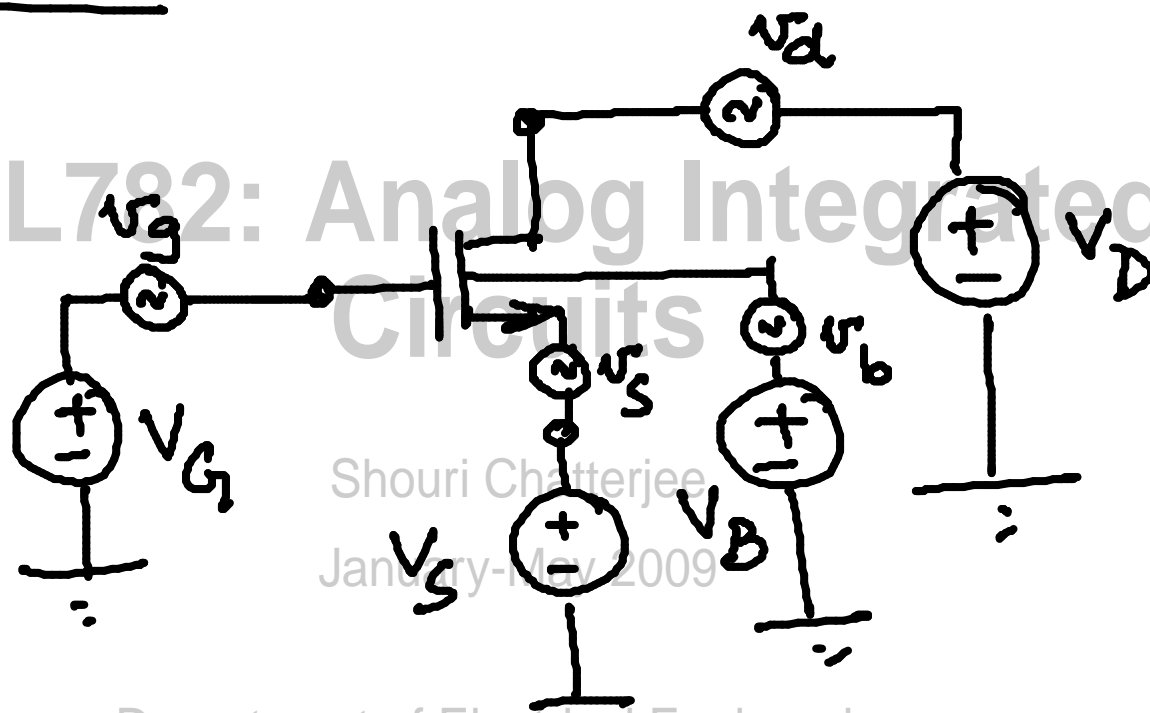


Small signals

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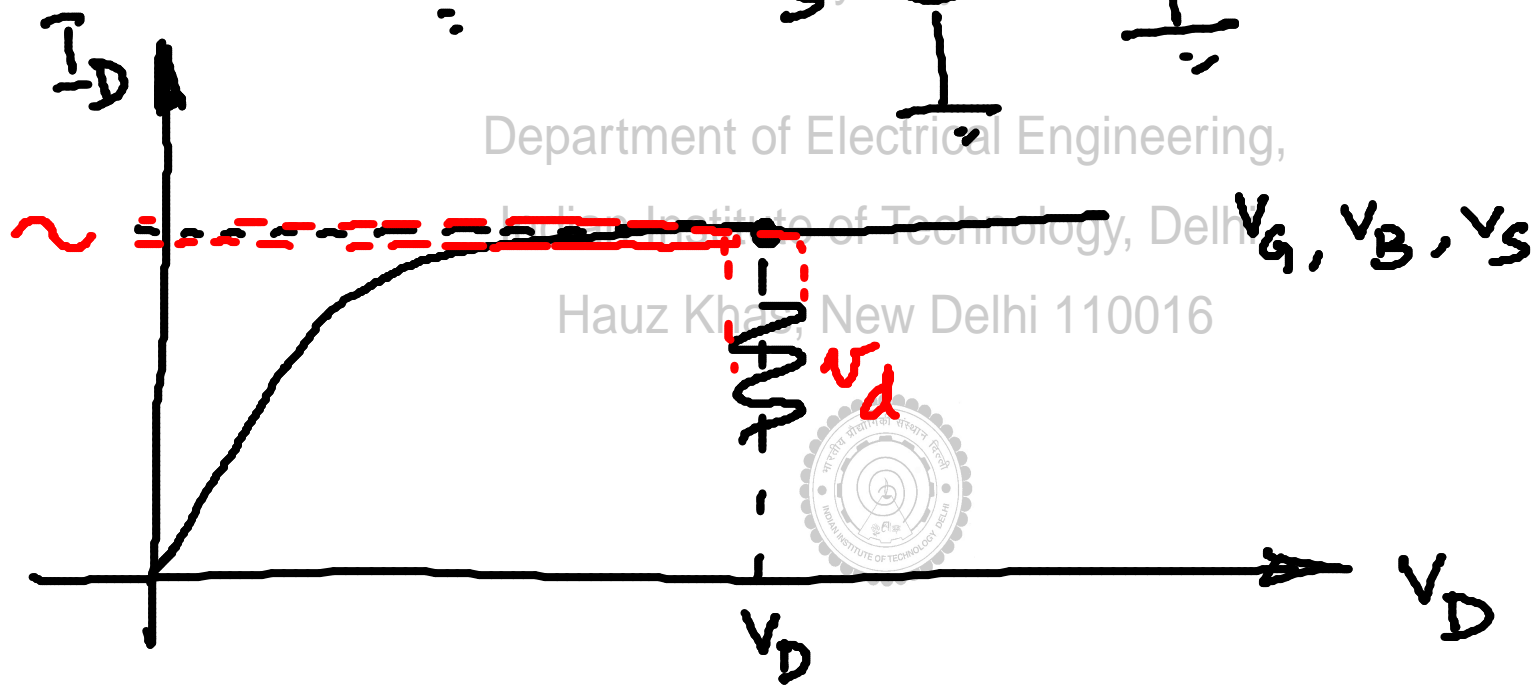
