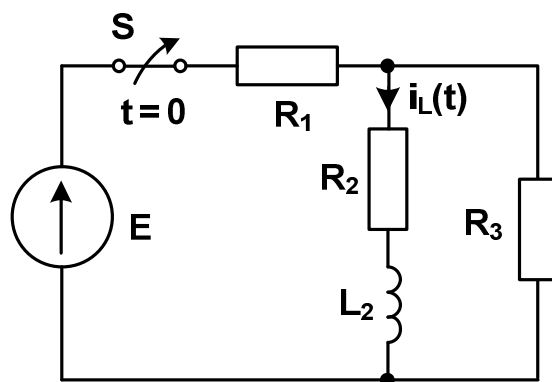


Module name: **Electrical Circuits 2**
 Module ID: **IS-FEE-10085S**
 Module type: **Class**
 Semester: **summer 2023/2024**
 Instructor: **Jarosław Forenc, j.forenc@pb.edu.pl**

Class 10 (21.05.2024)

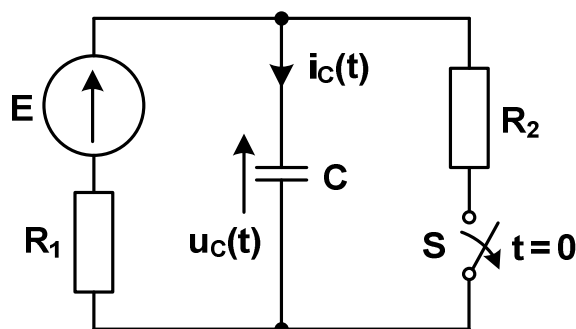
1. The circuit shown in the figure has been in a steady-state. The switch was open at $t = 0$. Find and plot $i_L(t)$ for $t < 0$, $t = 0$ and $t > 0$.

$E = 80 \text{ V}$, $R_1 = 120 \ \Omega$, $R_2 = 50 \ \Omega$, $R_3 = 200 \ \Omega$,
 $L_2 = 0.75 \text{ H}$.



2. The circuit shown in the figure has been in a steady-state. The switch was open at $t = 0$. Calculate and plot $i_C(t)$ and $u_C(t)$ for $t < 0$, $t = 0$ and $t > 0$.

$E = 100 \text{ V}$, $R_1 = 20 \ \Omega$, $R_2 = 40 \ \Omega$, $C = 10 \text{ mF}$.



3. The circuit shown in the figure has been in a steady-state. The switch was open at $t = 0$. Plot $i_1(t)$ and $i_2(t)$ for $t < 0$, $t = 0$ and $t > 0$.

$E = 100 \text{ V}$, $L = 0.1 \text{ H}$, $R_1 = 25 \ \Omega$, $R_2 = 75 \ \Omega$.

