The universe consists of expanding space containing a distribution of matter and energy. In this paper, we discuss dark matter, which is the unseen material in space. This dark matter report examines the reasons why scientists postulate the existence of dark matter. The paper also discusses the properties of dark matter. This paper also discusses the possible candidates of dark matter in the universe. This reports also includes an analysis performed using the findings of the current dark matter detectors to determine the most likely candidates for dark matter. In this section, the paper focuses on determining whether the current detection results rule out any of the suggested dark matter candidates. Finally, the paper outlines the new detector capabilities that are expected to be incorporated into the next generation studies if the current dark matter detectors appear unsuccessful in their ability to detect dark matter particles.