

MAJOR TO CAREER GUIDE

Computer Science

Howard R. Hughes College of Engineering

Mission of the College of Engineering

The mission of the Howard R. Hughes College of Engineering is to educate the future leaders, innovators, and entrepreneurs while discovering, integrating, and applying new engineering and computer science knowledge in service to society.

The overarching goals of the College of Engineering are to:

- Enable students to achieve excellence in engineering, informatics, computer science, and construction management.
- Promote the discovery, integration, dissemination and employment of new engineering, informatics, computer science, and construction management knowledge in service to society;
- Enable economic growth while increasing the quality of life and maintaining the ecosystem. Our core strategy for undergraduate learning in engineering, computer science, informatics and construction management embraces four distinct objectives:
 - Graduates will be technically competent in core areas within their discipline and related mathematics and sciences.
 - Graduates will be able to work within a team and communicate effectively through oral, graphical, and written modalities.
 - Graduates will be able to synthesize diverse information to develop creative design solutions.
 - Graduates will be able to function effectively in an evolving profession.

Visit this site for more information:

<http://www.unlv.edu/engineering/mission>

About Computer Science

Computer science is the study of the design, theory, and application of computers. It is a continuously evolving field based on electronics, linguistics, logic, mathematics, and systems engineering. The computer science program emphasizes the development of software and the use of computers focusing around the creation and analysis of algorithms, the development of computer programs and the integration of software and hardware into a fast-moving and highly reliable problem-solving system.

Computer scientists pursue research in the areas of artificial intelligence and expert systems, communication systems and networking, computational complexity, computer graphics and image processing, programming language processing, robotics, computer and network security, and the implementation of complex information systems.

The degree program is accredited by the Computing Accreditation Commission of ABET (Accreditation Board for Engineering and Technology, Inc.)

Computer Science Career Options

- Application software designer
- Web developer
- Computer system manager
- Computer network architect
- Computer programmer
- Computer system analyst
- Information security analyst
- Computer graphics designer

Graduate Programs

Students interested in furthering their education at the post-graduate level have several opportunities to pursue a Master of Science and Doctor of Philosophy. At UNLV the Department of Computer Science offers the following post-baccalaureate degree options:

- Master of Science – Computer Science
- Doctor of Philosophy – Computer Science

<http://www.cs.unlv.edu>

Student & Professional Associations

Students are encourage to get involved with these organizations early on by joining the student chapters at UNLV.

Association for Computing Machinery (EWB):

www.acm.org

Institute of Electronic and Electrical Engineers (IEEE)

www.ieee.org

National Society of Professional Engineers (NSPE):

www.nspe.org/

Upsilon Pi Epsilon (Computer Science Honor Society)

www.upe.acm.org

Further engineering & computer science-related student organizations can be found at

<http://www.unlv.edu/engineering/orgs>

UNLV Academic Advising for Computer Science Majors:

UNLV offers both a bachelor of science (BS) and a bachelor of arts (BA) in Computer Science.

Academic Advisors are available to meet with students about their academic goals for both computer science degree options and to assist in constructing a plan for graduation. Advisors can also help students understand how their experiences at UNLV can lead to a career in their desired field.

College of Engineering Advising Center

Phone: 702-895-2522_

Campus Location: TBE A-207

<http://engineering.unlv.edu/advising>

Helpful Career Information

Employers rate candidate soft skills/qualities in order of importance

- 1 Ability to verbally communicate with persons inside and outside the organization
- 2 Ability to work in a team structure
- 3 Ability to make decisions and solve problems
- 4 Ability to plan, organize and prioritize work
- 5 Ability to obtain and process information
- 6 Ability to analyze quantitative data
- 7 Technical knowledge related to the job
- 8 Proficiency with computer software programs
- 9 Ability to create and/or edit written reports
- 10 Ability to sell or influence others

Source: Job Outlook 2013

Courtesy of the National Association of Colleges and Employers

Visit the Career Occupational Handbook to learn more about a specific occupation:

<http://www.bls.gov/ooh/>

The OCH covers hundreds of occupations and describes: What They Do, Work Environment, How to Become One, Pay, and more. Each profile also includes BLS employment projections for the 2010–20 decade.

Career Exploration/Planning

FOCUS 2: UNLV's computerized assessment that profiles your interests, abilities, and values and helps you find a career that's right for you.

<http://hire.unlv.edu/careerAssessment.html>

Myers-Briggs Type Indicator (MBTI): Assessment designed to identify how you are energized, how you take in information, how you make decisions, and how you approach life.

<http://hire.unlv.edu/careerAssessmentMBTI.html>

Strong Interest Inventory: Generates an in-depth assessment of your interests among a broad range of occupations, work and leisure activities, and educational subjects.

<http://hire.unlv.edu/careerAssessmentStrong.html>

UNLV Career Services

Career Services encourages ALL UNLV students to take advantage of their services, which include:

- Assistance with developing a career plan and choosing a major
- Career counseling and guidance on building a RESUME
- Preparing for an interview, assistance with job searching and networking.

Phone: 702-895-3495

Campus Location: SSC-A 2nd Floor

<http://hire.unlv.edu/>

Internship Opportunities

The College of Engineering maintains a webpage listing employment and internship opportunities for College of Engineering students. Please visit:

<http://www.unlv.edu/engineering/opportunities>

UNLV's **Hire a Rebel** is a free, online recruiting system that helps students, alumni, and employers connect in a variety of ways. Students can use **Hire a Rebel** to search for: job and internship listings, on-campus recruiting interviews, employer information sessions, resume book database, & dates for career fairs.

<http://hire.unlv.edu/careerLink.html>

MEDIAN SALARIES BY DISCIPLINE 2010-2012

Career	Salary Range	Median Salary
Computer Programmer	\$41,000-\$115,000	\$71,000
Computer Systems Analyst	\$48,000-\$119,000	\$78,000
Information Security Analysts	\$43,000-\$120,000	\$76,000
Web Developer	\$61,000-\$100,000	\$78,000

Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2012-13 Edition*, <http://www.bls.gov/ooh/>

UNLV | ACADEMIC
ADVISING
Collaborate to Graduate