Summer Practice 2018
BU: P ES E E
Responsible coordinator: Kotlar Aurelian
Project title: Control Unit that operates are both 48V Voltage rail and a 12V Voltage Rail
Project Description
To improve the power losses and be more energy efficient, the modern cars use both a 12C battery and a 48V battery for the high power loads. Your task is to create an Automotive Electronic Control Unit that can operate on both 48V grid and 12V grid. The 48V side and 12V side need to be galvanic isolated. The unit needs to communicate on CAN, referenced to the 12V bus. Your task: 1. Analyze the automotive requirements for 48V and 12V supply grid 2. Choose a solution for the architecture of the product 3. Design and simulate the new product 4. Build and test a prototype A mentor will guide you during your summer practice and support with your tasks.
Student Requirements
Faculty:
Specific technical knowledge required: **Do you want students from other cities? – yes**
Planning & Estimation
Hours/day (4/6/8): 4/6/8
No of students: **2**
Start date (month): **July / Aug**
Required technical test - please choose from: **Hardware, microcontrollers**