

To convert from geographic coordinates (Latitude, Longitude) to UTM WGS84 (X, Y)

1. If you have a file with **(Latitude, Longitude)** in degree, minutes, second the first step is to convert them to Decimal Degree (DD). You can use Excel or calculate field in ArcGIS.
2. Use the Add Data button to add the table to ArcGIS. Add XY Data tool to create an Event Theme from it (i.e. X=Lon field, Y=Lat field).
3. First: You MUST define the projection - i.e. Geographic Coordinate System. ArcToolBox > Data Management > Projection and Transformation > Define Projection > **Geographic** > Nahrwan 1967 (for Al Ain)
4. Second: ArcToolBox > Data Management > Projection and Transformation > Feature > **Project** > output coordinate system > **Projected** Coordinate System > UTM > WGS84 > Northern Hemisphere > UTM WGS84 Zone 40 (for Al Ain) > Geographic Transformation > Nahrwan 1967_to_WGS_1984_1

Other way for conversion

1. Right click on the map window and go to properties. Under the "coordinate system" tab, change the coordinate system to whatever you want the output to be in (e.g. UTM, Zone 10N, WGS84).
2. Right click on the Event theme in the table of contents, and select "Data" then, "Export Data". A form will pop up which gives you the option of exporting the data in a) the same coordinate system as the data or b) the same coordinate system of the **data frame**. You obviously need to pick B.
3. So it creates a shapefile with your coordinates in the new coordinate system. If you want those coordinates in the attribute table, there are various tools that will do that. E.g. "Add XY To Table" in this free toolset: