Computational Science Research Center (Academic Programs)

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Agenda



- About SDSU
- Basic Skills set
- Degree Programs
- Areas of Research
- Graduate Programs in Numbers
- Basic Skills Set
- Curriculum Core Areas
- Summary

About SDSU



- San Diego State University: (27K+ students), 1 of 23 campuses in the California State University system, founded in 1897
- Designated a Doctoral/Research Intensive University by the Carnegie Foundation
- Since 2000, SDSU faculty and staff have attracted more than \$1.4 billion in grants and contracts for research and program administration
- 4,357 current masters and doctoral students

Degree Programs



- Advanced Certificate in Computational Science (on line)
- Master of Science Program
- Master of Science with a Concentration in Professional Studies
- PhD Program in Computational Science
- PhD in Computational Science/Statistics

Areas of Research



- Fluid Dynamics
- Materials Science
- Biophysics
- Nonlinear Dynamics
- Environmental Science
- Scientific Databases & Data Mining
- Bioinformatics
- Computational Algebra
- Nuclear Physics

- Astrophysics
- Scientific Visualization
- Image Processing
- Structural Mechanics
- ... and more

The Numbers



Ph.D.

of students: 52

Female: 20

Male: **32**

graduated: 16

graduating this year: 7

Master of Science

of students: 20

Female: 4

Male: 16

graduated: 28

Professional Master of Science

of students: 15

Female: 4

Male: 11

Number of scientific publications by students: more than 100

Basic Skills Set



- Team Projects
- Interdisciplinary
- Scientific Computing
- Software
- Planning
- Communications

Curriculum Core Areas



- Numerical Analysis
- Mathematical Modeling
- Statistics
- Scientific Visualization
- High Performance Computing
- Scientific Data Base Techniques

Summary



We are training the next generation of Computational Scientist of the 21st Century and we need your help providing real world problems for our students