



The Virginia Geo-Institute Chapter of ASCE
Presents

2024 Ground Improvement Day 1 Short Course

June 24, 2024
Smithfield, Virginia

www.geovirginia.org



COURSE SUMMARY

The Virginia Geo-Institute Chapter of ASCE is committed to providing premier educational opportunities to the Civil Engineering communities that we serve. The Ground Improvement Short Course represents that ethos and is a full day of comprehensive coverage of Ground Improvement Design and Construction State of Practice.

This course is led by nationally and internationally recognized leaders in all aspects of ground improvement design and construction. The course will cover ground improvement fundamentals, materials, equipment, structural design, geotechnical design, testing, and new developments in the industry. This opportunity is not currently available anywhere else.

PRICING:

Full Time Students, Professors, and Retired Professionals	FREE
Everyone Else	\$400

Full time student, professor, and retired status needs to be confirmed in order to be eligible for gratis registration.



Session Co-Chair

Jeremy Ashlock, PhD
James M. Hoover Chair in Geotechnical Engineering
Associate Professor, Iowa State University
President, Handy Geotechnical Instruments, Inc.



Session Co-Chair

Roger A. Failmezger, PE,
ASCE, D.GE
President
In-Situ Testing, L.C.



Instructor

Vern Shaefer, PhD, PE
Professor Emeritus
Iowa State University



Instructor

Billy Camp, PE, BC.GE
Principal Engineer
Kiewit Engineering Group



Instructor

Chris Woods, PE, GE, D.GE,
CEng. MIEI, LEED AP BD+C
Vice President
Densification, Inc.
Adjunct Faculty, George Mason University



Session Co-Chair

J. Brian Anderson,
PhD, PE
Professor
Auburn University



Instructor

Brian Metcalfe, PE
VP, Engineering
Geopier



Instructor

Russel A. Green, PhD, PE
Professor
Virginia Tech



Instructor

John Jones, Jr., PE
President
TerraSystems, Inc.



2024 GROUND IMPROVEMENT DAY 1 SHORT COURSE PROGRAM

7:00-7:50	Continental Breakfast & Networking	
7:50-8:00	Welcome & Speaker Introduction	Jeremy Ashlock, PhD
8:00-9:00	Introduction to Ground Improvement – Fundamentals, Applications, and Goals	Vern Schaefer, PhD, PE
9:00-10:00	Ground Improvement for Structures	Brian Metcalfe, PE
10:00-10:15	Break	
10:15-11:15	Ground Improvement in Cohesionless Soils	Russell Green, PhD, PE
11:15-12:00PM	Ground Improvement in Cohesive Soils	Billy Camp, PE, BC.GE
12:00-1:00	Lunch & Networking	
1:00-1:45	Stabilization for Roadways & Embankments	Vern Schaefer, PhD, PE
1:45-2:30	Deep Dynamic Compaction Equipment & DDC Program Design	Chris Woods, PE, GE, D.GE, CEng. MIEI, LEED AP BD+C
2:30-2:45	Break	
2:45-3:30	Ground Improvement for Structures: Case Histories	Brian Metcalfe, PE
3:30-4:00	What Did Not Work With Ground Improvement	John Jones, Jr., PE
4:00-4:15	Industry Organizations and Resources	Vern Schaefer, PhD, PE
4:15-5:00	Q&A Discussion Panel	All Instructors

(Program Subject to Modification)

Visit: www.geovirginia.org for information updates!

Visit: <https://www.eventbrite.com/e/2024-ground-improvement-short-course-tickets-780192144707> to register!

