

The Sustainability Imperative

Scanning the Horizon of Future Engineering Education Developments

Winter 2023 Engineering Education Summit

Pre-Session Work/Readings

Recommended Readings/Resources:

- [“The climate is changing. Engineering education needs to change as well,”](#) Michael James Martin, et.al., Wiley Online Library, 28 September 2022.
- The Engineering for One Planet Framework: Essential Sustainability-focused Learning Outcomes for Engineering Education (2022)
https://engineeringforoneplanet.org/wp-content/uploads/2022_EOP_Framework_110922.pdf
- [“Educating the Structural Engineer of 2040 and Beyond”](#) (pages 1-21). Structural Engineering Institute of ASCE, Committee on the Reform of Structural Engineering Education, April 14, 2022.
- Scan: IUSE/Professional Formation of Engineers: Revolutionizing Engineering Departments (National Science Foundation RED Program)
<https://beta.nsf.gov/funding/opportunities/iuseprofessional-formation-engineers>

Optional Readings:

- [“Global responsibility of engineering, the extent to which global responsibility is embedded into engineering practice, an exploratory study,”](#) Engineers Without Borders UK, November 2022.
- [“The Culture of Engineering Overlooks the People It’s Supposed to Serve”](#), Grace Wickerson, *Scientific American*, February 24, 2022.
- David E. Goldberg and Mark Somerville, *A Whole New Engineer, The Coming Revolution in Engineering Education*, Douglas, Michigan, ThreeJoy Associates, Inc., 2014.