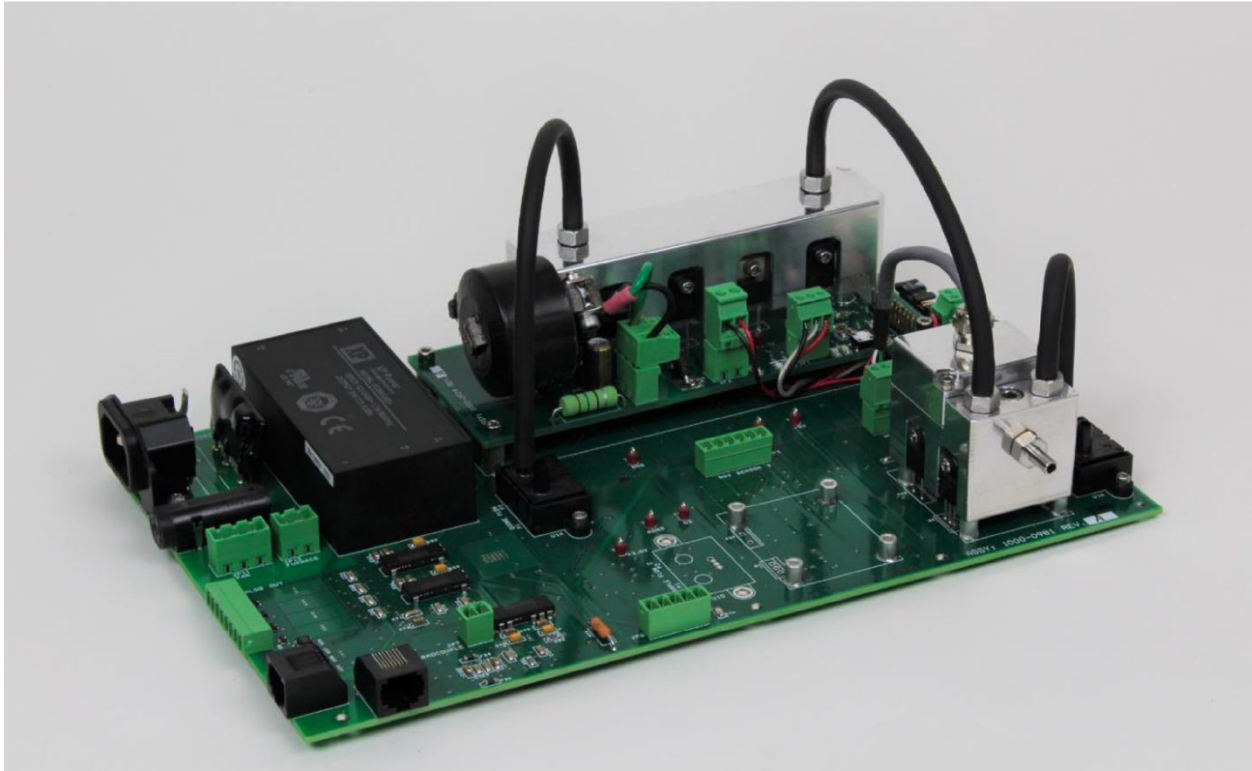


Physics Engineering Half Block



PC210: Investigations in Engineering: Development and Manufacturing of Instrumentation

Have you ever wondered how a high-tech piece of hardware progresses from an idea to a tangible product? This course will investigate the engineering process that takes a laboratory measurement principle, specifically optical detection of gas concentration, through development of an analytical instrument that can be manufactured, deployed, and operated in an industrial setting. We will touch on many aspects of this process including: the environmental monitoring market; development and hands-on testing of gas detection instrumentation; analyzing tradeoffs for manufacturability and commercial viability; production processes; and support documentation.