

PROFESSIONAL DEVELOPMENT & FACULTY ENHANCEMENT



National Computational Science Institute Workshops



computationalscience.org

Shodor provides introductory through advanced workshops in computational science for precollege teachers and university faculty. In addition, professional development by Shodor scientists and educators help incorporate interactive computing across the curriculum.

PATHWAYS

Pathways to CyberInfrastructure

shodor.org/cyberpathways Shodor enables computational explorations to enhance existing after-school, community center, and faith-based programs for students.





cserd.nsdl.org Shodor develops and maintains CSERD, a peer-reviewed resource in computational science education and a Pathway portal of the National Science Digital Library (NSDL).

The Computational Science Education Reference Desk



Interactivate

shodor.org/interactivate/ A popular set of interactive, online, materials for the teaching and

learning of mathematics and quantitative reasoning



shodor.org/succeedhi/ Online lessons and activities with corresponding sign language video for hearing impaired students and their instructors

LEARNING THROUGH COMPUTATIONAL THINKING

TRANSFORMING

shodor.org/master/ Online software for mathematical and scientific modeling

MASTER Tools

Online Courses



for Faculty computational science.org/courses/

A variety of online courses for teachers and university faculty, such as Computational Chemistry for Chemistry Educators

SUCCEED Curriculum

shodor.org/succeed/curriculum/ A collection of activities and lesson plans adapted from Shodor's own workshops that incorporate computational elements into math and science explorations



STUDENT PROGRAMS

SUCCEED Workshops

shodor.org/succeed/ Science and math workshops throughout the year for middle and high school students.

Apprenticeships

shodor.org/succeed/



apprenticeships/ High school students work through a set of

modules and projects, developing the skills needed for an internship.

Internships

shodor.org/mentorcenter/

Expert students develop online resources, mentor apprentices, and teach workshops at Shodor and in the community.

