**Aerospace and Mechanical Engineering Deficiency Course Information for MS Applicants**

| **Discipline** | **Deficiency Courses** |
|---|---|
| Materials/Structures | AME 204 *Strength of Materials* |
| Dynamics | AME 301 *Dynamics* |
| Fluids | AME 309 *Dynamics of Fluids* |
| Thermal Dynamics | AME 310 *Engineering Thermodynamics I* |
| Heat Transfer | AME 331 *Heat Transfer* |
| Design | AME 305 *Mechanical Design* or<br>AME 408 *Computer-Aided Design of Mechanical Systems* |
| Control | AME 451 *Linear Control Systems I* |

| **Mathematics** | **Physics** |
|---|---|
| MATH 125: Calculus I | PHYS 151L: Mechanics and Thermodynamics |
| MATH 126: Calculus II | PHYS 152L: Electricity and Magnetism |
| MATH 226: Calculus III | PHYS 153L: Optics and Modern Physics |
| MATH 245: Mathematics of Physics and Engineering I | |

Applicants with non- Aerospace Engineering or Mechanical Engineering undergraduate degrees such as ***Astronautical Engineering, Biomedical Engineering, Civil Engineering or Physics*** will have better chances of being considered for admission as compared to students from other unrelated majors.

Applicants who majored in ***Computer Science, Electrical Engineering, Industrial Systems Engineering, Accounting, Business, Chemistry or other non-engineering or liberal arts majors*** will likely have the least success in being considered for admission as they may be missing too many courses that are equivalent* to the deficiency courses listed above. Such applicants may opt to complete equivalent deficiency courses at another accredited institution before applying to help improve their consideration for admission.

*Course equivalents should be assessed on course description, content, and syllabus, not course titles. Course descriptions can be found at:

http://catalogue.usc.edu/