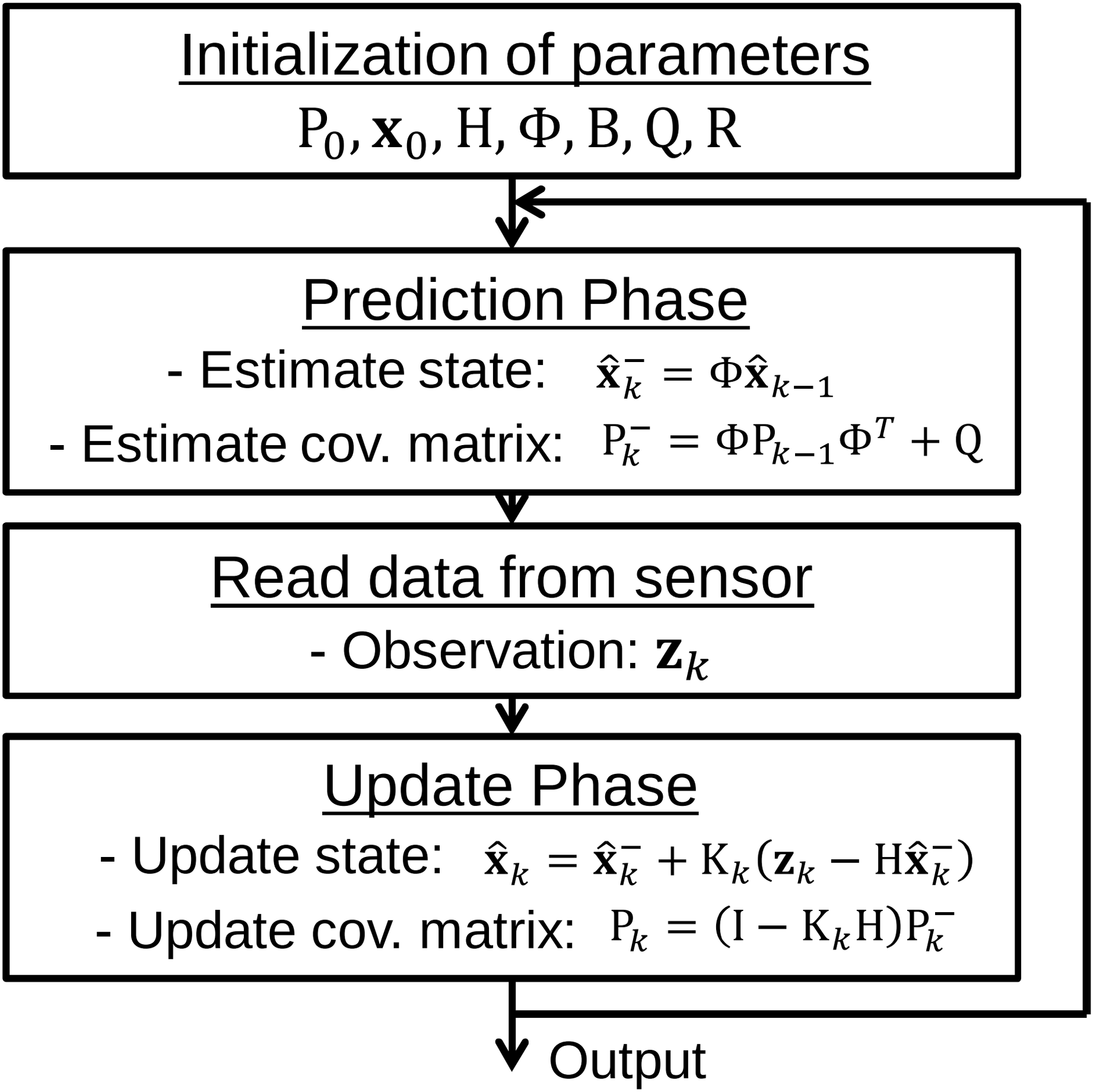
Initialization of parameters
$P_0, \mathbf{x}_0, H, \Phi, B, Q, R$
Prediction Phase
- Estimate state: $\hat{\mathbf{x}}_k^- = \Phi\hat{\mathbf{x}}_{k-1}$
- Estimate cov. matrix: $P_k^- = \Phi P_{k-1}\Phi^T + Q$
Read data from sensor
- Observation: $\mathbf{z}_k$
Update Phase
- Update state: $\hat{\mathbf{x}}_k = \hat{\mathbf{x}}_k^- + K_k(\mathbf{z}_k - H\hat{\mathbf{x}}_k^-)$
- Update cov. matrix: $P_k = (I - K_k H)P_k^-$
Output