators**
Associate’s degree
$23-$68 per hour; $47k-$141k per year

**Software Developers, Systems Software**
Associate’s or Bachelor’s (preferred) degree
$36-$81 per hour; $74k-$168k per year

**Software Developers, Applications**
Associate’s or Bachelor’s (preferred) degree
$32-$79 per hour; $66k-$164k per year

**Computer Programmers**
Bachelor’s degree
$27-$69 per hour; $55k-$143k per year

**Web Developers**
Associate’s degree
$18-$64 per hour; $37k-$133k per year

**Data Entry Keyers**
High school diploma or equivalent
$12-$26 per hour; $25k-$54k per year

**Computer and Information Systems Managers**
Bachelor’s degree
$44-$145 per hour; $92k-$299k per year

**Computer Systems Architects/Development Managers**
Bachelor’s degree
$22-$72 per hour; $46k-$149k per year

**Software Developers, Systems Software**
Associate’s or Bachelor’s (preferred) degree
$36-$81 per hour; $74k-$168k per year

**Computer Programmers**
Bachelor’s degree
$27-$69 per hour; $55k-$143k per year

**Web Developers**
Associate’s degree
$18-$64 per hour; $37k-$133k per year

**Data Entry Keyers**
High school diploma or equivalent
$12-$26 per hour; $25k-$54k per year

**Computer Systems Architects**
Bachelor’s degree
$22-$72 per hour; $46k-$149k per year

**Computer Systems Analysts/IT Business Analysts**
Bachelor’s degree
$29-$66 per hour; $60k-$138k per year

**Computer Network Support Specialists**
Associate’s degree
$24-$64 per hour; $50k-$132k per year

**Computer User Support Specialists**
Some college, no degree
$18-$47 per hour; $40k-$98k per year

**Cybersecurity/Information Security Analysts and Architects**
Bachelor’s degree
$30-$80 per hour; $63k-$166k per year

**Network/Computer Systems Administrators**
Bachelor’s degree
$29-$66 per hour; $60k-$138k per year

Data source: Massachusetts Emsi and O*NET data
Technology Career Pathways: Database Management; Development; and Systems Design, Support, and Management

This document includes three sample career pathways for technology in the Commonwealth of Massachusetts, which highlight both apprenticeship opportunities and high-growth occupations. These pathways are based on labor market data, priority occupations and pathways in the Regional Labor Market Blueprints (www.mass.gov/service-details/view-your-regions-blueprint), and career and technical education Innovation Pathways (www.doe.mass.edu/ccte/innovation-pathways/).

These career pathways are meant to serve as external visuals, to be used to show students, job seekers, and incumbent workers how they might enter and advance in this industry. Users can learn more about available apprenticeships at www.mass.gov/topics/apprenticeships and other education and training programs at jobquest.dcs.eol.mass.gov/jobquest/Training.aspx.

There are multiple on- and off-ramps available to students, job seekers, and incumbent workers. Although the visuals depict a linear pathway of how one might advance from entry-level to senior positions, there are opportunities for direct entry into these positions through apprenticeships, other education and training programs, and lateral transfers from other industries.

This tool can be used by all partners for their individual audiences. Partners, including workforce development teams, adult education providers, technical schools, school districts, colleges, other service providers—and most importantly, employers—can provide valuable intelligence to continue to update and validate this pathway information over time.