

# Links to computational science degrees and programs in the USA

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## Contents

<b>1 Computational Physics specific</b>	<b>1</b>
<b>2 non-physics specific computational degrees</b>	<b>2</b>
<b>3 Selected universities in Canada and international</b>	<b>8</b>

These are collection of links to degrees in computational physics, computational science, computational engineering, Scientific computing, computational science engineering (CSE), Applied and Computational Mathematics.

The differences in degrees content is not large since number of these fields are interdisciplinary. The term CSE (computational science and engineering) is becoming the most common term used to describe these studies in the USA.

## 1 Computational Physics specific

#	university name	degree name
1	Carnegie Mellon	Concentration area in Computational Physics
2	University of Alaska, Fairbanks	MS in Computational physics. "Computational physics includes numerical modeling and computer simulation of physical systems" courses are here
3	University of Memphis, Tennessee	MS degree in physics with concentration in Computational physics

4	University of Kansas	MS in computational physics and astronomy
5	Oregon state univ	undergraduate degree, computational physics
6	Univ. of Buffalo, NY state	undergraduate degree, computational physics
7	Univ. of Georgia, Center for simulation physics	Degree program
8	California state univ. San Jose	MS in computational physics
9	The Catholic University of America Institute for Astrophysics and Computational Sciences	within the Physics dept has graduate program
10	Rice University, Department of Earth Science, 6100 Main Street, Houston, Texas 77005. Computational Geophysics in the dept of earth science.	MS and PhD programs
11	Chapman University, ORANGE, California	Has a Bachelor of science in Physics and Masters and PhD in Computational and data sciences
12	University of Arkansas	Computational Condensed Matter Physics (CCMP) Group Seems to be just for research and visiting Scientists. No degrees offered

## 2 non-physics specific computational degrees

1. HTML Numerical Mathematics for Scientific Software, NYU, Columbia. "principal goal of our group is to train researchers focusing on development of algorithms for numerical problems in engineering, medicine, business, and the arts, and their implementation in scientific software. "
2. HTML New graduate program at UC Berkeley in Computational Science and Engineering.
3. HTML George Mason Univ. has graduate computational science program within the Physics dept now  
older site (before merging with the physics dept) HTML
4. <http://www.stanford.edu/group/mathcompsci/> Stanford univ. California. Mathematical and Computational Science program at Stanford offers programs leading to a B.S.

degree, an honors option, and a minor. MCS is a multidisciplinary.

Stanford also has ICME (Institute for Computational and Mathematical Engineering) has its own M.S. and Ph.D. programs. interdisciplinary programs.

5. HTML State univ. of NY, Brockport, has undergraduate in computational science, and graduate program as well.

The College at Brockport  
350 New Campus Drive  
Brockport, NY 14420

#### Tuition

Undergraduate:  
Part-time - per credit  
Resident: \$257  
Non-resident: \$659  
  
Graduate:  
Part-time - per credit  
Resident: \$432  
Non-resident: \$841

6. HTML Univ. of Utah has MS degree in Computational Engineering and Science Program

Univ. of Utah has also the HTML Scientific Computing and Imaging Institute. Accepts graduate students. interdisciplinary program. They also have a Computational Bio-imaging Certificate Program.

Univ. of Utah also has M.S. and Ph.D. in Computing, Graphics Track in the school of computing.

7. <http://www.caam.rice.edu/> CAAM (computational and applied mathematics). MS and PhD programs

Department of Computational and Applied Mathematics  
6100 Main MS-134 Houston, TX 77005 713.348.4805

see also HTML Rice univ. graduate program in computational and applied mathematics. Same as above.

8. The University of Southern Mississippi has graduate program in computational science
9. HTML Syracuse University has MS computational science and also certificates in computational science

Syracuse University  
900 South Crouse Ave

<p>Syracuse, NY 13244 Phone: (315) 443-1870</p>
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## HTML

10. HTML Purdue Univ. Indiana, has graduate program in computational science and engineering CSE

Purdue also has Center for Computational & Applied Mathematics (CCAM), in the Math dept. Seems to accept graduate students.

11. HTML Department of Mathematics and Computer Science at the Courant Institute of Mathematical Sciences, New York University has MS in scientific computing
12. HTML HTML University of Michigan, College of Engineering, Lab for Scientific Computation, LaSC, has PhD in Scientific Computing

<p>Lab for Scientific Computation University of Michigan, College of Engineering 1919 Cooley Building Ann Arbor, MI 48109-2104 Phone (734) 936-3130</p>
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13. HTML University of Michigan also has a Phd program in Scientific Computing The doctoral program in scientific computing was established by the University of Michigan in 1989.
14. Computational Science and Engineering University of Illinois at Urbana Champaign (UIUC) has graduate program in Computational Science and Engineering.

