THE UNIVERSITY ADVANTAGE

It all takes place on the campus of a highly respected teaching and research-based university situated on a beautiful wooded 550-acre campus that is home to nearly 15,000 students enrolled in over 200 fields of study. This true collegiate environment makes our graduates more well-rounded professionals, and ultimately, more well-rounded people.

University life provides students with more than professional training – it allows them to take part in a lively array of social, cultural, and recreational activities. With a population of 98,000, the surrounding Greater Grand Forks area is a thriving cultural and retail center. Parks, theaters, art galleries, museums, nightlife, sporting events and concerts provide students with plenty of entertainment both on and off campus.

ADVISORY BOARD

In order to assure an up-to-date curriculum, the Department of Computer Science has an advisory board comprised of the following companies:

- Microsoft
- Digi-Key
- IBM
- Rockwell
- Federated Insurance
- Daktronics
- InfoTech

WHAT OUR GRADUATES ARE DOING NOW

UND Computer Science graduates:

- Have excellent job prospects
- Work in one of the highest-paying professions
- Work in all types of industries
- Establish careers all over the world
- Have excellent job prospects as the job outlook through 2022 calls for 22% growth (222,600 new positions)
- Work in one of the highest-paying professions (the nation-wide 2012 mean salary was $93,350)
- Work in all types of industries
- Establish careers all over the world

Shelley Andrew
Minnesota Twins
Business Systems Analyst

Kyle Goehner
Amazon
Software Development Engineer

David Lannoye
Microsoft Corporation
Software Engineer
DEPARTMENT OF COMPUTER SCIENCE

The Department of Computer Science is committed to providing two comprehensive undergraduate degrees (B.S. and B.A.) that provide a solid foundation in computer science and prepares students for a successful career. The curricula includes theory and programming and provides ample opportunities for undergraduate research and experiential learning/senior projects, for example:

- We offer a B.S. and a B.A. degree to meet the different learning strengths of students. While both degrees have nearly identical computer science coverage, the B.S. requires more math, while the B.A. requires more liberal arts (and less math). Graduates of both degrees are sought after by regional employers.
- We offer extensive real-world learning opportunities. As a department within the world-renowned John D. Odegard School of Aerospace Sciences and as part of a diverse liberal-arts University, many of these opportunities are interdisciplinary. Our students conduct research, develop software, and manage computer systems for many schools and departments, including Medicine, Chemistry, Engineering, Aviation, Unmanned Aircraft Systems, Atmospheric Sciences, Biology, and the Computational Research Center. Our students are even developing, from scratch, the systems required to fabricate, launch, and operate a CubeSat-class spacecraft.

WHAT IS A COMPUTER SCIENTIST?

Today practically everything runs on software and everyone is a computer user. But a computer scientist must be more than just a user, as computer science is a science of problem solving. Computer scientists must model and analyze problems, design solutions, and verify that they are correct. To do this you need to master the basics: programming languages, data structures, software design, and computer architecture. However, there are many other topics of importance: computer graphics, computational complexity, human-computer interfaces, software engineering, databases, and artificial intelligence.

WHY UND COMPUTER SCIENCE?

Many colleges and universities offer an undergraduate degree in computer sciences, so why should you choose the University of North Dakota?

- All of our faculty conduct research which is incorporated into their course materials and activities.
- Teaching and research are supported by four computer labs, a set of diverse servers, and a high-performance computing (HPC) system.

STUDENT ORGANIZATIONS

The Association of Computing Machinery (ACM)

ACM National is the world’s largest educational and scientific computing society, delivering resources that advance computing as a science and a profession. ACM provides the computing field’s premier Digital Library and serves its members and the computing profession with leading-edge publications, conferences, and career resources. The ACM local chapter keeps Computer Science students involved in the community with programming competitions and Lego robotics.

Upsilon Pi Epsilon

The mission of UPE is to recognize academic excellence at both the undergraduate and graduate levels in the computing and information disciplines.

UND Anime Society

The purpose of the UND Anime Society is to promote an understanding and interest in Japanese animation, manga and culture in the surrounding community.

DEGREE PROGRAMS

B.S. in Computer Science (ABET Accredited) designed for students who intend to pursue graduate studies or a career involving the technical and scientific applications of computing. The curriculum emphasizes the mathematical and scientific aspects of this dynamic science.

B.A. with Major in Computer Science recommended for students seeking a broader-based liberal arts education. The flexible curriculum includes humanities courses in place of some of the science and mathematics requirements.

Minor in Computer Science intended for students who are majoring in other disciplines and who want to be competitive within the global marketplace of the Information Age.

B.S./M.S. in Computer Science intended for students who plan to earn both B.S. and M.S. degrees in the discipline. This program allows students to designate two three-credit hour courses to count for both degrees.

M.S. in Computer Science prepares students for leadership roles in the high-technology industry. Research areas include artificial intelligence, software engineering, computer graphics, internet technology, networks and operating systems, and simulation.

Ph.D. in Scientific Computing prepares students for research roles in any branch (bioinformatics, software design, etc.) of computational science where the scientific computing approach is used to gain understanding. Research areas include numerical analysis, theoretical computer science, visualization, high-performance computing, and simulation.

OpenOrbiter CubeSat

Blood Counter "Zeus" Video Game

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