STRENGTHS

- Students
  - High quality
  - Great work ethic and experiences
  - Understand theory but more importantly application
  - Graduates are leaders in MS industries
- World class research and researchers
  - Reputation
  - Strong research collaborations internally and externally
  - Full scale flight lab capability
  - Long term relationships with industry/agency
- Strong alumni and corporate support

WEAKNESSES

- Faculty Issues
  - Faculty have low salaries and a high teaching load
  - Faculty retention
  - Faculty need a connection to Mississippi to stay
  - Hiring / onboarding process cumbersome, especially for international faculty
  - Spousal hires are difficult
- Research Issues
  - Research areas are too broad (likely to meet the land grant mission definition but also to maintain leadership in engineering—competent at a lot, super strong in very little
  - Lagging in research directions rather than leading (chasing funding)
  - No redundancy in faculty expertise in some units (due to high student / faculty ratios)
  - Current structure promotes internal competition within and external to the college
  - Significant portfolio of research is housed within centers with little infrastructure to support faculty/departmental contributions
  - Research park design and location (travel is problematic given course and work schedules of faculty, staff and students)
  - Student/faculty access to research infrastructure (processes for approval also problematic)

OPPORTUNITIES

- Education
  - Increase experiential learning, and for engineering this needs to be with industry
  - Grow the innovation focus in the classroom and laboratory
  - Increase focused partnerships (industry, feeder colleges, other institutions, international, etc.)
- Enrollment
  - Grow dual enrollment
  - Grow Ti5
  - Direct admissions into graduate programs
  - Grow non-thesis online MS and PhD programs / enrollment
- Faculty / Staff Development
  - Strategic workload on faculty and staff (more time /space to think / do strategically)
  - Rational staffing (develop depth instead of breadth)
  - More targeted fundraising that supports critical needs (faculty considerations)

THREATS

- External
  - Students desire to achieve technical degrees in less time and with less training
  - Degree creep—are non-engineering degrees fulfilling jobs engineers typically held
  - Decreased perception of the value of higher education
  - Student job placement
  - Increased regulatory compliance requirements (DFARS, IRB, etc.), bureaucratic hurdles
  - Accredited vs non-accredited programs
  - Disconnect between recruitment and placement
- Internal
  - Separation of authority and responsibility
  - Lack of return on investment (faculty hire, research infrastructure, revenue returns to departments/units, etc.)
  - Student access to resources (e.g., research infrastructure)
  - Constant time pressure for everyone
  - Disconnect between recruitment and placement