Both the United States’ and Pennsylvania’s infrastructure have been given poor grades in the latest infrastructure report cards by the American Society of Civil Engineers. The next generation of civil engineers will be tasked with repairing and modernizing existing horizontal and vertical infrastructure to ensure that it is safe, sustainable, and resilient in the face of current and future hazards. We also will need to build out new infrastructure to accommodate the needs of people and businesses, all while keeping the protection of public health and safety at the forefront of our designs. This will require not just the strong understanding of structural, environmental, transportation, geotechnical, construction, and water resources fundamentals, but also the ability to apply modern design principles and tools to solve these wicked challenges of the future.

The Master's of Science in Civil Engineering at Penn State Harrisburg is designed to ensure that you are prepared to meet these challenges in your specialty area of civil engineering: structural, transportation, and/or water resources. The program can accommodate the needs of working professionals, as well as full-time students, with most classes offered in the evening. Some classes are offered in a hybrid or web format so that students do not have to commute to campus every week. Strong connections with local industry and with government agencies allows the faculty to bring experts into classes to create connections and allow students to understand how their master’s degree is immediately useful in the profession. Updated laboratories and computing facilities support classroom experiences and student research.

For students wishing to focus in environmental and water resources engineering, they can select this option. The option ensures that Environmental and Water Resources Engineering will be listed on their transcript to highlight this focus.