EVENT LOCATION

Smithfield Center
220 N. Church Street, Smithfield, VA 23430
(757) 356-9939

Ample free parking on site

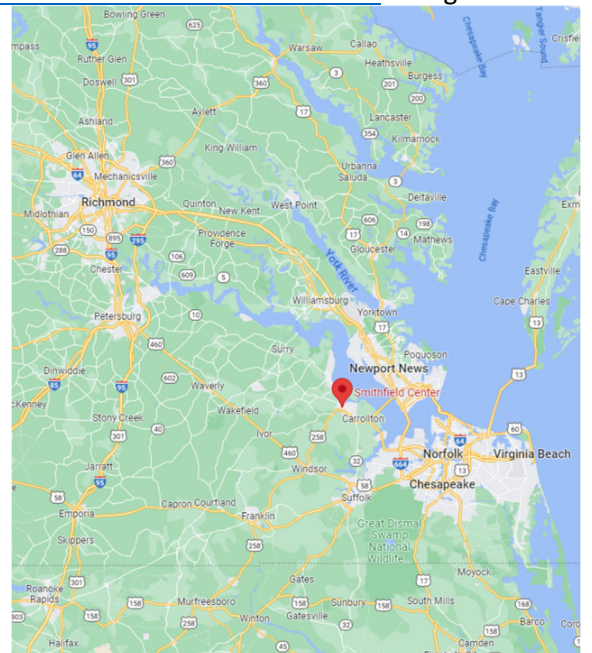
LODGING OPTIONS (Lodging is NOT included in registration)

Below are some local lodging options with contact information.

Smithfield Station – Smithfield, VA
(757) 357-7700 www.smithfieldstation.com

Smithfield Inn – Smithfield, VA
(757) 357-1752 www.smithfieldinn.net

Hampton Inn – Smithfield, VA
(757) 365-4760 www.hamptoninn.com





The Virginia Geo-Institute Chapter of ASCE
Presents

2024 Ground Improvement Day 2 Short Course

June 25, 2024
Smithfield, Virginia

www.geovirginia.org



Session Co-Chair
Jeremy Ashlock, PhD
James M. Hoover Chair in Geotechnical Engineering
Associate Professor, Iowa State University
President, Handy Geotechnical Instruments, Inc.



Session Co-Chair
Roger A. Failmezger, PE,
ASCE, D.GE
President
In-Situ Testing, L.C.



Session Co-Chair
J. Brian Anderson,
PhD, PE
Professor
Auburn University



Instructor
Brian Freilich, PhD, PE
Senior Engineer
Keller – North America



Instructor
Martin Taube, PE, PG
Vice President of
Business Development
Menard USA



Instructor
Brian DeSpain
President
UMA Geotechnical
Construction, Inc.



Instructor
Tom Richards, Jr., PE, PA,
BC.GE - Consultant
Nicholson Construction Co.



Instructor
Doug Nolan
Design Engineer
Nicholson Construction Co.



Instructor
Adam Paisley, PE
Associate
Schnabel Engineering



Instructor
PK Prah-Ennin, PE
Senior Engineer
UMA Geotechnical
Construction, Inc.



Instructor
Archie Fillshell, PhD,
ENV SP, M. ASCE
CEO, Aero Aggregates
Of North America



Instructor
Billy Camp, PE, BC.GE
Principal Engineer
Kiewit Eng. Group



Instructor
John Jones, Jr., PE
President
TerraSystems, Inc.

COURSE SUMMARY

The Virginia Geo-Institute Chapter of ASCE is committed to providing premier educational opportunities to the Civil Engineering communities that we serve. The Ground Improvement Short Course represents that ethos and is a full day of comprehensive coverage of Ground Improvement Design and Construction State of Practice.

This course is led by nationally and internationally recognized leaders in all aspects of ground improvement design and construction. The course will cover ground improvement fundamentals, materials, equipment, structural design, geotechnical design, testing, and new developments in the industry. This opportunity is not currently available anywhere else.

PRICING:

Full Time Students, Professors, and Retired Professionals	FREE
Everyone Else	\$400

Full time student, professor, and retired status needs to be confirmed in order to be eligible for gratis registration.



