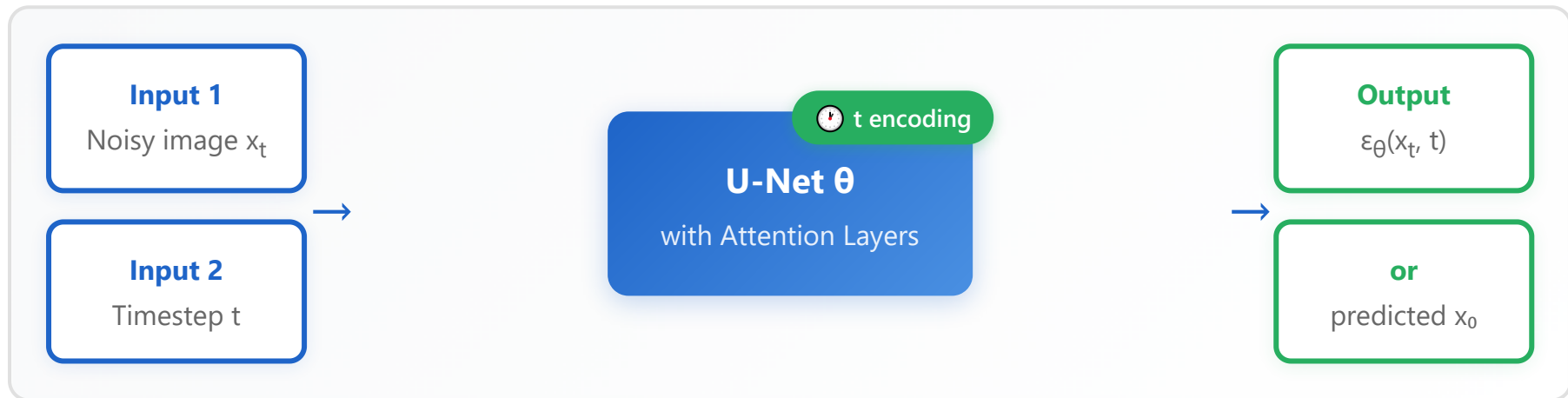


# Neural Network Parameterization

Part 3/7: Reverse Process



## Mean Prediction

$$\mu_{\theta}(x_t, t) = 1/\sqrt{\alpha_t} \cdot (x_t - (1-\alpha_t)/\sqrt{(1-\bar{\alpha}_t)} \cdot \epsilon_{\theta}(x_t, t))$$



## Variance

$$\sigma_t^2 \text{ (Fixed or Learned)}$$



## Reverse Transition Distribution

$$p_{\theta}(x_{t-1}|x_t) = N(x_{t-1}; \mu_{\theta}(x_t, t), \sigma_t^2 I)$$