Example Proof 1

$$\dfrac{\dfrac{\dfrac{B}{A \wedge B} \text{ And I}}{B \Rightarrow (A \wedge B)} \text{ Imp I}}{A \Rightarrow (B \Rightarrow (A \wedge B))} \text{ Imp I}$$

Example Proof 2

$\Gamma_3 = \{A \Rightarrow B,\ B \Rightarrow C,\ A\}$
$\Gamma_4 = \{A \Rightarrow B,\ B \Rightarrow C,\ A,\ B\}$
$\Gamma_5 = \{A \Rightarrow B,\ B \Rightarrow C,\ A,\ B,\ C\}$

$$\dfrac{\dfrac{\dfrac{\dfrac{\dfrac{\text{Hyp}}{\Gamma_3 \vdash A \Rightarrow B} \quad \dfrac{\text{Hyp}}{\Gamma_3 \vdash A} \quad \dfrac{\dfrac{\text{Hyp}}{\Gamma_4 \vdash B \Rightarrow C} \quad \dfrac{\text{Hyp}}{\Gamma_4 \vdash B} \quad \dfrac{\text{Hyp}}{\Gamma_5 \vdash C}}{\Gamma_4 \vdash C} \text{Imp E}}{\{A \Rightarrow B,\ B \Rightarrow C,\ A\} \vdash C} \text{Imp E}}{\{A \Rightarrow B,\ B \Rightarrow C\} \vdash A \Rightarrow C} \text{Imp I}}{\{A \Rightarrow B\} \vdash (B \Rightarrow C) \Rightarrow (A \Rightarrow C)} \text{Imp I}}{\{\,\} \vdash (A \Rightarrow B) \Rightarrow ((B \Rightarrow C) \Rightarrow (A \Rightarrow C))} \text{Imp I}$$