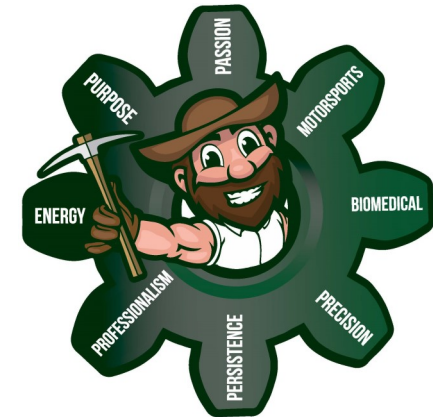


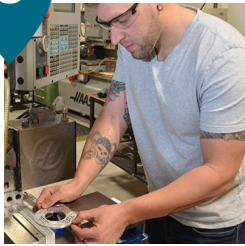
EXPLORE UNC CHARLOTTE

Mechanical Engineering and Engineering Science



The Department of Mechanical Engineering & Engineering Science welcomes you to EXPLORE Open House and our home on campus, Duke Centennial Hall. To get the most from your self-guided tour, we ask that you follow the schedule below. Tour guides and signs around our facilities will direct you to each tour stop. For your safety and overall experience, each tour time is limited to 20 guests.

Tour Times 20 Guests/Tour	MACHINE SHOP DUKE 125	MOTORSPORTS Alan D. Kulwicki Lab	BIOMEDICAL DUKE 342	JUNIOR DESIGN DUKE LOBBY
11:00 am—11:10 am	As sophomores, Mechanical Engineering students learn the fundamentals of manufacturing and design with hands-on experience in the machine shop. Training includes computer aided manufacturing (CAM), an emphasis on design visualization, functional analysis, and design prototyping. Our machine shop includes both manual mills and lathes and CNC equipment.	The UNC Charlotte Alan D. Kulwicki Motorsports Laboratory is named after the 1992 Winston Cup Champion and engineer, Alan Kulwicki. The Alan D. Kulwicki Motorsports Laboratory represents 6800 square feet of research space, one of the largest in the Southeast. This facility is open to students Monday through Friday, 9am to midnight, where they have the opportunity to participate in one of our own racing teams. The cars built and raced by our students are their own design. Student designed. Student built. Student raced.	Motion Analysis is used to evaluate sports and daily activities before and after injuries, before and after surgery or non-surgery treatment and before and after a specific training or rehab program for research purposes. For clinical applications, motion analysis is used in the diagnosis of disease related to human locomotion, for assisting in developing rehab protocol, and evaluation of fitness/rehab devices/equipment.	Juniors focus on electromechanical systems, and begin using rapid prototyping technology to build robots in their junior design class. Junior Design topics include the process of design and reduction to practice of engineering concepts in a team environment. Each junior design group formulates a functional specification, completes a design, documents the design and design decisions, details the design with a design package, fabricates a prototype to use for further design evaluation, and tests the prototype via a performance competition.
11:15 am—11:25 am				
11:30 am—11:40 am				
11:45 am—11:55 am				
12:00 pm—12:10 pm				
12:15 pm—12:25 pm				
12:30 pm—12:40 pm				
12:45 pm—12:55 pm				

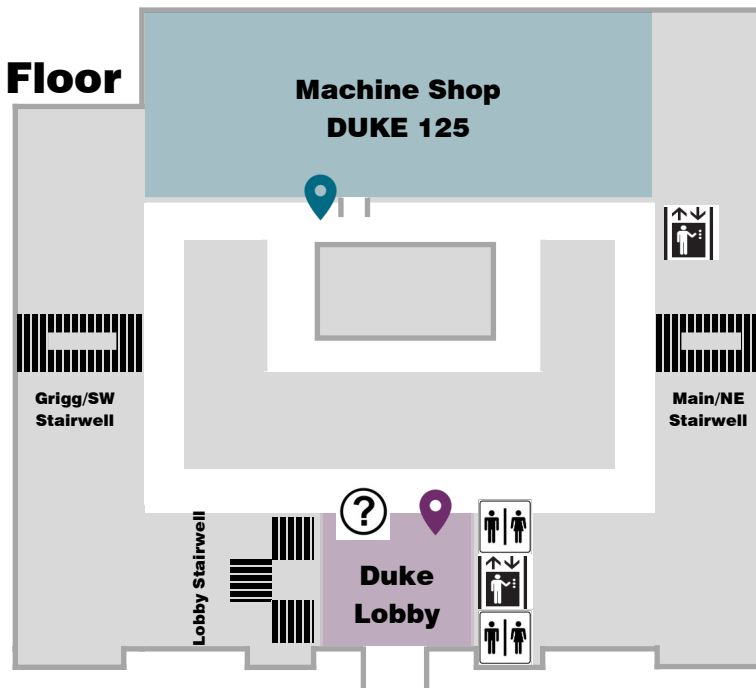


Machine Shop
DUKE 125

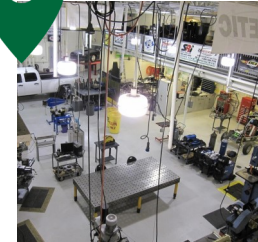


Junior Design
DUKE LOBBY

First Floor

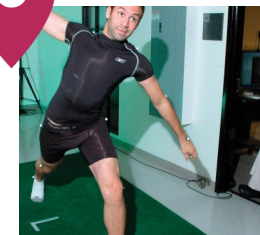
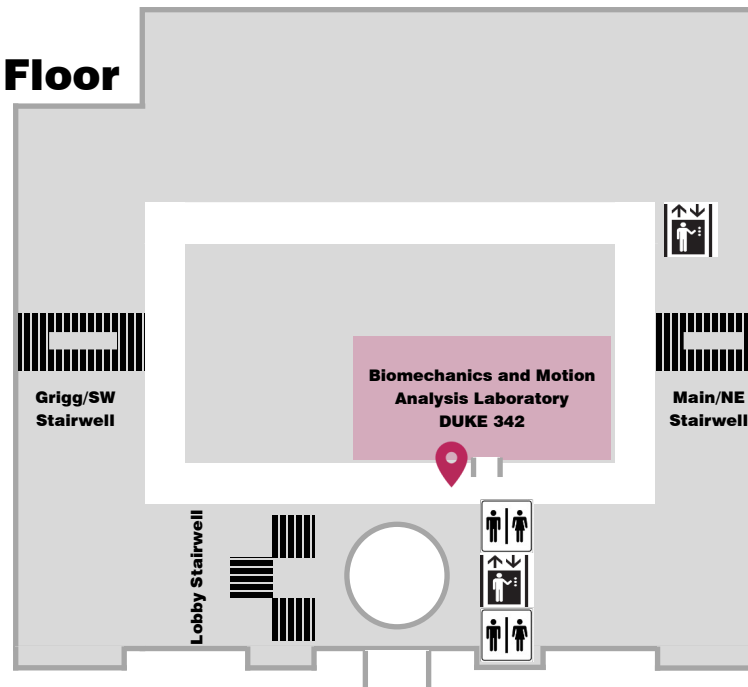


Duke Centennial Hall



Alan D. Kulwicki
Motorsports
Laboratory

Third Floor



Biomechanics and
Motion Analysis
Laboratory
DUKE 342

Legend



Restrooms



Information



Elevator



Tour Location