SME Competitions Guide

SME proudly hosts and sponsors several competitions that aim to engage students in the manufacturing and engineering ecosystem. This guide serves as a breakdown of these competitions, providing information and key links. For any other questions related to the competitions, please contact chapters@sme.org.

ASME/SME Student Manufacturing Design Competition:

The purpose of this competition is to foster interest in manufacturing, provide the manufacturing engineering community with fresh new perspectives on design, and create a forum for students to share their new and innovative ideas

To learn more including entry requirements, eligibility, awards, and judging details, click here.

Blue Sky:

The goal of the annual Blue Sky competition is to influence the future of manufacturing research and education in the United States through new visionary ideas of the future. Presentations should pose grand challenges to be addressed by pursuing the manufacturing research vision, describing the intersections between disparate disciplines necessary to advance that vision. Topical areas should extend beyond the scope of single investigator and show potential for transformative impact in areas of interest to federal agencies. It is likely that team efforts will be needed to formulate such ideas. Therefore, interdisciplinary collaborations are encouraged, including disciplines outside of engineering.

To learn more including registration requirements, judging details, and other information, click here.

Digital Manufacturing Challenge:

This annual competition invites student designers to use their imagination to arrive at an innovative design, which exploits the geometric capabilities of direct digital manufacturing (DDM) to the fullest. Entries are welcome from college/university students and high school students; both categories are judged separately. Winners are recognized at SME's annual RAPID + TCT event.

DMC winners receive a complimentary conference pass to RAPID + TCT, a cash prize, certificate of achievement, recognition letter, complimentary AM certification, and a one-year all access license to Tolling-U SME online courses.

For more information on how to enter the Digital Manufacturing Challenge, click **here**.

FIRST Robotics:

SME partners with FIRST for their **FIRST Robotics Competition**. FIRST Robotics competition seasons begin with district and regional events, where teams compete locally for a chance to win awards and for a spot at the FIRST Championship. These events offer students the opportunity to have fun, make new friendships, and gain exposure to new ideas, technology, and techniques that will enhance their manufacturing and engineering experience.

To find a FIRST Robotics competition near you and upcoming dates, click here.

SkillsUSA:

SME, in partnership with Stratasys, created the **SkillsUSA Additive Manufacturing Competition** to attract students to the new, exciting, emerging technologies and tools involved in this market. The competition helps contestants better understand additive manufacturing applications and provides them with hands-on experience using the latest 3D printing technology and software.

Each year, the challenge changes, allowing participants to experience first-hand what manufacturing professionals can deal with on the job. The focus of each contest ranges from designing objects that help streamline processes within the manufacturing factory setting to solving real-life medical problems. SkillsUSA events are typically held in June of each year.

To participate in SkillsUSA, or for more information, click **here**.