

UMass Dartmouth civil engineering students make an impact on regional infrastructure

As part of their required coursework, graduating seniors in the engineering programs at UMass Dartmouth must complete a capstone project. Civil engineering majors work with community stakeholders to create a plan, and then communicate their ideas to faculty, other engineers, and the public.

“The College of Engineering is committed to training future engineers who can address the complex problems of today and tomorrow,” said Dean Jean VanderGheynst. “The capstone projects in civil engineering provide excellent training for our students because they work on community projects and learn to interact with the public, an important skill in this field.”

This year, students participated in ten capstone projects that addressed various issues across the SouthCoast of Massachusetts, from Rhode Island to Cape Cod. Projects included:

1. Oyster Harbors Bridge Engineering Study sponsored by the Town of Barnstable
2. Reconstruction of Route 6 and 10 Interchange in Providence sponsored by the Rhode Island Department of Transportation
3. Mashpee Rotary Study sponsored by the Cape Cod Commission
4. North Watuppa Loop Road Layout sponsored by the City of Fall River
5. Cross Road/Old Westport Road Intersection and UMassD Entrance sponsored by the Town of Dartmouth
6. New Bedford Port Authority Public Marina sponsored by the

New Bedford Port Authority/Pare, Inc.

7. Renovations to Playing Fields and New Pavilion Design sponsored by Tighe & Bond/UMassD

8. New Bedford Crapo Hill Landfill Cell 5 and 6 Expansion sponsored by Brown & Caldwell

9. Preliminary Design of Wastewater Collection System sponsored by the Town of Barnstable

10. Waste Water Treatment Plant Algae Removal Device sponsored by Ethos Energy

“The capstone design experience is the bridge from the classroom to the real world, where students learn that real design is different than a textbook problem,” said Professor Dan MacDonald, chair of the Department of Civil and Environmental Engineering.