

Factors Affecting Computer and Mathematical Occupations	
Computer Systems Analysts (15-1211)	
Total Employment	
decreasing due to economies of scale in cloud computing; IT contracting to reduce costs	
By Industry	
* monetary authorities	
* insurance (not medical, life)	
* accounting, tax, bookkeeping, payroll	
demand increasing in sectors needing digital solutions to specific problems, inefficiencies	

decrease	increase
demand (industry specific)	demand (industry specific)
demand (by industry)	demand (by industry)
demand (total emp)	demand (total emp)
productivity	productivity
source	source

Information Security Analysts (15-1212)	
Total Employment	
increasing due to increasing threat of cyber attacks aimed at sensitive or financial data	
By Industry	
* data processing, hosting	
* monetary authorities	
* credit intermediation	
* health, medical insurance	
* insurance (not medical, life)	
* computer systems design	
* management	
demand increasing in sectors needing to protect sensitive data from cyber attacks	

Computer and Information Research Scientists (15-1221)	
By Industry	
* software publishers	
* computer systems design	
* research & development	
demand increasing in sectors where demand for digital services is increasing	

Computer User Support Specialists (15-1232)	
Total Employment	
decreasing as troubleshooting increasingly handled by automated tools	
decreasing as businesses increase uptake of successful automated tools	
By Industry	
* computer systems design and related services	
increasing as companies outsource IT to industry experts	
increasing for specialists who can respond to complex user requests that cannot be handled by automated tools	

Computer Network Architects (15-1244)	
Total Employment	
decreasing due to economies of scale in cloud computing; IT contracting to reduce costs	

Network and Computer Systems Administrators (15-1244)	
Total Employment	
decreasing due to economies of scale in cloud computing	

Database Administrators and Architects (15-1245)	
	By Industry
	* data processing, hosting, and related services
	demand increasing as small- and medium-sized enterprises adopt cloud services for data needs
Computer Programmers (15-1251)	
	Total Employment
	decreasing due to continued offshoring to control costs
Software Developers and Software Quality Assurance Analysts and Testers (15-1256)	
	Total Employment
	increasing as software integrated into many more consumer and industry goods, including IoT
	By Industry
	* monetary authorities
	* health and medical insurance
	* other insurance (not medical, life)
	demand increasing in sectors integrating software into products, sectors adopting new technologies
Computer Occupations (all other) (15-1299)	
	Total Employment
	decreasing as computer operating tasks increasingly automated
Actuaries (15-2011)	
	Total Employment
	increasing with greater emphasis on identifying, quantifying, and managing risk
Operations Research Analysts (15-2031)	
	Total Employment
	increasing as more data collected across all industries, increased need to optimize and improve business processes
Data Scientists and Mathematical Science Occupations (all other) (15-2098)	
	Total Employment
	increasing with growing data collection, desire to improve business processes and design, develop new products