

## Computer and Information Technology Tracks at LFCC

<b>Information Systems Technology (AAS)</b>	<b>Cybersecurity (AAS)</b>	<b>Computer Science (AS)</b>
Designed for students wishing to enter the IT workforce upon graduation	Transfer opportunities exist, but students must be very careful as 4-year schools will want different courses	Designed for students wishing to pursue a four-year degree in computer science with core knowledge and skills needed for entry into baccalaureate schools in computer science.
Multiple specialties options via Career Studies Certificate (networking, programming, web design, database, etc.) to choose from to supplement the IST degree	The program meets the requirements for the NSA/DHS Center of Academic Excellence.	This degree is an Associate of Science degree with a specialization in Computer Science. Traditional transfer degree.
Typically deal with the design, configuration and maintenance of network hardware and servers. By nature, this is much more of hands-on field.	Cybersecurity is the use of various technologies and processes to protect networks, computers, programs and data from attack, damage or unauthorized access.	Emphasis on theory, math and creativity
IS has five basic components: hardware, software, database, network, and people. Typically, IS performs the following five functions: input, process, output, feedback, and control.	Cybersecurity jobs require strong technical skills and most require a technical degree in Cybersecurity, computer science, information technology or engineering. Cybersecurity courses examine topics such as: Computer forensics, Advanced computer security issues and practices.	There are three main CS categories: designing and building software; developing effective ways to solve problems in computing; and creating better ways to utilize computers as well as to address challenges in the field such as computer vision, robotics, or digital forensics.
Stays up to date on new hardware, software, and solutions.	Stays up to date on new threats and developments that emerge daily	Can lead to a master's-level computer science degree with opportunities to conduct technical research in ground-breaking areas like artificial intelligence and robotics.

## Career Outlook

### Information Systems Technology

Employment of computer and information technology occupations is **projected to grow 13 percent from 2016 to 2026**, faster than the average for all occupations. These occupations are projected to add about 557,100 new jobs. Demand for these workers will stem from greater emphasis on cloud computing, the collection and storage of big data, and information security.

### Cybersecurity

Employment of cybersecurity analysts is **projected to grow 28 percent from 2016 to 2026**, much faster than the average for all occupations. Demand for information security analysts is expected to be very high, as these analysts will be needed to create innovative solutions to prevent hackers from stealing critical information or causing problems for computer networks.

Professionals skillful in the area of cybersecurity are in demand, and it doesn't appear that it will change in the near future. Cyber Defense Magazine states that about 1.8 million cyber security professionals will be needed to fill the demand by 2022. One of the top cybersecurity jobs is that of the information security analyst. U.S. News & World Report ranked information security analyst No. 2 in Best Technology Jobs, No. 6 in Best STEM Jobs and No. 32 in the 100 Best Jobs.

### Computer Science

Employment of computer and information research scientists is **projected to grow 19 percent from 2016 to 2026**, much faster than the average for all occupations. Computer scientists are likely to enjoy excellent job prospects, because many companies report difficulties finding these highly skilled workers.

Employment projections source: Bureau of Labor Statistics (<https://www.bls.gov/>)