

Einstein's special relativity equation is: $E = mc^2$ This equation shows the relationship between energy (E) and mass (m). It states that the energy (E) of a system, such as an atom, is equal to the product of its mass (m) multiplied by the speed of light (c) squared. This equation tells us that matter is a form of energy, and it demonstrates the relationship between the two. It is widely used in particle physics, quantum mechanics and astrophysics. It also helps explain phenomena such as time dilation and gravitational waves.