Distance Education
Materials Engineering

Materials Engineering offers graduate programs of instruction and research leading to the degree of Master of Materials Engineering (M.Mtl.E.). Students completing the degree program are expected to have knowledge in the following areas: mechanical properties; materials structure; materials thermodynamics; kinetics; and electrical, optical and magnetic properties of materials.

The M.Mtl.E. is intended for those who expect to enter the engineering profession at an advanced level or are practicing engineers wishing to gain additional fundamental knowledge in the field of materials. Emphasis is on professional development. Applicants must have a bachelor’s degree in engineering or science from an institution of recognized standing.

Minimum Requirements for M.Mtl.E. Degree

- All applicants must submit GRE scores for the General Test
- There is no residency, foreign language or minor requirements for this degree
- Completion of 33 semester credit hours of graduate level (6000 and 7000) course work which must include:
  - MATL 6100, 6200/6201, 6300, 6400, 7050
  - MATL 7980
  - Can include a maximum of 6 credit hours of transfer credit
- The specific plan of study must be approved by the student’s advisory committee (3 person) before the end of the second semester
- Must pass an on-campus oral examination
  - Offered twice per year – Fall (~August-September) and Spring (~February-March)
  - Based on 5 core subjects: thermodynamics, crystallography, phase transformations, physics of solids, and mechanical properties
  - Taken at first opportunity after completion of core courses (at AU or other institution)
- Must pass an on-campus written examination
  - Taken after passing the oral exam
  - Content: half on core coursework and 50 percent on integration of coursework
- Must complete a written and oral report covering the materials engineering project

M.S. and Ph.D. Programs

With departmental approval, it is also possible to complete thesis-requiring master’s of science and doctoral degree in material engineering via a combination of distance learning and on-campus activities.

Special Requirements: Students with Degrees in Fields Other than Materials Engineering

Those students lacking the necessary background may be required to take additional classwork before being considered for acceptance for the program. These courses do not have to be taken at Auburn.