Computer Science and Physics

Department Information

• Department Web Site:
  www.ndsu.edu/cs/ (http://www.ndsu.edu/cs/)
• Credential Offered:
  B.S.; B.A.
• Official Program Curriculum:
  catalog.ndsu.edu/undergraduate/program-curriculum/computer-science-physics/ (http://catalog.ndsu.edu/undergraduate/program-curriculum/computer-science-physics/)

Since the dawn of the computer age, Computer Science and Physics have been closely intertwined disciplines. Computational physics is now an established branch of physics, complementing experiment and theory, that develops and applies computer modeling approaches to the solution of a wide range of physical problems. At the same time, software development (e.g., for graphics and data mining applications) is increasingly inspired by physics. Computer modeling, including simulation and numerical analysis, is an essential component of modern research and development. Correspondingly, the demand is growing for scientists with multidisciplinary training that combines fundamental knowledge of physics and computer science with practical skills in programming and computation.

The Computer Science and Physics dual major program is designed to allow students to complete one degree and the core requirements of both majors. Graduates of the program will have a unique background qualifying them to work in industry or to pursue graduate studies in physics, computer science, engineering, or other technical fields.