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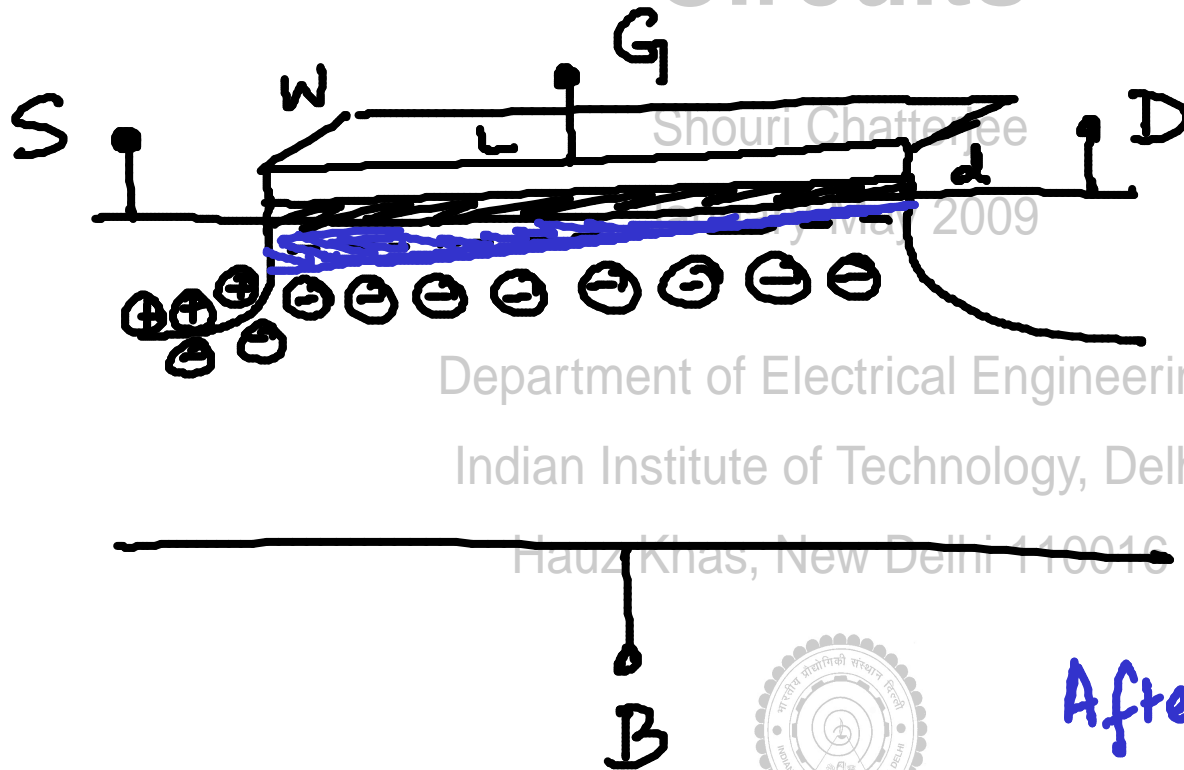
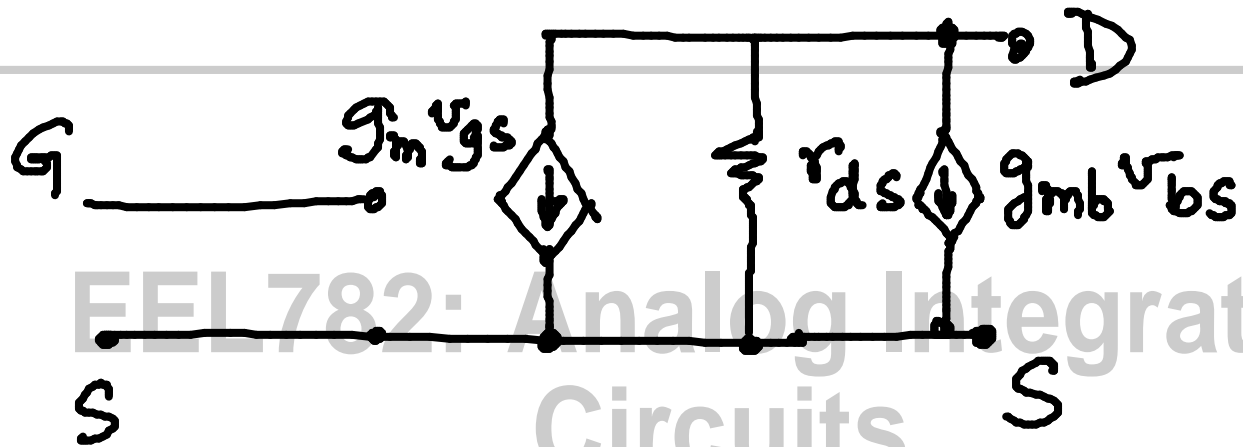


