

ELE - ELECTRICAL ENGINEERING (ELE)

ELE 1253 Fundamentals of Electrical Engineering (2-2-3)

Examine the fundamental concepts of electrical engineering, which include identifying basic electrical quantities and common scales relative to current, voltage, resistance and power. Describe the construction, value and voltage-current characteristics of common passive components. Ohm's law is investigated by using laboratory equipment to measure voltage, current, power of series, parallel, series-parallel DC circuits.

ELE 4713 Digital Image Processing (2-2-3)

This course covers the fundamental of image analysis and understanding: fundamentals of image formation, human vision system, spatial and frequency domain image processing, image transform and their use in image filtering, image segmentation and morphological image processing. It provides the basics concepts that enable learners understanding the compression of digital images. Also, the focus on the image representation and description gives students the necessary tools for applying image processing for solving real-life computer vision problems.

Prerequisites: ELE 3613, EGN 2712

ELE 4803 Hybrid and Electric Vehicle Technology (2-2-3)

This course will provide you with a broad technical knowledge and practical expertise of hybrid and electric vehicle (HEV) technologies, analysis, design, component selection and sizing at both system and vehicle level.

Prerequisites: ELE 1253