1. **Reversible hydration as a design tool for sustainable design**  
   Advisor: Eric Beckman, chemical & petroleum engineering

2. **Protein-based nanomanufacturing: Using silk and hydrophobins for sustainable lithography**  
   Advisor: Mostafa Bedewy, industrial engineering

3. **Exploring the end-of-life of buildings using environmental life cycle assessment**  
   Advisor: Melissa Bilec, civil & environmental engineering

4. **Analyzing Water/Energy technology tradeoffs to create a sustainable development framework for a rainforest village outside Panama City, Panama**  
   Advisors: Dan Budny, civil & environmental engineering  
               Dave Sanchez, civil & environmental engineering

5. **Microstructure and properties of sintered magnetocaloric materials for efficient magnetic refrigeration**  
   Advisor: Markus Chmielus, mechanical engineering & materials science

6. **Magnetogaloric effect of binder jet printed Ni-Mn-Ga magnetic shape memory alloy**  
   Advisor: Markus Chmielus, mechanical engineering & materials science

7. **Energy-efficient processors, sensors, and systems for space-based sensing and computing**  
   Advisor: Alan George, electrical & computer engineering

8. **Conducting holistic analyses of computing and electronics to understand their entire life-cycle impacts to sustainability and the environment**  
   Advisor: Alex Jones, electrical & computer engineering

9. **Machine learning blueprints for green chelants**  
   Advisor: John Keith, chemical & petroleum engineering

10. **Designing efficient electrocatalysts devices atom by atom**  
    Advisor: John Keith, chemical & petroleum engineering

11. **Food-Energy-Water Nexus**  
    Advisor: Vikas Khanna, civil & environmental engineering

12. **Insect Pollination: Contributions to the U.S. Economy**  
    Advisor: Vikas Khanna, civil & environmental engineering

13. **Self-cleaning solar cells**  
    Advisor: Paul Leu, industrial engineering

14. **Black silicon solar cells**  
    Advisor: Paul Leu, industrial engineering

15. **Nanofabricated interfaces for electrochemical catalysis**  
    Advisor: James McKone, chemical & petroleum engineering

16. **Making green infrastructure work: building systems-level models for networks of green and grey infrastructure**  
    Advisor: Carla Ng, civil & environmental engineering

17. **Capturing tidal energy using smart materials**  
    Advisor: Katherine Ong, mechanical engineering
18. Smarter Riversheds – Real-time environmental sensors networks  
   Advisor: David Sanchez, civil & environmental engineering

19. Using Biofilm-Electrodes as environmental sensors  
   Advisor: David Sanchez, civil & environmental engineering

20. Not Your Grandpa’s Fossil Fuels: Environmentally responsible use of natural gas  
   Advisor: Goetz Veser, chemical & petroleum engineering

   Advisor: Goetz Veser, chemical & petroleum engineering

22. Making more with less: “Greening” the process industry via process intensification  
   Advisor: Goetz Veser, chemical & petroleum engineering

23. Green electronics – Low-Power memory device on transparent nanopaper substrate  
   Advisor: Feng Xiong, electrical and computer engineering

24. Thermoelectric microdevice for energy harvesting  
   Advisor: Minhee Yun, electrical & computer engineering

25. 3D Printing of Graded Alloys for Energy Efficiency in Aerospace Materials Manufacturing  
   Advisor: Wei Xiong, mechanical engineering & material science