

NOISE CONTROL AND BUILDING ACOUSTICS GRADUATE CREDIT CERTIFICATE PROGRAM

Learning Outcomes

1. **Knowledge:** Graduates will demonstrate knowledge of noise control and building acoustics such as sound structure interaction, noise control standards, and outdoor sound propagation.
2. **Apply/Create:** Graduates will be able to apply advanced knowledge, skills, and use software simulation to solve noise control and building acoustics problems as they relate to mitigation of noise.
3. **Professionalism:** Graduates will be able to demonstrate professionalism, including the accomplishment of timely assignments and professional communication.
4. **Critical Thinking:** Graduates will be able to conceptualize, evaluate and formulate noise and building acoustics problems such as measurement methods and machine noise control including systems such as gears, pulleys, fans, HVAC systems, muffler systems and rotating machinery, and statistical energy analysis.
5. **Communicate:** Graduates will be able to effectively communicate, using Penn State online learning resources, their solutions to noise control and building acoustics problems, including the use of software simulation tools such as MATLAB.