The Sustainable Development Action Lab (SDAL) builds upon the field research track record of the Nepal Study Center (NSC), a South Asia focused research center at UNM, and its various doctoral research activities over the last several years. This is an interdisciplinary approach to research, learning and problem solving by bringing together the three disciplines: Natural Sciences, Social Sciences and Humanities. The lab trisects the whole learning process in three ways. First, using UNM's access to research platforms in Nepal –Lumbini Center for Sustainability, NSC's global research program gathers real world data (e.g., water and air quality data, geomatic maps of urban built-environment and ecosystems, household surveys, feasibility studies, health and sanitation, randomized control trial experiments). Second, an interdisciplinary graduate-undergraduate mentorship classroom lab at UNM (special topic course) analyzes the baseline data rigorously and tries to come up with practical solutions that are implementable on the ground in Nepal (e.g., long-term scientific data monitoring programs; sustainable technologies; evidence-based policies; educational and awareness platforms including riparian bio-gallery, visual arts, Apps & e-portals; citizen science program; urban eco-systems and conservation; urban wildlife refuge). Third, the Himalayan Study Abroad Program and its community engaged-research component provide students an opportunity to travel to Nepal to implement some of their solutions. This STEM project-based integrative environment and linkages are strengthened every year as a cutting-edge learning platform for UNM and its Himalayan-based collaborators.