Given the polynomial $P(x) = x^4 + x + 1$ and the message represented by the polynomial $M(x) = x^{10} + x^7 + x^4 + x^3 + x + 1$, we perform the CRC encoding by multiplying $M(x)$ by x^4 and dividing by $P(x)$. The remainder from this division is the CRC.

The division process is as follows:

$$
\begin{array}{ll}
 & \underline{x^{10} + x^6 + x^4 + x^2} \\
P(x) = x^4 + x + 1 \qquad & x^{14} + x^{11} + x^8 + x^7 + x^5 + x^4 = x^4 \cdot M(x) \\
 & \underline{x^{14} + x^{11} + x^{10}} \\
 & \qquad\qquad\quad \underline{x^{10} + x^8 + x^7} \\
 & \qquad\qquad\qquad\quad \underline{x^8 + x^6 + x^5 + x^4} \\
 & \qquad\qquad\qquad\qquad\quad \underline{x^6} \\
 & \qquad\qquad\qquad\qquad\qquad\quad x^3 + x^2 = R(x)
\end{array}
$$

The remainder $R(x) = x^3 + x^2$ corresponds to the binary sequence 1100 when translated from polynomial form.