

1998 Engineer of Distinction



John H. Matthews

B.S. Electrical Engineering, TTU, 1970
M.S. Electrical Engineering, TTU, 1985
Ph.D. Electrical Engineering, TTU, 1989

President, John Matthews and Associates, Inc.
Consulting Electrical Engineers
Cookeville, Tennessee

Citation

John Matthews is a native of Nashville, Tennessee. He received his BSEE, MSEE and PhD in electrical engineering from Tennessee Technological University. Since 1970, Dr. John Matthews has been President of John Matthews & Associates, Inc., Consulting Electrical Engineers. He has also served as adjunct professor of electrical engineering in the School of Electrical and Computer Engineering at Georgia Institute of Technology, Atlanta, Georgia, from 1989 to the present time.

Upon receipt of his undergraduate degree in 1970, Dr. Matthews moved to Atlanta, Georgia, and began his consulting firm. Since that time, the firm has served as Engineer of Record for over 3,000 projects, including: shopping centers, office buildings, high-rise hotels, hospitals, nursing homes, multi-story residential complexes and a variety of other projects.

In 1983, he wished to further his education and "came back home" to Tennessee Tech. He did not, however, relocate to Cookeville. Dr. Matthews so valued the educational experience at Tennessee Tech that he commuted between Atlanta and Cookeville during the six years it took to receive his MS and PhD in electrical engineering. In all, John drove almost a quarter of a million miles to earn the title of doctor. In the pursuit of his graduate degrees, he also taught courses in electrical engineering.

Upon earning his doctorate, he changed the direction of his design firm from an emphasis on electrical design to services such as electromagnetic field (EMF) and power quality related studies, system design, including fault current and coordination studies, investigation of electrical accidents and fires. He also conducts workshops and hosts courses in building electrical power design, power quality, protection, safety, illumination and power system theory.

As an adjunct professor at Georgia Tech, John teaches a series of three courses which are a sub-track in the power curriculum. These courses are Introduction to Building Electrical Systems, Introduction to Illumination Engineering, and Advanced Building Electrical Systems. Because no pertinent textbook existed, Dr.

Matthews wrote one. *Introduction to the Design and Analysis of Building Electrical Systems* was published in 1992 by Van Nostrand Reinhold. The second edition of his book is due to be completed in late 1998.

John is registered as a Professional Engineer in 12 states and holds a certificate from the National Council of Engineering Examiners and Surveying. He is a member of American Consulting Engineers Council, National Society of Professional Engineers, Illuminating Engineering Society of North America, National Fire Protection Association and a senior member of Institute of Electrical and Electronics Engineers. He is also a member of Eta Kappa Nu and Sigma Xi.

He currently co-chairs the Tennessee Tech Department of Electrical and Computer Engineering's Industrial Advisory Board. During the late 1970s, he served on the Department of Electrical Engineering's Electric Power Advisory Committee. He has been a guest lecturer over the past few years at Tennessee Tech, the latest being at the IEEE Student Professional Awareness Conference meeting in 1997.

In 1994, John was voted Outstanding Professor of the Year by the Senior Class of the School of Electrical and Computer Engineering at Georgia Tech. In 1996, he received the Industry Man of the Year Award, presented by the National Electrical Contractors Association, Atlanta Chapter.

In 1992-93, he served as Chair, Atlanta Chapter, Institute of Electrical and Electronics Engineers/Industrial Applications Society. That same year, he was a founding member and first president of the southeastern Power Quality Group, Atlanta, Georgia.

John and his family are proud of their past association with Tennessee Tech and hope to continue their involvement and support in the future.

John's daughter, Lynn, received her undergraduate degree in physics and MS in electrical engineering from Tennessee Tech. David Fountain, his son-in-law, also received an MS in electrical engineering from Tennessee Tech. John's wife, Mary, also attended Tennessee Tech before completing her Bachelor of Business Administration and Master of Business Administration degrees at Georgia State University in Atlanta.



John Matthews accepts his plaque from Interim Dean Charles Hickman