NON-DESTRUCTIVE EVALUATION MINOR

Minor supervised by an interdisciplinary faculty committee, administered by Aerospace Engineering. The NDE minor is a unique opportunity for engineering students to acquire a multidisciplinary engineering qualification in the rapidly evolving field of Nondestructive Evaluation.

Undergraduate Study

Students interested in completing the NDE engineering minor must be enrolled in the College of Engineering at Iowa State University. They must submit the "Request for Minor" form and complete the minimum prescribed 16 credit-hours of course work defined below. Acceptance is based on approval by the administering department, Aerospace Engineering.

A combined average grade of C or higher is required in courses applied to the minor. The minor must include at least 9 credits that are not used to meet any other department, college, or university requirement.

The course requirements for the undergraduate minor in NDE are:

- MAT E/E M 362 Principles of Nondestructive Testing 3
- MAT E/E M 362L Nondestructive Testing Laboratory 1
- At least one of the following NDE specific courses 3-4
  - C E 449 Structural Health Monitoring
  - M S E/E M 550 Nondestructive Evaluation
  - MAT E 488 Eddy Current Nondestructive Evaluation
  - E M 480 Ultrasonic Nondestructive Evaluation
  - AER E 429X Penetrating Radiation Methods in Nondestructive Evaluation

Independent Study courses on NDE projects from other engineering disciplines will need to be approved by the NDE Minor Coordinator

- AER E 490J Aerospace Engineering Independent Study: Nondestructive Evaluation (Research Topic related to NDE for any 490)
  or E E 490 Independent Study
  or M E 490 Independent Study
  or MAT E 490 Independent Study

Up to three of the following or additional NDE specific courses from the list above 9-12

- AER E 321 Flight Structures Analysis
- AER E 421 Advanced Flight Structures
- AER E 423 Composite Flight Structures
- E E 418 High Speed System Engineering Measurement and Testing

Total Credits 16-20