

Challenges & Opportunities in Teaching Component Engineering Skills to Students & Young Engineers

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Senior design engineers know that software algorithm performance is often limited by electronic circuits performance restrictions related to component engineering physics (material science, thermodynamics, heat transfer, electromagnetics).

Project managers know that electronics project success can be negatively affected by a part's supply chain availability & package choice. Can we make engineering students & young engineers more aware of these important component engineering skills earlier in their career? Also, what if students take more software coursework (machine learning, embedded software, cybersecurity, quantum computing, fintech, etc.) and take less component engineering physics coursework?

Based on experience in industry & academia, this presentation will discuss these issues and give a few practical methods incorporated to better train students and young engineers in component engineering skills for electronics industry careers.