Technology Pathway

Development Pathway

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

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; $56k-$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

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

Systems Design, Support, and Management Pathway

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

Network/Computer Systems Administrators
Bachelor's degree
$27-$64 per hour; $57k-$133k 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

1

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.

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT