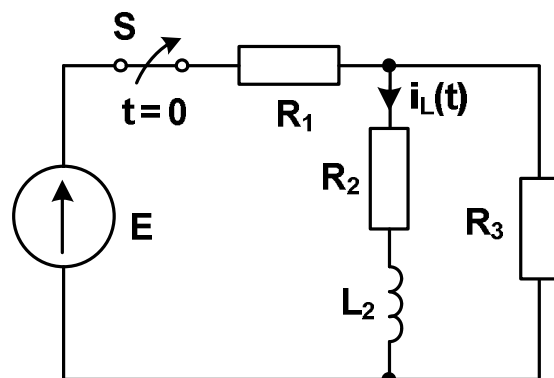


Module name: **Electrical Circuits 2**  
Module ID: **IS-FEE-10085S**  
Module type: **Class**  
Semester: **summer 2024/2025**  
Instructor: **Jarosław Forenc**, [j.forenc@pb.edu.pl](mailto:j.forenc@pb.edu.pl)

**Class 10 (20.05.2025)**

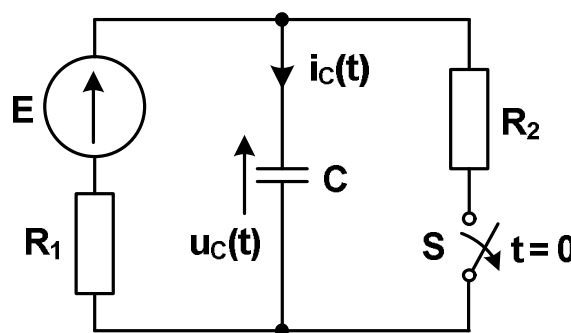
1. The circuit shown in the figure has been in a steady-state. The switch was open at  $t = 0$ . Find and plot  $i_L(t)$  for  $t < 0$ ,  $t = 0$  and  $t > 0$ .

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



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  $t > 0$ .

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



20.05.2025

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