

**You must take 12 Technical Elective credits from the following three groups/categories:**

**A.) Aerospace – 3 credits**

- a. AerE 412 Propulsion
- b. AerE 417 Experimental Mechanics
- c. AerE 422 Structures
- d. AerE 423 Composites
- e. AerE 426 Design/Structures
- f. AerE 432 Controls
- g. AerE 433X Spacecraft Dynamics/Control
- h. AerE 442 V/STOL
- i. AerE 446 Comp. Fluid Dynamics
- j. AerE 448 Fluid Dyn. Of Turbo Mach.
- k. AerE 451 Astrodynamics
- l. AerE 463X Intro to Multi-disciplinary Design Optimization
- m. AerE 464 Spacecraft Systems
- n. AerE 468X Large Scale Complex Eng. Syst.
- o. AerE 481 Wind Energy

**B.) Technical/Engineering – 3 credits**

- a. any course from Group A listed above
- b. Math 308
- c. Math 317
- d. Math 365
- e. Math 385
- f. Math 414
- g. Math 465
- h. Math 471
- i. Math 481
- j. Stat 305
- k. Stat 341
- l. Physics 306
- m. Physics 321
- n. Physics 361
- o. Physics 364
- p. Astro 342
- q. Astro 346
- r. AerE 381
- s. AerE 490
- t. IE 305
- u. any 300-level or above course in the College of Engineering (must be approved by Department)

**C.) Career – 6 credits**

- a. any course from Group A or Group B listed above
- b. any course 300-level or above from the Iowa State University catalog that is relevant to a student's statement of career goals and objectives. The statement of career goals relates all four technical electives to a common career objective. Statements must be submitted to the AerE Curriculum Committee through your Academic Advisor during the first week of registration in the Fall or Spring semester before the semester in which the first course will be taken.