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$$C_{ox} = \frac{\epsilon W L}{d}$$

$$C_{gs} = \frac{1}{2} C_{ox} = C_{gd}$$

After pinch-off

$$C_{gs} = \frac{2}{3} C_{ox}$$

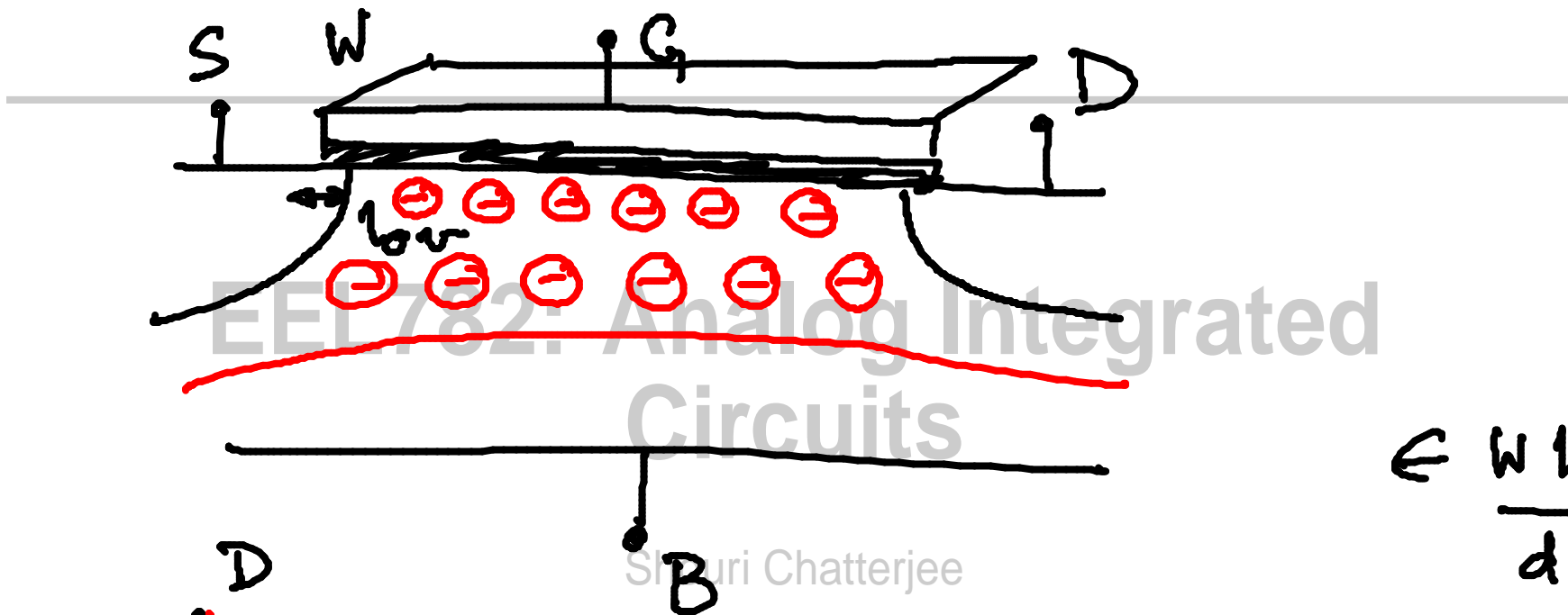
$$C_{gd} = \frac{1}{3} C_{ox}$$



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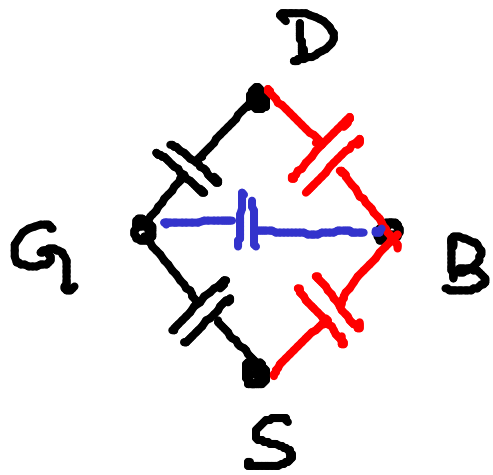
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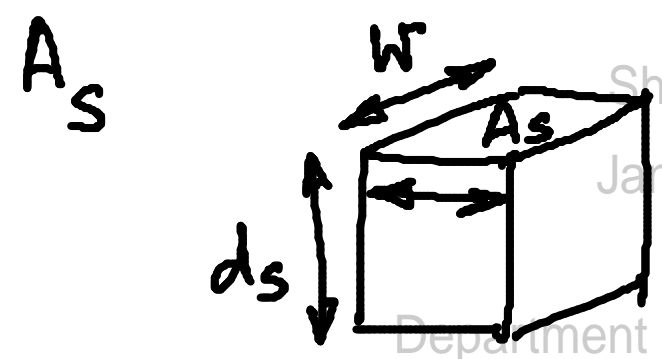
