

Tahsin Khajah

Assistant Professor

Biographical Sketch:

Dr. Tahsin Khajah received a Ph.D. in Mechanical Engineering from Old Dominion University where he was also worked as a Lecturer. His graduate research was focused on numerical analysis of electromagnetic wave propagation and its biomedical applications. He continued working on developing new numerical methods to perform accurate wave propagation analyses after joining University of Texas at Tyler at Fall 2015. He has over a decade of industrial experience in plant and machinery design.

Dr. Khajah has taught nine courses at UT Tyler ranging from freshmen to graduate level. He received the 2019 Outstanding Young Faculty Award by American Association for Engineering Education - Gulf South West (ASEE-GSW) and Crystal Quill Award for Outstanding Faculty. He has a wide range of international collaboration to further advance the state of the art numerical methods to perform wave propagation analyses. He is currently focused on developing efficient numerical platforms to design and optimize the next generation of acoustic meta-materials and perform related shape and topology optimization.

Research Interest:

Numerical Methods:

Isogeometric analysis (IGA), High-order Absorbing Boundary Conditions (ABCs), On Surface Radiation Condition (OSRC), Finite Element Analysis (FEA), Scaled Boundary Finite Element Analysis (SBFE), Shape Optimization, Variable Stiffness Composite Laminates (VSCL), and high-fidelity image-based analyses.

Applications: Design and optimization of acoustic meta-materials and smart composite materials.

Contact Information:

Email: tkhajah@uttyler.edu

Telephone: 903.566.7245

Office Number: RBN 3010