<p>University of Illinois at Urbana-Champaign 2270 DCL, MC-278, 1304 W. Springfield Ave. Urbana, IL 61801, USA</p>
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Scientific Computing Group UIUC also has Scientific Computing Group in the dept of computer science. Graduate level.

15. HTML HTML Penn State university has a graduate minor in Computational Science Also Penn State has <http://ccma.math.psu.edu/>, the Center for Computational Mathematics and Applications. Not sure if they offer direct study programs. Penn state univ., University Park, PA 16802
16. HTML University of Texas At Austin has MS in Computational and Applied Mathematics Dept. of Applied Mathematics
17. HTML I think the above program is now replaced by this:

The university of Texas at Austin, Institute for Computational Engineering and Sciences (ICES), has a Computational Science, Engineering, and Mathematics (CSEM) graduate program. Formerly Computational and Applied Mathematics. An interdisciplinary program.

18. HTML San Diego State/Claremont Graduate University: PhD degree in computational science
19. HTML University of Minnesota has graduate program in scientific computation

Director of Graduate Studies  
 293 Amundson Hall  
 421 Washington Ave SE  
 Minneapolis, MN 55455  
 Phone: 612-625-6345

20. HTML UC Davis has graduate program in CSE
21. HTML Michigan Technological university, MI, Has PhD in Computational Science and Engineering
22. HTML HTML Indiana University Bloomington has minor in Scientific Computing
23. HTML HTML Florida state univ. has graduate Degrees In APPLIED AND COMPUTATIONAL MATHEMATICS and also a program in the Department of Scientific Computing.
24. HTML Princeton has a graduate program in Applied and Computational Mathematics (PCAM). There is also Princeton Institute for Computational Science and Engineering (PICSciE) but I am not sure it offers direct programs. It seems only for research.
25. HTML RPI has graduate program in CSE
26. HTML Univ. Of California, San Diego has new graduate program called CSME (computational science mathematics and engineering).  
 UCSD has also HTML the center for Computational Mathematics (CCoM).
27. HTML Caltech Computing + Mathematical Sciences Department offers an interdisciplinary program of graduate study in Applied and Computational Mathematics leading to a PhD degree.
28. HTML Clark Univ. Computational Science program
29. HTML Colorado state univ. Master of Science Degree in Mathematics with Specialization in Applied and Computational Mathematics
30. HTML Cornell Univ. Program in Computational Science and Engineering
31. HTML Duke Univ Computational Science, Engineering and Medicine program (CSEM)
32. HTML Georgia Institute of Technology, Computational Science and Engineering Division (CSE)
33. HTML Georgia state Univ. Dept of Mathematics has MS degree with concentrations in scientific computing.
34. HTML Louisiana State University, Center for Computation and Technology. Graduate level program.

35. HTML Louisiana Tech University, PhD program in Computational Analysis and Modeling (CAM)
36. HTML Loyola university has an MS in Scientific and Technical Computing
37. HTML MIT has MS degree program in in Computation for Design and Optimization in the center of computational engineering.
38. HTML Mississippi State University has graduate studies in Computational Engineering and high performance computing
39. HTML College of Engineering at North Carolina Agricultural and Technical State University has graduate program in Computational Science and Engineering (CSE)
40. HTML Center for Research in Scientific Computation (CRSC) at North Carolina state univ. has graduate studies program.
41. HTML Northwestern univ. has a graduate Engineering and applied mathematics program (ESAM) which seems to be computational based.
42. HTML Ralph Regular School of Computational Science at the Ohio Supercomputer Center has an undergraduate program in computational science.
43. HTML Ohio university has Master of Science in Mathematics - Computational Track
44. HTML Old Dominion University has a graduate program in modeling and simulation and has certificate program in computational science HTML
45. HTML Southern Methodist University Center for Scientific Computation has graduate studies.
46. HTML Stony brook university, NY, has graduate program in COMPUTATIONAL APPLIED MATHEMATICS in the applied Math dept.
47. HTML Texas A&M Institute for Scientific Computation. Interesting courses, FEM and numerical do not know what degrees they offer.
48. HTML UCLA Computational & Applied Mathematics, in the Math dept. Has graduate programs.
49. HTML Univ. Of California, Santa Barbra (UCSB) has CSE program for MS and PhD. multidisciplinary program.
50. HTML Univ of Chicago, dept of computer science, has a Computational Mathematics track of the Ph.D. program in Computer Science.
51. HTML The University of Arizona, Computational Science and Numerical Analysis program, in the Applied Math dept.
52. HTML University of Delaware. Graduate Program in Mathematical Computation, within the computer science dept. MS/PhD level.
53. HTML Also at University of Delaware, in the Math dept, a Numerical Analysis and Scientific Computing program. Courses seem really interesting. Graduate level.

