COMPUTER SCIENCE

The **Computer Science and Information Technology** area of study prepares students for careers and continued education in the rapidly evolving technology sector. Programs in this area develop strong foundations in programming, computing systems, data analysis, and problem-solving while emphasizing the practical application of technology to real-world challenges. Students can pursue transfer-oriented degrees such as **Computer Science**, which prepares them for bachelor's programs in computing and software development, or career-focused programs and certificates that build technical skills for the workforce. These programs equip students with the analytical thinking, technical expertise, and adaptability needed for careers in software development, information technology, cybersecurity, data analytics, and other technology-driven fields.

Associate in Applied Science

Computer Science/Information Technology, Associate in Applied Science (https://catalog.ocean.edu/areas-study/computerscience/aas-it/)

The Associate in Applied Science (AAS) in Information Technology prepares students for entry-level positions in various computer-related roles within the IT field. The program features a comprehensive curriculum that covers essential areas such as hardware, software, operating systems, information security, networking, computing fundamentals, and cloud computing. It is also designed to equip students with the skills needed for the integration, design, deployment, and management of computing resources and services. This program prepares students for industry-recognized certifications, enhancing their qualifications and career prospects.

Cybersecurity Option, Computer Science, Associate in Applied Science (https://catalog.ocean.edu/areas-study/computerscience/aas-cyber/)

The Cybersecurity option in the Computer Science/Informational Technology, Associate in Applied Science is designed to provide students the opportunity to apply their work experience to earning an associate degree in applied science. Students can earn credit for their work experience while they prepare for career advancement. Up to 17 credits may be awarded for work experience, including military experience, trade/proprietary school preparation, apprenticeship programs, certifications, and on-the-job-training.

Computer Technology Option, Technical Studies, Associate in Applied Science (https://catalog.ocean.edu/areas-study/computerscience/aas-computer-tech/)

The AAS in Technical Studies degree program is designed to provide students the opportunity to apply their work experience to earning an associate degree in applied science. Students can earn credit for their work experience while they prepare for career advancement. Up to 17 credits may be awarded for work experience, including military experience, trade/proprietary school preparation, apprenticeship programs, and on-the-job-training.

Associate in Science

Computer Science, Associate in Science (https://catalog.ocean.edu/areas-study/computerscience/as-cs/)

Students are encouraged to choose a concentration to guide their studies and get on a pathway to transfer. A concentration is an advising structure used to help students focus their coursework within a broader degree program. Concentrations provide guidance toward a particular area of interest or intended transfer major and ensure students complete the appropriate prerequisite courses. A concentration is not a separate major or credential and will not appear on the diploma or transcript.

Concentrations
- Computer Science (https://catalog.ocean.edu/areas-study/computerscience/computer-science/)
- Cybersecurity (https://catalog.ocean.edu/areas-study/computerscience/cyber/)
- Information Technology (https://catalog.ocean.edu/areas-study/computerscience/info-tech/)

Certificates
- Cybersecurity, Certificate of Completion (https://catalog.ocean.edu/areas-study/computerscience/cc-cyber/)
- Information Technology, Certificate of Completion (https://catalog.ocean.edu/areas-study/computerscience/cc-it/)
- Information Technology, Certificate of Proficiency (https://catalog.ocean.edu/areas-study/computerscience/ct-it/)

Workforce Education
- Google IT Support
- Google IT Automation with Python
- Google UX Design
- Google Cybersecurity
- Google Digital Marketing & E-commerce
- Google Data Analytics
- Microsoft Excel I – Basic
- Microsoft Excel II – Intermediate
- Microsoft Excel III – Advanced
- Microsoft Word I – Basic
- Microsoft Word II – Intermediate
- Microsoft PowerPoint I – Basic
- Microsoft PowerPoint II – Intermediate