# Reinforcing Materials

When combines with a matrix, the reinforcing material fibers are what give the major strength to the composite component There are several types of reinforcing fibers the most often used are outlined below These fiber material can be used in combination with another (e g Kevlar/ Graphite), woven in specific pattern, in combination with other materials (e g foams or core materials) or simply in combination with various matrix materials.

# Matrix Materials:

The matrix is the bonding material that completely surrounds the fiber to give strength and transfer the stress to the fiber. The newer matrix material has good stress distributing, heat resistance, chemical resistance and durability properties Most of these newer matrix materials are epoxy resins. Resin matrix are two-part systems consisting of a resin and a hardener or catalyst, which acts as curing agent. Resins are a type of plastic and they are broken down into two categories. Thermoplastics & Thermoset.