54. HTML The Computational Sciences Initiative at the University of Houston (CSIUH) interdisciplinary graduate certificate program.
55. HTML University of Illinois at Chicago, Applied Mathematics and Computational Science (AMCS). Seems to be an MS program in the Math dept.
56. HTML University of Iowa. Applied Mathematical and Computational Sciences program (AMCS) is an interdisciplinary Ph.D. program in the Graduate College.
57. HTML University of Kentucky, dept of Math, has an Applied and Computational Mathematics graduate level program.
58. HTML University of Maryland. College Park. Applied Mathematics and Scientific Computation (AMSC) Graduate Program They also have a Scientific Computation Graduate Certificate Program.
59. HTML University of Maryland also has Center for Scientific Computation and Mathematical Modeling (CSCAMM). See the above AMSC program.
60. HTML Univ. of Massachusetts, Dartmouth, has Mathematics Major with Computational Mathematics concentration
61. HTML Univ. of Massachusetts, Lowell. Show a PhD program in Computational Mathematics
62. HTML University of Michigan-Dearborn has Master of Science Degree in Applied and Computational Mathematics in the department of Mathematics and Statistics.
63. HTML University of Minnesota Duluth, has Master of Science in Applied and Computational Mathematics in the dept of Mathematics and statistics.
64. HTML The University of Tennessee, Knoxville. Has Interdisciplinary Graduate Minor in Computational Science (IGMCS)
65. HTML University of Tennessee at Knoxville, Joint Institute for Computational Sciences has graduate program in Applied and Computational Mathematics through the math dept.
66. HTML University of Washington, Seattle, College of Arts and Sciences, The Applied and Computational Mathematical Sciences (ACMS) program, multidisciplinary Bachelor of Science degree program in the College of Arts and Sciences.
67. HTML Western Michigan University, Math dept has Master of Science in Applied and Computational Mathematics
68. HTML Johns Hopkins University, Whiting School of Engineering, has Applied and Computational Mathematics at the MSc level.
69. HTML Chapman University, ORANGE, CA. offers MS and PhD in Computational Science.
70. HTML Central Washington Univ. WA. Has Computational Science Masters Program. Offered by the Computer Science Department.

71. HTML Boston University, The Boston University Center for Computational Science (CCS). CCS offers a Certificate in Computational Science to graduate students in engineering and science pursuing a Ph.D.
72. HTML VirginiaTech, College of Engineering, Blacksburg, VA. Graduate Certificate in Computational Engineering Science and Mechanics (CESM). Admission requirements will be the same as those for the MS degree in Engineering Mechanics"
73. HTML Texas A&M University, Mathematics dept.College Station, Texas 77843. Masters degree: Computational Math Track
74. HTML SFU (Simon Fraser University) Applied and Computational Mathematics Master of Science Program Located in Canada on British Columbia's west coast. Department of Mathematics. They seem to have an MS and PhD program (very hard to navigate web site).

### **3 Selected universities in Canada and international**

1. McGill University, Canada. [https://www.mcgill.ca/study/2013-2014/faculties/engineering/graduate/programs/master-engineering-meng-electrical-engineering-thesis-%E2%80%94-comp#meng-elect\\_ele4\\_cse\\_concentration\\_en](https://www.mcgill.ca/study/2013-2014/faculties/engineering/graduate/programs/master-engineering-meng-electrical-engineering-thesis-%E2%80%94-comp#meng-elect_ele4_cse_concentration_en) New program, Master of Engineering (M.Eng.); Computational Science and Engineering
2. Undergraduate and graduate degrees (MS, PhD) in Computational Mathematics, in the applied Mathematics dept. University of Waterloo, Waterloo, ON, Canada. <http://math.uwaterloo.ca/computational-mathematics/>
3. MS computational physics, Stockholm Univ. Stockholm University, SE-106 91 Stockholm, Sweden. Telephone: +46 (0)8 5537 8000