Laser Radar Imaging (LADAR)
Course Outline

- Introduction: (4 hours)
- Week 1: (May 15) Introduction –
  - Design and major elements of laser radar system
  - Historical development
  - Applications
- Week 2: (May 29) The Range Equation and Scaling Laws –
  - Performance analysis
  - Design methods and trade space
- Study Overviews (4 hours)
Course Outline

- 3D Mapping Systems: (4 hours)
  - Week 5: (June 19) The World in 3D:
    - Digital Elevation Maps
    - Coordinates & Datum
    - Precision and Accuracy
  - Week 6: (June 26) Comparative Mapping – Photogrammetry, SAR, Lidar
  - Week 7: (July 3) Review and Live Demo
  - Week 8: (July 10) Adv.
    - Source and safety issues in class applications
  - Week 9: (July 17) Adv.
    - TargetsAtmospherics –
  - Week 10: (July 24) Adv.
  - Receivers
  - Week 11: (July 31) Adv
  - Systems Engineering
Course Outline

- Week 12: (August 7)
- Requirements and Trade Studies
- Week 13: (August 14)
- Intro to trade space
- Week 14: (August 21)
- Trade Space Studies
- Week 15: (August 28)
- Putting it all together – good and bad system designs
- Week 16: