

# ACOUSTICS (GRADUATE CERTIFICATE)

<https://eos.unh.edu/center-acoustics-research-education/program/graduate-certificate/acoustics>

## Description

The UNH Graduate Certificate in Acoustics offers students the opportunity to develop competencies in acoustic signal processing, animal bioacoustics, and underwater acoustics. This interdisciplinary graduate certificate is appropriate for students with professional interests in acoustics that have backgrounds in mathematical or applied sciences, and the courses that populate the program can be applied toward a UNH graduate degree. Three combinations of required and elective courses can be taken to earn a digital badge in three micro-credential technical areas: bioacoustics, digital signal processing, and underwater acoustics. The program curriculum consists of two required online courses (Advances in Acoustics and Introduction to Digital Signal Processing), and students then select two additional electives from six possible course choices.

## Requirements

The Graduate Certificate in Acoustics requires the completion of four courses: two required courses and two electives.

Code	Title	Credits
<b>Core Required Courses</b>		
Select two courses from the following:		
EOS 808	Acoustics Essentials	3
EOS 809	Acoustic Measurements and Signal Analysis	3
ECE 814	Introduction to Digital Signal Processing	4
<b>Electives</b>		
Select two courses from the following:		
BIOL 827	Animal Communication	4
BIOL 828	Marine Bioacoustics	3
CEE 902	Machine Learning for Engineering Applications	3
ECE 941	Digital Signal Processing	3
OE 865	Underwater Acoustics	3
OE 874	Integrated Seabed Mapping Systems	4
OE 965	Advanced Underwater Acoustics	3