2024 GROUND IMPROVEMENT DAY 2 SHORT COURSE PROGRAM

7:00-7:50	Continental Breakfast & Networking	
7:50-8:00	Welcome & Speaker Introduction	Jeremy Ashlock, PhD
8:00-9:00	Deep Soil Mixing	Brian Freilich, PhD, PE
9:00-10:00	Grouting, Design Principles, Case Histories, Designer Perspective	Adam Paisley, PE
10:00-10:15	Break	
10:15-11:15	Drainage Enhancement for Ground Improvement – Wick Drains and Earthquake (EQ) Drains	Martin Taube, PE, PG
11:15-12:00PM	High Density Polyurethane Resin (HDPR) Injection for Ground Improvement	Papa Kwesi (PK) Prah-Ennin, PE
12:00-1:00	Outdoor Lunch & HDPR Field Demonstration	Brian DeSpain
1:00-1:45	Lightweight Fill	Archie Fillshell, PhD, ENV SP, M.ASCE
1:45-2:45	Grouting Case Histories – Contractor Perspective	Tom Richards, Jr., PE, PA, BC.GE and Doug Nolan
2:45-3:00	Break	
3:00-3:30	Economics of Ground Improvement	Billy Camp, PE, BC.GE
3:30-4:15	New Technologies	John Jones, Jr., PE
4:15-5:00	Q&A Discussion Panel	All Instructors

(Program Subject to Modification)

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Visit: <https://www.eventbrite.com/e/2024-ground-improvement-short-course-tickets-780192144707> to register!

EVENT LOCATION

Smithfield Center
220 N. Church Street, Smithfield, VA 23430
(757) 356-9939

Ample free parking on site

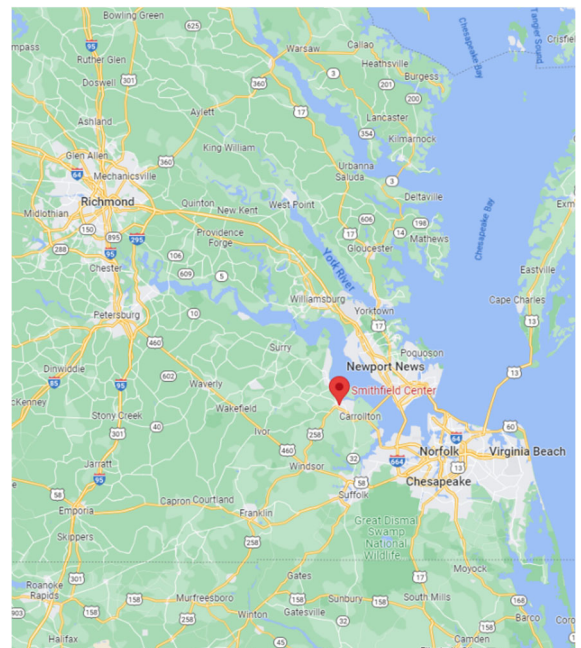
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Hampton Inn – Smithfield, VA
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The Virginia Geo-Institute Chapter of ASCE
Presents

2024 Support of Excavation (Braced Excavations and Shoring) Short Course

June 26, 2024
Smithfield, Virginia

www.geovirginia.org



Session Co-Chair/Instructor
Morgan A. Eddy, PE, MSc
Vice President
Steele Foundation, LLC



Session Co-Chair
Roger A. Failmezger, PE,
ASCE, D.GE
President
In-Situ Testing, L.C.



Session Co-Chair
J. Brian Anderson,
PhD, PE
Professor
Auburn University



Instructor
Richard J. Finno, PhD
Professor Emeritus
Northwestern University



Instructor
Dimitrios Konstantakos
President
Deep Excavation, LLC



Instructor
Jonathan K. Bennett, PE, D.GE
Design-Build Manager
Wagman Geotechnical Construction



Instructor
Nadir Ansari, PE, D.GE, M.ASCE
President
Isherwood Geostructural Engineers



Instructor
Tom Richards, Jr., PE, PA,
BC.GE - Consultant
Nicholson Construction
Company



Instructor
Harry W. Schnabel, PE
VP, Engineering
Schnabel Foundation
Company



Instructor
Giovanni Bonita, PhD, PE, PG, P.Eng.
Senior Vice President
GEI Consultants

COURSE SUMMARY

The Virginia Geo-Institute Chapter of ASCE is committed to providing premier educational opportunities to the Civil Engineering communities that we serve. The Ground Improvement Short Course represents that ethos and provides one full day of comprehensive coverage focused on the Support of Excavation Design and Construction State of Practice.

