

COMPUTER SCIENCE CAREER PATHS



UMBC's B.S. in Computer Science, an ABET accredited program, introduces students to a rich and diverse discipline. Opportunities in exciting emerging fields such as artificial intelligence, machine learning, cybersecurity, malware analysis, mobile computing, graphics, game design, quantum computing, human-computer interaction, forensic analysis, and data science are accessible in a wide range of environments. Computing jobs are some of the fastest growing and highest paid jobs in the country according to the Bureau of Labor Statistics, and UMBC Computer Science graduates are employed by some of the top businesses in the country: Google, Amazon, Microsoft, NSA, NIST, CIA, Northrop Grunman, Lockheed Martin, Firaxis, JP Morgan, T Rowe Prices, Legg Mason, UPS, and many more.



AT



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COMPUTER SCIENCE INDUSTRY PATHS

Examples of Industries:

PROGRAMMING

Operating Systems

- Systems Programmer
- Systems Software Developer
- Computer Programmer
- Programmer Trainee
- Software Engineer
- Software Developer
- Software Development Specialist
- Software Integration Engineer

Applications

- Applications Engineer
- Applications Software Developer
- Applications Programmer
- Scientific Applications Programmer
- Software Integration Engineer
- Associate Applications Developer
- Firmware Engineer
- Software Specialist
- Process Control Programmer
- Software Technician
- Information System Programmer
- Applications Analyst
- Virtual Reality Developer
- Field Systems Technician

Data Communication

- Data Communications Programmer
- Data Communications Analyst
- Data Communications Specialist Hardware
- Design Engineer

SYSTEMS ANALYSIS

- Systems Analyst
- Associate Analyst
- Associate Systems Analyst
- Computer Analyst
- Systems Manager
- Assistant Analyst
- Programmer/Analyst
- Digital Systems Analyst

DIGITAL IMAGING

- Digital Graphic Artist
- Computer Game Programmer
- GUI Designer
- Multimedia Producer
- Technical Director
- Computer Animator
- Graphics Programmer
- Special Effects Programmer
- Interactive Multimedia Associate

DATA PROCESSING MANAGEMENT

- Data Processing Installer
- Data Processing Director
- Data Processing Manager
- EDP Manager
- Data Processor
- EDP Systems Analyst
- EDP Systems Sales Rep.

SECURITY

- ATM Specialist
- Computer Security Specialist
- Security Specialist
- Computer Security Consultant
- Encryption Specialist

DATABASE MANAGEMENT

- Database Administrator
- Database Specialist
- Data Administrator
- Data Retrieval Specialist
- Database Manager
- Data Control Manager

PRODUCT SUPPORT

- Service Engineer
- Customer Engineer
- Product Support Rep.
- Computer Help Desk Technician
- Technical Support Rep.
- Systems Engineer
- Field Service Rep.
- Technical Support Specialist
- Product Support Specialist
- Computer Support Specialist
- Customer Support Specialist
- Technical Support Analyst
- Computer Repair Specialist
- Software Support Specialist
- Technical Support Engineer

INTERNET

- Website Engineer
- Webmaster
- Website Programmer
- Website Analyst
- Online Services Sales Rep.
- Cyber Journalist

GRAD SCHOOL PATHWAYS

A NOTE FROM OUR ASSOCIATE PROGRAM DIRECTOR



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“Alexa, turn on the lights”. Congratulations, you’ve just implemented a script with syntax, keywords, functions and parameters. Some of the fundamental building blocks of a computer scientist.

So ... what does a computer scientist look like? We’re ordinary people doing extraordinary things. We are critical thinkers. We take things we already know and weave them in with new exciting ideas and in new ways to solve problems. We are explorers. Always pushing forward the edge of what is possible. We are dreamers. We are movers and shakers. We serve mankind. We not only help you store, retrieve and analyze your data, we help you keep it safe. We value the power that comes from the strength of diversity. We are lifelong learners. In this ever-changing field of Information and Computer Technologies, it is important to keep abreast of the skills needed to be efficient, effective and marketable.

Come find the extraordinary that drives you!



THE UNIVERSITIES AT SHADY GROVE