

**Entrepreneurial Mindset at the Ira A. Fulton Schools of Engineering (EM@FSE):  
ABET Skillset + EM Mindset = ABET<sup>+EM</sup>**

*The EM@FSE initiative comprises 17 entrepreneurial mindset indicators that, when infused with the ABET 1-7 Student Outcomes, produces the resulting 1-7 ABET<sup>+EM</sup> student outcomes listed below.*

**ABET<sup>+EM</sup> 1:**

The FSE Engineer critically observes surroundings to identify and formulate complex engineering problems as opportunities and applies engineering principles, science, and mathematics to solve complex engineering problems.

**ABET<sup>+EM</sup> 2:**

The FSE Engineer applies human-centered design as a part of the engineering design process to discover users' needs, value propositions and market opportunities, to meet specified needs with consideration of public health, safety, and welfare, and/or global, cultural, social, environmental, and economic factors. Explores multiple solution paths, suspending judgement on new ideas.

**ABET<sup>+EM</sup> 3:**

The FSE Engineer can communicate effectively with diverse audiences, articulating how a discovery adds value from multiple perspectives (e.g., technological, societal, environmental, etc.).

**ABET<sup>+EM</sup> 4:**

The FSE Engineer can recognize an engineer's ethical and professional responsibilities, understanding that potential solutions have the potential to lead to both gains and losses. Understanding how elements of an ecosystem are connected, can make informed judgements about expected and unanticipated impacts of engineering solutions in global, economic, environmental, and societal contexts.

**ABET<sup>+EM</sup> 5:**

The FSE Engineer can function effectively on teams whose members have diverse and complimentary skillsets, backgrounds, and/or expertise, creating an inclusive environment characterized by shared leadership to successfully establish goals, plan tasks, and meet objectives.

**ABET<sup>+EM</sup> 6:**

The FSE Engineer can develop and conduct appropriate experimentation and analyze and interpret data to support and refute ideas. Can collect feedback and data from customers and/or customer segments and use engineering judgment to draw conclusions to modify an innovation accordingly.

**ABET<sup>+EM</sup> 7:**

The FSE Engineer can seek and apply new knowledge using appropriate learning strategies, synthesizing information from a range of sources and/or modalities to discern trends about the changing world and adopting a future-focused perspective to assess the sustainability and/or scalability of potential solutions.