This course is led by nationally and internationally recognized leaders in all aspects of support of excavation and construction. The course will cover support of excavation, materials, equipment, structural design, geotechnical design, testing, and new developments in the industry. This opportunity is not currently available anywhere else.

PRICING:

Full Time Students, Professors, and Retired Professionals	FREE
Everyone Else	\$400

Full time student, professor, and retired status needs to be confirmed in order to be eligible for gratis registration.



2024 SUPPORT OF EXCAVATION (BRACED EXCAVATIONS AND SHORING) SHORT COURSE PROGRAM

7:00-8:00	Continental Breakfast & Networking	
8:00-8:15	Welcome & Speaker Introduction	Roger Failmezger, PE, F.ASCE
8:15-9:30	Introduction to Support of Excavation	Richard J. Finno, PhD
9:30-9:45	Break	
9:45-10:30	Design and Construction Challenges	Morgan A. Eddy, PE and Jonathan K. Bennett, PE, D.GE
10:30-11:15	Design Software	Dimitrios Konstantakos
11:15-12:00PM	Case Histories	Tom Richards, Jr., PE, BC.GE
12:00-1:00	Lunch & Networking	
1:00-1:45	Case Histories	Harry W. Schnabel, PE
1:45-2:00	Break	
2:00-2:45	Case Histories	Giovanni Bonita, PhD, PE, PG, P.Eng.
2:45-3:45	Novel Approach to Design/Build	Nadir Ansari, P.Eng., D.GE
3:45-5:00	Q&A Discussion Panel	All Instructors

(Program Subject to Modification)

Visit: www.geovirginia.org for information updates!

Visit: <https://www.eventbrite.com/e/2024-ground-improvement-short-course-tickets-780192144707> to register!

EVENT LOCATION

Smithfield Center
220 N. Church Street, Smithfield, VA 23430
(757) 356-9939

Ample free parking on site

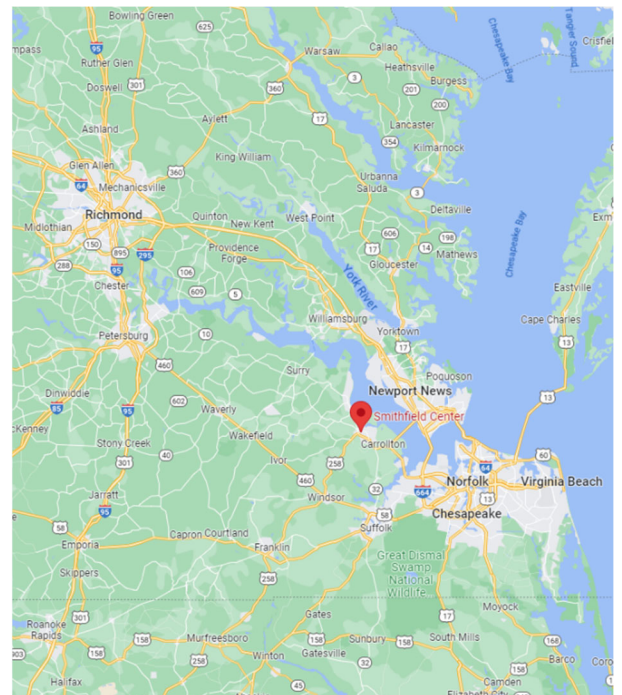
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Hampton Inn – Smithfield, VA
(757) 365-4760 www.hamptoninn.com





The Virginia Geo-Institute Chapter of ASCE
Presents

2024 MSE Walls Short Course

June 27, 2024
Smithfield, Virginia

www.geovirginia.org



COURSE SUMMARY

The Virginia Geo-Institute Chapter of ASCE is committed to providing premier educational opportunities to the Civil Engineering communities that we serve. The Ground Improvement Short Course represents that ethos and is a full day of comprehensive coverage of Ground Improvement Design and Construction State of Practice.

