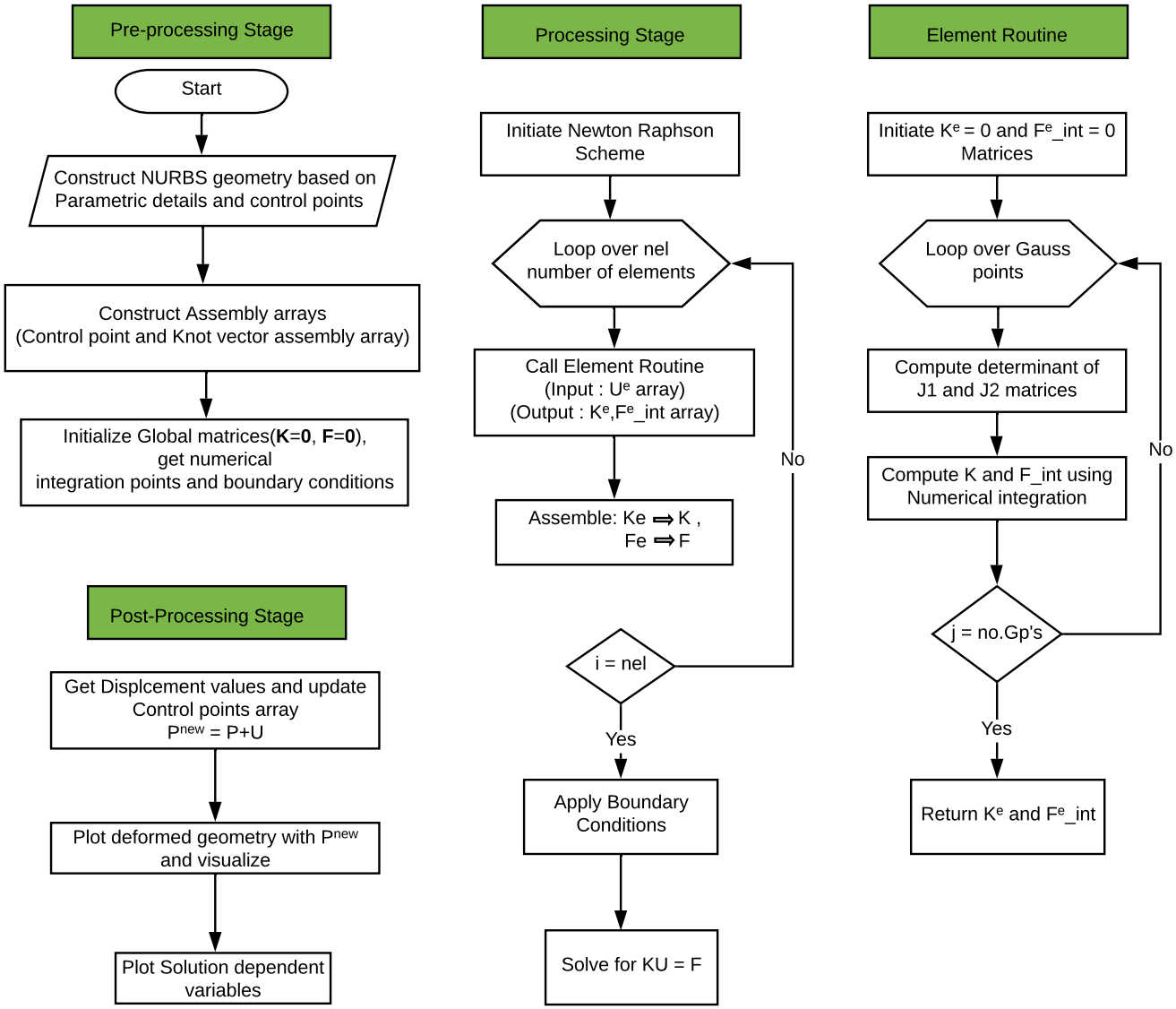
Pre-processing Stage
Start
Construct NURBS geometry based on Parametric details and control points
Construct Assembly arrays (Control point and Knot vector assembly array)
Initialize Global matrices(K=0, F=0), get numerical integration points and boundary conditions
Post-Processing Stage
Get Displcement values and update Control points array
Pnew = P+U
Plot deformed geometry with Pnew and visualize
Plot Solution dependent variables
Processing Stage
Initiate Newton Raphson Scheme
Loop over nel number of elements
Call Element Routine
(Input : Ue array)
(Output : Ke,Fe_int array)
Assemble: Ke ⟹ K ,
Fe ⟹ F
i = nel
No
Yes
Apply Boundary Conditions
Solve for KU = F
Element Routine
Initiate Ke = 0 and Fe_int = 0 Matrices
Loop over Gauss points
Compute determinant of J1 and J2 matrices
Compute K and F_int using Numerical integration
j = no.Gp's
No
Yes
Return Ke and Fe_int