

AUDIO DEVICES AND SIGNAL PROCESSING GRADUATE CREDIT CERTIFICATE PROGRAM

Learning Outcomes

1. Knowledge: Graduates will demonstrate knowledge of principles in transducers, and signal processing as related to audio devices.
2. Critical Thinking: Graduates will be able to conceptualize, evaluate, and formulate transducer and signal processing problems as they relate to audio devices in architectural acoustics, as well as perform the required analyses.
3. Communicate: Graduates will be able to effectively communicate, using Penn State online learning resources, their solutions to audio devices and signal processing problems, including the use of software simulation tools such as MATLAB.
4. Apply/Create: Graduates will be able to apply advanced knowledge, techniques, and skills Apply/Create: Graduates will be able to apply advanced knowledge, techniques, and skills pertaining to audio devices to create solutions to problems in signal analysis for acoustics and vibrations, electroacoustic transducers, spatial sound and 3D audio.
5. Professionalism: Graduates will be able to demonstrate high standards of ethics and apply best practices in their research or professional activities.