

James Austin Hewin

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404-916-5517

TEACHING EXPERIENCE

Electronics Engineering Technology Instructor

Nashua Community College, Nashua, NH – August 2021 – present

Teach core courses required for the Associate of Science in EET degree:

- Circuit Analysis I
 - DC electricity, Ohm's Law, Kirchoff's Laws, Mesh and Nodal Analysis, Superposition Theorem, Thevenin's and Norton's Theorems, LTSpice
- Digital Circuits I
 - Number Systems, Logic Gates, Combinational and Sequential logic, Boolean algebra and Karnaugh mapping, Multisim

Fayetteville Technical Community College, Fayetteville, NC – September 2009 – July 2021

Taught core courses required for the Associate of Science in EET degree:

- Circuit Analysis I/Circuit Analysis I Lab
 - AC and DC electricity, Ohm's Law, Kirchoff's Laws, Mesh and Nodal Analysis, Superposition Theorem, Thevenin's and Norton's Theorems
- Analog Electronics I
 - Diodes, Bipolar Junction Transistors (2N3904/2N3906), MOSFET Transistors (ZVN3306A/ZVP3306A), transistor biasing, single-stage amplifiers
- Digital Electronics
 - Number Systems, Logic Gates, Combinational and Sequential logic, Boolean algebra and Karnaugh mapping, VHDL and Schematic Capture designs using Quartus Prime Lite
- C Programming
 - Data types, variables, expressions, conditional statements, loops, programs with electronics applications, structures, functions, debugging using Eclipse IDE and Cygwin toolchain
- Adv C/C++ Programming
 - Object oriented programming using Eclipse IDE
- Eng and Design Graphics
 - 3D modeling, materials and textures, animation using Blender
- Microprocessor Systems

- Programming and Interfacing to the PIC16F628A microprocessor using assembly language and the MPLAB IDE

TECHNICAL EXPERIENCE

Member of Technical Staff

TRW/Northrop Grumman, Redondo Beach, CA – July 1996 – May 2009

ASIC/FPGA design and verification using VHDL

Presentation of designs at Internal Design Reviews

EDUCATION

North Carolina State University

Computer Programming Certificate, December 2019

University of Southern California

M.S. Electrical Engineering, August 1999

Georgia Institute of Technology

B.S. Electrical Engineering (magna cum laude), June 1996

COLLEGE SERVICE

- National Technical Honor Society – FTCC Chapter – Co-advisor and Treasurer – 2015 – present
- Advising and assisting students in registration
- Participating in recruitment events at local schools as well as on-campus at college

PROFESSIONAL QUALIFICATIONS

Engineer-In-Training, October 2001

COMPUTER SKILLS

LTspice and Multisim, Tinkercad (circuit simulation)

Netbeans IDE, Eclipse IDE, cygwin (computer program development)

Quartus Prime Lite IDE (FPGA development)

Windows OS, Microsoft Office

TEACHING VIDEOS

YouTube Channel – search “Austin Hewin” or follow link below:

https://www.youtube.com/channel/UCGf5555LepaY5GFzDWAR3A?view_as=subscriber

Multiple technical videos on topics of computer programming, circuit analysis, using software, analog and digital electronics

Received positive feedback from viewers

500 WORD NEWSPAPER ARTICLES

1. FPGAs: Fun Programming Gate Arrays – published October 2019
2. C Programming: Solving problems in a fun way – published February 2021

*Up & Coming Weekly - <https://www.upandcomingweekly.com/>

** Articles available upon request