

UGA IRIS 5-Week Virtual Short Course (October 13 – November 12, 2026)
“Nature Based Solutions (NBS): Planning, Design & Construction”

Course Directors

Dr. Todd Bridges (todd.bridges@uga.edu)

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Module 1 – Introduction to Nature-Based Solutions & Key Planning Tenets	
Tuesday, October 13 (1:00 – 4:00 PM ET)	
1:00 – 1:15 PM	Welcome to IRIS & Course Objectives - <i>Dr. Brian Bledsoe, UGA IRIS</i>
1:15 – 2:00 PM	The Case for Nature-Based Solutions - <i>Dr. Todd Bridges, UGA IRIS</i>
2:00 – 2:45 PM	Introduction to NBS, Key Principles and Project Types – <i>Dr. Ram Mohan, UGA IRIS</i>
2:45 – 3:30 PM	Planning Considerations and Key Metrics for NBS Projects – <i>Julie Beagle, USACE San Francisco</i>
3:30 – 4:00 PM	Discussion (Q&A Session)
Thursday, October 15 (1:00 – 4:00 PM ET)	
1:00 – 1:45 PM	Case Studies of NBS Projects Across Varying Landscapes – <i>Jesse Ross, U.S. Navy</i>
1:45 – 2:30 PM	Evaluating NBS/NI from an Asset Management Perspective – <i>Zak Ruehman, UGA IRIS</i>
2:30 – 3:30 PM	Developing Restoration Projects Using a Continuum Approach – A Practitioners’ Perspective – <i>Josef Rieger, Anchor QEA, Inc.</i>
3:30 – 4:00 PM	Discussion (Q&A Session)
Module 2 – Coastal & Ecological Processes for NBS Projects	
Tuesday, October 20 (1:00 – 4:00 PM ET)	
1:00 – 2:00 PM	Coastal Processes and Parameters for Effective NBS Design – <i>Dr. Matt Bilskie, UGA IRIS</i>
2:00 – 2:45 PM	Effects of Nature Based Solutions on Freshwater Biodiversity – <i>Dr. Charles Van Rees, UGA IRIS</i>
2:45 – 3:30 PM	Ecosystem Goods and Service Evaluation for NBS Projects – <i>Dr. Burton Suedel, USACE ERDC</i>
3:30 – 4:00 PM	Discussion (Q&A Session)
Thursday, October 22 (1:00 – 4:00 PM ET)	
1:00 – 2:00 PM	Wetland Restoration Planning & Ecological Principles – <i>Dr. Candice Piercy*, USACE ERDC</i>
2:00 – 2:45 PM	Nature Based Technologies for Coastal Resiliency – <i>Tyler Ortego, Natrrix</i>
2:45 – 3:30 PM	Designing Resilient and Sustainable Marine Infrastructure – <i>Maor Bezner, ECONcrete</i>
3:30 – 4:00 PM	Discussion (Q&A Session)

**Pending final approval*

Module 3 - Coastal NBS Design and Case Studies	
Tuesday, October 27 (1:00 – 4:00 PM ET)	
1:00 – 1:45 PM	Oyster Reefs and NBS Tools – <i>Dr. Brock Woodson, UGA IRIS</i>
1:45 – 2:30 PM	Design and Construction of Island NBS – <i>Elizabeth Godsey, USACE Mobile</i>
2:30 – 3:30 PM	Beaches & Dune Construction Case Studies – <i>Connor Tennant, Manson Construction</i>
3:30 – 4:00 PM	Discussion (Q&A Session)
Thursday, October 29 (1:00 – 4:00 PM ET)	
1:00 – 2:45 PM	Engineering-With-Nature (EWN) Proving Grounds: Key Aspects and Deployment Lessons Learned Across Varying Landscapes – <i>Panel Discussion* – Facilitated by: Dr. Jeffrey King, USACE ERDC – Panelists: Monica Chasten (USACE Philadelphia); Eddie Brauer (USACE St. Louis); Elizabeth Godsey (USACE Mobile); and Julie Beagle (USACE San Francisco)</i>
2:45 – 3:30 PM	Case Study Review: Hancock County Living Shoreline & Heron Marsh – <i>Renee Robertson, PE., Anchor QEA, Inc.</i>
3:30 – 4:00 PM	Discussion (Q&A Session)
Module 4 - Fluvial NBS Design and Case Studies	
Tuesday, November 3 (1:00 – 4:00 PM ET)	
1:00 – 2:00 PM	Fluvial Processes and Parameters for Effective NBS Design – <i>Dr. Brian Bledsoe, UGA IRIS</i>
2:00 – 2:45 PM	USACE Engineering Practice Guide for Floodplain Benching – <i>Dr. Joanna Curran*, USACE ERDC</i>
2:45 – 3:30 PM	Engineering Guide for Wood-Based Riverbank Stabilization – <i>Eddie Brauer*, USACE St. Louis</i>
3:30 – 4:00 PM	Discussion (Q&A Session)
Thursday, November 5 (1:00 – 4:00 PM ET)	
1:00 – 2:00 PM	Scaling Nature-Based Solutions for Fluvial Floods – <i>Dr. Brian Bledsoe, UGA IRIS</i>
2:00 – 2:45 PM	Benefit-Cost Analysis for NBS – <i>Dr. Matt Chambers, UGA IRIS</i>
2:45 – 3:30 PM	Case Studies of NBS Projects in Riverine Environments – <i>Andrew Timmis, JF Brenan Company</i>
3:30 – 4:00 PM	Discussion (Q&A Session)
Module 5 – NBS Across Varying Landscapes	
Tuesday, November 10 (1:00 – 4:00 PM ET)	
1:00 – 2:00 PM	Advancing NBS Science and Practice for Arid Landscapes – <i>Dr. Andrew Goodwin, USACE ERDC</i>
2:00 – 2:45 PM	Using NBS and Engineering for Managing Water Supply and Addressing Drought – The Pajaro River Case Study – <i>Dr. Mark Strudley, Pajaro Regional Flood Management Agency</i>
2:45 – 3:30 PM	Managing Water Quality using NBS Principles – Missouri River Case Study – <i>Scott Blackstock, U.S. Army Omaha District</i>
3:30 – 4:00 PM	Discussion (Q&A Session)
Thursday, November 12 (1:00 – 4:00 PM ET)	
1:00 – 2:00 PM	Leveraging Landscape Architecture for NBS – <i>Jon Calabria, UGA IRIS</i>
2:00 – 2:45 PM	Case Studies of NBS Projects in Cold Regions – <i>Sam Whittin, EA Engineering</i>
2:45 – 3:30 PM	Key Steps to the Successful Development of NBS Projects – <i>Dr. Todd Bridges & Dr. Ram Mohan, UGA IRIS</i>

**Pending final approval*

3:30 – 4:00 PM	Discussion (Q&A Session) & Closing
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