

## **Fundamentals of Electrical Engineering I**

<b>Course Code:</b>	25091
Credits:	3
<b>Course Type:</b>	Theoretical
<b>Prerequisites:</b>	General Mathematics 2, Physics 2
Corequisite:	-
<b>Course Length:</b>	51 hours

## **Outline**:

- 1. Introduction to modeling
- 2. Basic parameters and electric components
- 3. Voltage and current Laws
- 4. Basic circuit analysis technics
- 5. Basic *RL*, *RC* and *RLC* circuit analysis
- 6. AC Circuit Analysis
- 7. Introduction to Three-Phase Circuits
- 8. Introduction to Telecommunications, Control and Logic Circuits

## **References:**

William Hayt, Jack Kemmerly, Jamie Phillips and Steven Durbin, "Engineering Circuit Analysis – 9<sup>h</sup> Ed." McGraw-Hill Book Company Inc.