

Students who engage in quality STEM experiences are better equipped to respond to life's challenges and make informed decisions as empowered members of society. In addition to course offerings, STEM awards, clubs, and competitions may enhance students' exposure to STEM and build 21st century competencies needed to solve challenges in their everyday lives. The tables below include resources intended to serve as an example of quality STEM awards, clubs, and competitions appropriate for STEM learning and is in no way an exhaustive list.

Nationally recognized STEM award		
Name of award	Description	
<u>Cognia School</u> or System of <u>Distinction</u>	Schools or systems may be awarded the Cognia School/Systems of Distinction award after demonstrating excellence in meeting <u>Cognia Performance Standards</u> . Cognia's STEM Certification may be earned by schools that demonstrate a strong and effective STEM focus.	
ITEEA STEM School of Excellence	ITEEA, International Technology and Engineering Educators Association, recognizes schools who demonstrate outstanding leadership in the field of STEM education as <u>STEM Schools of Excellence</u> . Recognized schools undergo a rigorous application process requiring detailed documentation to demonstrate a strong Integrative STEM program.	
<u>Green Ribbon</u> <u>Schools</u>	The U.S. Department of Education Green Ribbon Schools (ED-GRS) is a public engagement initiative for school sustainability that is structured as a federal recognition award. By highlighting schools, districts, postsecondary institutions, and early learning centers' cost-saving, health promoting, and performance-enhancing sustainability practices, ED-GRS celebrates these institutions and brings more attention to their work. Additional resources can be found in the <u>Green Strides School</u> <u>Sustainability Resource Hub.</u>	

Interscholastic STEM Competitions		
Name of competition	Description	
<u>Microsoft</u> Imagine Cup	The Microsoft Imagine Cup, a global software and game design competition hosted by Microsoft, allows teams to create and build technology to solve the world's problems. This competition is open to all age groups and there are no fees to enter.	
<u>You Be The</u> <u>Chemist</u> <u>Challenge</u>	This free competition, sponsored by the Chemical Educational Foundation, for groups of 3-4 students in grades 5-8, can be completed either virtually or in-person. Regional, state, and national winners will be named and winners at the national level are eligible to compete for scholarships.	



Interscholastic STEM Competitions		
Name of competition	Description	
<u>Louisiana</u> <u>Regional</u> <u>Science Bowl</u>	The National Science Bowl <sup>®</sup> (NSB) is a highly competitive "Jeopardy style" science and math education academic event among teams of high school and middle school students from all over the country. Regional and national events encourage student involvement in math and science activities of importance to the Department of Energy and the nation. The five member state winning team and their coach are awarded a four-day all expense paid trip to Washington D.C.	
<u>Louisiana 4-H</u> <u>SeaPerch</u> <u>Challenge</u> <u>2023</u>	<u>SeaPerch</u> is an innovative underwater robotics program that guides students to build an underwater remotely operated vehicle (ROV). The SeaPerch Challenge is a regionally supported event hosted by <u>Louisiana 4-H</u> in which teams will tackle elements that showcase STEM, problem solving, and teamwork skills alongside a supportive community of mentors and enthusiasts.	
<u>National 4-H</u> <u>STEM</u>	4-H STEM programs equip young people (grades k-12) with the skills they need to succeed in life and are available through local clubs, schools, and grant-funded programs. Focus areas include computer science, robotics, aerospace, physics, chemistry, financial literacy, entrepreneurship, and veterinary science. 4-H programs use hands-on activities in robotics, computer science, and electrical engineering to teach problem solving, creative and critical thinking, and inspire kids to explore engineering and technology. The <u>4-H STEM Challenge</u> , formerly known as National Youth Science Day (NYSD), is an annual initiative to inspire kids everywhere to take an interest in STEM topics through hands-on learning.	
Louisiana High School Rally Association	The Louisiana High School Rally Association (LHSRA) is a voluntary, non-profit, educational association of middle and junior units of a school, home schools, and senior high schools that are recognized by the State Department of Louisiana and the colleges and universities that coordinate the district and state competitions each year. Students compete in regional and then state competitions in various academic science and math disciplines. Students who place in each area are eligible for scholarships. To qualify for interests and opportunities points, students should participate in science and math areas.	
Louisiana Science and Engineering Fairs Region I Region II Region III Region IV Region V Region VI Region VII Region VII Region VIII	Science and Engineering fairs are conducted at the local, regional, state, and national levels. Louisiana has twelve Science and Engineering Fair regions to serve students in public, private, parochial, charter, and home schools. Students compete by division and the top qualifier goes to the state competition. If a student wins in their state category, they may then advance to the <u>National</u> <u>Fair</u> for Junior Division (Grades 6-8) and the <u>International Fair</u> for the Senior Division (Grades 9-12).	



