**FEA professional** is a fully online training program that teaches advanced skills in finite element analysis for structural and thermal applications. The program is designed to train recent graduates or mid-career professionals who are interested in career opportunities in design, product development or applied research. Participants will gain the modeling and simulation skills and the experience to drive innovation in their chosen field. The fundamentals learned here may be applied across a broad range of industries.

**DETAILS AND TIMELINE**

- Earn the certificate in nine months (late August to early May)
- 12 credit hours / 3 core + 1 elective course
- 100 percent online classes allow students to complete coursework on your schedule from any location with WiFi access
- Each class lasts eight weeks and requires approximately 15 hours per week
- Connect and complete your class assignments with any laptop, tablet or handheld device
**PROGRAM OUTCOMES**

Upon completion of the program, graduates will have the ability to:

- Pursue software-specific endorsements/certifications for products such as Abaqus, SolidWorks Simulation and ANSYS
- Drive innovation through the effective application of simulation tools for ideation and design verification
- Leverage simulation to reduce physical testing in new product development and reduce time to market
- Exploit parametric simulation, DOE and optimization to reveal more and better R&D solutions
- Identify CTQs in your development or applied research program and quantify impact on all outcome metrics
- Execute, review and manage simulation strategies for your NPD or applied research pipeline; spec software tools and training for your team

**APPLICATION DETAILS**

- The minimum requirement for admission is a baccalaureate degree in engineering, computer science, mathematics or a physical science.
- Graduate Record Examination (GRE) is not required.
- For international applicants or applicants whose native language is not English, English proficiency is required. Please visit the English Proficiency section of the International Graduate School Admissions site mines.edu/graduate-admissions/international-applicants to learn more about accepted tests and minimum scores.

**ACCEPTING APPLICATIONS**

**TO LEARN MORE, VISIT:**
gradprograms.mines.edu/fea or contact apetrell@mines.edu