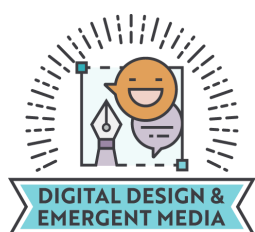


STEM Renaissance Pathway Descriptions



Computing and Cybersecurity

The [Computing and Cybersecurity Pathway](#) immerses students in computer science, cybersecurity, and math through project-based learning. Students apply computational thinking across STEM fields, explore ethical and practical aspects of emerging technologies, and develop skills like coding, system protection, and building advanced logic-based systems. The pathway prepares both TOPS University and Jump Start students for careers in the 21st-century tech workforce.



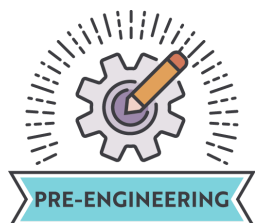
Digital Design and Emergent Media

The [Digital Design and Emergent Media Pathway](#) prepares students for modern media production by combining creativity with technical skills across STEM disciplines. Students gain experience in digital storytelling – no matter the media, media production, web programming, and emergent media, culminating in collaborative projects, exhibitions, and portfolio development.



Environmental Protection and Sustainability

The [Environmental Protection and Sustainability Pathway](#) is designed for both TOPS University and TOPS Tech diploma-seeking students, providing the knowledge and skills needed for careers connected to the natural environment. The pathway focuses on helping students understand regional weather, geology, and ecology, while also exploring career opportunities in various environmental fields. Students will understand the careers available to them in a variety of different settings to prepare for the sustainability of natural resources and the future of our state's citizens.



Pre-Engineering

The [Pre-Engineering Pathway](#) offers a hands-on program for both TOPS University and TOPS Tech diploma-seeking students, preparing them for 21st-century careers in engineering. Through project-based learning and engagement with industry professionals, students gain a strong foundation in engineering principles both in the classroom and in real-world settings. They also develop essential skills such as teamwork, technical communication, and work ethic – skills that support success in both higher education and the workforce.



Pre-Healthcare and Pre-Veterinary

The [Pre-Healthcare and Pre-Veterinary Pathway](#) offers a program for both TOPS University and TOPS Tech diploma-seeking students, preparing them for 21st-century careers in the medical and veterinary fields. Through hands-on projects and collaboration with industry professionals, students gain a solid foundation in STEM practices both in the classroom and in real-world settings. They also develop key skills such as teamwork, technical communication, and work ethic – valuable for success in advanced education or direct entry into the workforce.