Simulator

Input Deck

Geometry

Initial Conditions

Boundary Conditions

Selected sub-models

Other Controllable Inputs

TH System Code

Conservation Equations
$b(\mathbf{u}, \mathbf{x}_c, \{\mathcal{M}_i(\mathbf{x}_c, \mathbf{x}_m, \mathbf{u})\}) = 0$

Closure Laws, sub-models, etc.
$\{\mathcal{M}_i(\mathbf{x}_c, \mathbf{x}_m, \mathbf{u}); i > 0\}$

$\mathbf{u}(\mathbf{r}, t)$