This work is on decision tree-based classification for the disbursement of scholarship. Tree-based data mining classification technique is used in other to determine the generic rule to be used to disburse the scholarship. The system based on the defined rules from the tree is able to determine the class (status) to which an applicant shall belong whether Granted or Not Granted. The applicants that fall to the class of granted denote a successful acquirement of scholarship while those in not granted class are unsuccessful in the scheme. An algorithm that can be used to classify the applicants based on the rules from tree-based classification was also developed. The tree-based classification is adopted because of its efficiency, effectiveness, and easy to comprehend features. The system was tested with the data of National Information Technology Development Agency (NITDA) Abuja, a Parastatal of Federal Ministry of Communication Technology that is mandated to develop and regulate information technology in Nigeria. The system was found working according to the specification. It is therefore recommended for all scholarship disbursement organizations