This course is led by nationally and internationally recognized leaders in all aspects of ground improvement design and construction. The course will cover ground improvement fundamentals, materials, equipment, structural design, geotechnical design, testing, and new developments in the industry. This opportunity is not currently available anywhere else.

PRICING:

Full Time Students, Professors, and Retired Professionals	FREE
Everyone Else	\$400

Full time student, professor, and retired status needs to be confirmed in order to be eligible for gratis registration.

Session Co-Chair



Jeremy Ashlock, PhD
James M. Hoover Chair in Geotechnical Engineering
Associate Professor, Iowa State University
President, Handy Geotechnical Instruments, Inc.

Session Co-Chair



Roger A. Failmezger, PE,
ASCE, D.GE
President
In-Situ Testing, L.C.



Session Co-Chair

J. Brian Anderson,
PhD, PE
Professor
Auburn University

Instructor



Jim G. Collin, PhD, PE, BC.GE, F.ASCE
President
The Collin Group

Instructor



Tom Taylor, PhD, PE, P.Eng., BC.GE
Professor
University of Texas at Arlington
Vice President, Director of Research
Big-R Bridge



2024 GROUND IMPROVEMENT – MSE WALLS COURSE PROGRAM

7:00-8:00	Continental Breakfast & Networking	
8:00-9:00	Introduction to MSE Walls – Fundamentals and Applications	Jim G. Collin, PhD, PE, BC.GE, F.ASCE
9:00-10:00	Soil Reinforcement Principles and System Design Properties	Tom Taylor, PhD, PE, P.Eng., BC.GE
10:00-10:15	Break	
10:15-11:00	Design of MSE Walls – Analysis Methods & Load & Load Combinations	Jim G. Collin, PhD, PE, BC.GE, F.ASCE
11:00-12:00PM	Design of MSE Walls – External Stability	Tom Taylor, PhD, PE, P.Eng., BC.GE
12:00-1:00	Lunch & Networking	
1:00-2:00	Design of MSE Walls – Internal Stability of Coherent Gravity Method & Simplified Method	Jim G. Collin, PhD, PE, BC.GE, F.ASCE
2:00-3:00	Design of MSE Walls – Internal Stability Stiffness Method & Limit Equilibrium Method	Tom Taylor, PhD, PE, P.Eng., BC.GE
3:00-3:15	Break	
3:15-4:15	Design of Complex Structures	Tom Taylor, PhD, PE, P.Eng., BC.GE
4:15-5:00	Q&A Discussion Panel	All Instructors

(Program Subject to Modification)

Visit: www.geovirginia.org for information updates!

Visit: <https://www.eventbrite.com/e/2024-ground-improvement-short-course-tickets-780192144707> to register!

EVENT LOCATION

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220 N. Church Street, Smithfield, VA 23430
(757) 356-9939

Ample free parking on site

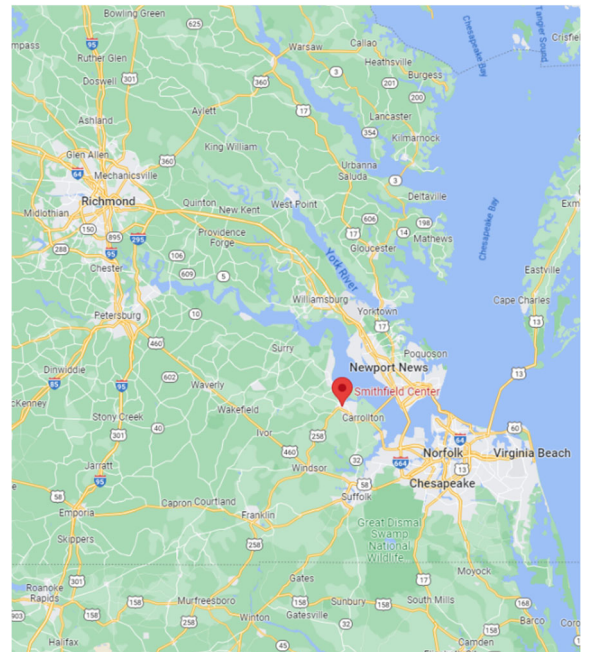
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Hampton Inn – Smithfield, VA
(757) 365-4760 www.hamptoninn.com





