Tri-County Technical College
Electronics Engineering Technology Program/Industrial and Engineering Technology Division
Technical Advanced Placement (TAP) Program

Competency Verification and Teacher Recommendation Form

EET 114 (Electrical Circuits II)

SECTION I (To be completed by the *student*)
Please complete this section of the form and give it to your Electronics (Computer)/Electricity teacher.

(*PLEASE PRINT*)

Your Name: _____ Phone:_____

Address: _____ SSN: _____

City: _____ State: _____ Zip: _____

High School: _____ Grade: _____

SECTION II (To be completed by the *teacher*)

By placing my initials next to the appropriate competency statement listed on the back of this form, I verify this student has mastered major competencies of the EET 114 (Electrical Circuits II) course as defined in the approved syllabus dated January, 2001. I understand that in order to progress in the validation process for Technical Advanced Placement credit, a minimum of 75 percent of the competencies must be verified. Having met this requirement, I recommend this student be permitted to continue the validation process by completing the TAP exam, which I understand will be arranged through the Electronics Engineering Technology Program at Tri-County Technical College.

Teacher Name (*PLEASE PRINT*): _____
Signature: _____
Date:_____

Name of high school course(s) in which this student gained the required competencies for possible TAP advanced standing: _____
Date of course completion or expected completion:_____

Comments (if applicable): _____

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Please make a copy of this form for your records and mail the original to Ms. Tonia McClain, Industrial and Engineering Technology Division Secretary, Tri-County Technical College, PO Box 587, Pendleton, SC 29670. (Questions regarding TAP procedures for EET 114 should be directed to Dr. Tim Brown, EET Program Coordinator, at 646-8361, extension 1404.)

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COMPETENCIES (please initial each one)

_____1. Calculate current through any element; calculate voltage between any two points in a circuit containing resistors, fixed DC voltage sources and fixed DC current sources; select the most appropriate method of calculating current and/or voltage.

_____2. Explain and use in an appropriate setting superposition, Thevenin's Theorem; Norton's Theorem, maximum power transfer, Millman's Theorem, substitution, reciprocity.

_____3. Calculate circuit resistance and impedance parameters; calculate impedance for all combinations of resistance, capacitive reactance and inductive reactance; apply voltage and current divider rules; compute admittance and susceptance; solve series-parallel circuit problems for circuits containing DC sources, AC sources or a combination of both sources.

_____4. Apply fundamental analytical techniques from Electrical Circuits I to relatively complex circuits incorporating reactive elements; utilize dependent sources, mesh analysis, nodal analysis, superposition, Thevenin's Theorem and maximum power transfer.

_____5. Analyze basic total power equation; differentiate among real, apparent, and reactive components; analyze simple power distribution systems; apply and/or calculate true power, apparent power, reactive power, power factor; define principles of polyphase voltage generation and Wye-Delta conversions.

_____6. Analyze passive filter circuits and apply concepts of series and parallel resonance.