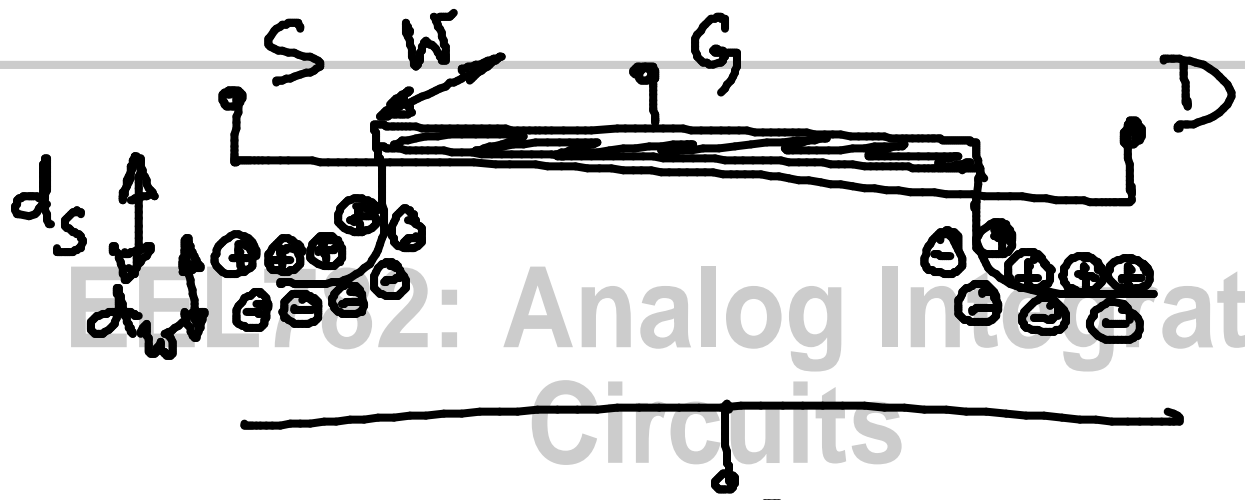
$$E = \frac{W l_{ov}}{d}$$

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$$\begin{aligned}
 & \epsilon_s \left(\frac{A_s}{dw} + 2 \frac{ds W}{dw} \right) \\
 & + 2 \frac{A_s}{W} \cdot \frac{ds}{dw} \\
 & = \frac{\epsilon_s}{dw} \left(A_s + \underbrace{2 ds W + 2 \frac{A_s}{W} \cdot ds}_{ds \cdot \text{perimeter}} \right)
 \end{aligned}$$