The Virginia Geo-Institute Chapter of ASCE
Presents

2024 Slope Stability Short Course

June 28, 2024
Smithfield, Virginia

www.geovirginia.org



COURSE SUMMARY

The Virginia Geo-Institute Chapter of ASCE is committed to providing premier educational opportunities to the Civil Engineering communities that we serve. The Ground Improvement Short Course represents that ethos and is a full day of comprehensive coverage of Ground Improvement Design and Construction State of Practice.

This course is led by nationally and internationally recognized leaders in all aspects of ground improvement design and construction. The course will cover ground improvement fundamentals, materials, equipment, structural design, geotechnical design, testing, and new developments in the industry. This opportunity is not currently available anywhere else.

PRICING:

Full Time Students, Professors, and Retired Professionals	FREE
Everyone Else	\$400

Full time student, professor, and retired status needs to be confirmed in order to be eligible for gratis registration.

Session Co-Chair



Jeremy Ashlock, PhD
James M. Hoover Chair in Geotechnical Engineering
Associate Professor, Iowa State University
President, Handy Geotechnical Instruments, Inc.

Session Co-Chair



Roger A. Failmezger, PE,
ASCE, D.GE
President
In-Situ Testing, L.C.

Session Co-Chair



J. Brian Anderson,
PhD, PE
Professor
Auburn University

Short Course Chair / Instructor



Timothy Stark, PhD, PE
Professor
University of Illinois at Urbana-Champaign

Instructor



Navid Jafari, PhD
Associate Professor
Louisiana State University



2024 GROUND IMPROVEMENT – SLOPE STABILITY COURSE PROGRAM

7:00-8:00	Continental Breakfast & Networking	
8:00-8:10	Greetings and Introductions – Active Audience Participation Encouraged and Welcomed	Tim Stark, PhD, PE
8:10-10:00	2D and 3D Slope Stability Methods	Tim Stark, PhD, PE
10:00-10:15	Break	
10:15-11:30	Drained and Undrained Shear Strength	Tim Stark, PhD, PE
11:30-12:00PM	Embankment Failure with Vertical Drains	Tim Stark, PhD, PE
12:00-1:00	Lunch & Networking	
1:00-1:45	Slope Stability Computer Demonstration	Navid Jafari, PhD
1:45-2:45	Offshore Slope Stability	Navid Jafari, PhD
2:45-3:00	Break	
3:00-3:30	Case History: Port Design Failure	Tim Stark, PhD, PE
3:30-4:15	Case History: Fill Placement Slope Failure, California	Tim Stark, PhD, PE
4:15-4:45	Case History: Reinforced Slope Failure at Yeager Airport	Tim Stark, PhD, PE
4:45-5:15	Q&A Discussion Panel	All Instructors

(Program Subject to Modification)

Visit: www.geovirginia.org for information updates!

Visit: <https://www.eventbrite.com/e/2024-ground-improvement-short-course-tickets-780192144707> to register!

EVENT LOCATION

Smithfield Center
220 N. Church Street, Smithfield, VA 23430
(757) 356-9939

Ample free parking on site

LODGING OPTIONS (Lodging is NOT included in registration)

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Smithfield Inn – Smithfield, VA
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Hampton Inn – Smithfield, VA
(757) 365-4760 www.hamptoninn.com

