Equation -

$$ J \frac{d^2 \theta}{dt^2} = T - b \frac{d{\theta}}{dt} \Longrightarrow
\frac{d^2 \theta}{dt^2} = \frac{1}{J}(K_{t}i - b \frac{d{\theta}}{dt})  $$

$$ L \frac{di}{dt} = -Ri + V-e \Longrightarrow \frac{di}{dt} =
\frac{1}{L}(-Ri + V-K_{e} \frac{d{\theta}}{dt})  $$

Referred- https://ctms.engin.umich.edu/CTMS/index.php?example=MotorSpeed&section=SimulinkModeling