Interscholastic STEM Competitions		
Name of competition	Description	
<u>FIRST LEGO</u> <u>League</u> <u>Challenge</u> <u>Robotics</u> <u>Competitions</u>	FIRST LEGO League offers regional tournaments and championships where teams compete with their robots. Some teams earn an invitation to FIRST LEGO League World Festival as part of the FIRST Championship, where teams from all over the world meet and compete. There are various opportunities for teams composed of students from pre-K to grade 8.	
<u>eCyber</u> <u>Mission</u>	Sponsored by the Army Educational Outreach Program, students in grades 6-9 participate in a mission to use STEM techniques and practices to investigate and/or solve a local community problem in teams of 2-4. 1st place winners at the state level receive \$500 savings bonds per student. 1st place regional winners receive an additional \$500 in bonds and a paid trip to the finals. 1st place national winners receive an additional \$3,000 in bonds.	
Toshiba/NSTA Exploravision	The <u>Toshiba/NSTA ExploraVision competition</u> is designed to help students in grades K-12 develop problem-solving, critical-thinking, and collaboration skills. To participate, students must imagine and produce a system or a technology with the potential to solve the problems of the future. The students will tackle real issues and envision viable solutions that could make a real difference in the world around them.	
Junior Science and Humanities Symposium (JSHS)	JSHS encourages high school students to conduct original research in the fields of science, technology, engineering, and mathematics (STEM) and publicly recognizes students for outstanding achievement. By connecting talented students, their teachers, and research professionals at affiliated symposia and by rewarding research excellence, JSHS aims to widen the pool of trained talent prepared to conduct research and development vital to our nation. Students must first participate in their regional symposium where they compete for selection to present at the national symposium each year.	
Make:able	This is an assistive technology 3D design and print challenge. Students use 3D printers to create their designs to impact someone in their community.	
Vex robotics	VEX IQ Robotics Competition is played on a rectangular field involving two robots competing as an alliance in 60 second long teamwork matches, working collaboratively to score points. <u>Teams</u> also compete in the Robot Skills Challenge where one robot takes the field to score as many points as possible. Teams consist of students who will plan, build, and drive a robot for a given competition.	
<u>Future City</u> <u>Competition</u> by Discovery Education	The Future City competition is an international team challenge where students research, design, and build cities that showcase a solution to a citywide sustainability issue. The topic changes each year and can include stormwater management, public spaces, green energy, age-related issues, and more. Teams of students in grades 6-8 with an educator or mentor as a coach may compete and utilize resources available online to guide the build and <u>competition deliverables</u> .	



Club or student organization associated with a national or international organization focused on STEM		
Name of club or student organization	Description	
<u>National STEM</u> <u>Honor Society</u>	NSTEM Chapters are school-based organizations that enrich the educational experience of all student chapter members. Chapters can <b>only</b> be started by a school, and each school has its own unique Chapter and Director. In addition, each Chapter is led by an Advisor who is often the school's enthusiastic "STEM Champion." The annual fee for an entire Chapter (elementary, middle, high school, or college) is \$295. The National STEM Honor Society <sup>™</sup> (NSTEM <sup>™</sup> ) has established minimum annual requirements for student members including GPA (STEM Classes Only), classroom STEM hours, and enrichment hours.	
<u>Technology</u> <u>Student</u> <u>Association</u>	The Technology Student Association (TSA) is a national career and technical student organization of students engaged in science, technology, engineering, and mathematics (STEM). TSA's intracurricular program includes competitions and leadership activities. TSA has <u>chapters</u> in more than 2000 schools throughout the country. Students who join have opportunities to compete in national and regional events and may apply for <u>scholarships and awards</u> .	
<u>CSTA</u> <u>Computer</u> <u>Honor Society</u>	CSTA Computer Honor Society's mission is to cultivate thriving environments for student success in Computer Science (CS) for grades 9-12. Schools must have a teacher who is a CSTA+ member and offer at least one CS course. Students who are members must have at least an 80% B or 3.0 in their CS coursework. A one-time charter fee of \$150 is needed to <u>start the club</u> , with an annual registration fee of \$100.	
Mu Alpha Theta National High School Mathematics Honor Society	The school must offer two years of Algebra, one year of Geometry, and at least one year of Advanced mathematics. A certified math teacher must be the club sponsor and membership is open to 9-12 high school students who have completed two years of college preparatory math and have a 3.0 math course grade point average. There is a \$25 chapter fee and a fee of \$10 per member to have this club. Reduced membership fees of \$5 per student are available for Title I schools. There are regional, state, and national competitions for clubs to engage in. Scholarships, awards, and honor cords are available to students. The Louisiana chapter has an annual state convention for clubs each year.	
<u>Science</u> <u>National</u> Honor Society	The Science National Honor Society was founded in 2001 with the idea of gathering students and scientists together to explore career opportunities beyond high school. The initial charter fee is \$300 with an annual \$75 per year renewal fee. Students must have an all subject 3.0 unweighted system GPA. The students must be 3.5 out of 4.0 overall in their science course work. Honor chords, awards, and scholarships are available to students.	

\*If there are additional listings that a school or school system would like added to this list, please email <u>STEM@la.gov</u>.