

Appalachian Pre-Engineering/Engineering Programs



The Department of Physics and Astronomy offers two separate pre-engineering programs and advises students interested in engineering. In addition, we offer dual degree programs with Auburn University and Clemson University. Also, the Physics and Astronomy Department offers its own program leading to a Bachelor's Degree in Physics with preparations for entering master's degree programs in engineering. Students who intend to enter any of these programs need to consult with an advisor in the Physics and Astronomy Department during the Summer Orientation sessions before the beginning of fall classes of their freshman year.

[THE NORTH CAROLINA UNIVERSITY SYSTEM PRE-ENGINEERING PROGRAM](#)

Appalachian's two-year North Carolina University System Pre-Engineering Program has been approved for student transfer to the engineering programs at North Carolina A&T, N. C. State and the University of North Carolina at Charlotte by the Subcommittee on Engineering Transfer.

[THE CLEMSON UNIVERSITY PRE-ENGINEERING PROGRAM](#)

Our second pre-engineering transfer program is in cooperation with Clemson University. After completing two semesters of courses students submit an "Intention to Transfer to Engineering" form to the College of Engineering at Clemson. Course requirements for this program are different than those for the North Carolina program above.

APPALACHIAN'S BS IN PHYSICS/ENGINEERING

A four-year bachelor's degree in physics/engineering has been designed to prepare students to enter universities which have master's degree programs in engineering. The student in this degree track identifies the engineering sub-field that they wish to pursue by their third semester so as to select additional courses that will best prepare them for master's study in that particular engineering specialty. To assure success a high level of academic performance in advanced physics, chemistry, mathematics and computer science must be maintained.

In addition to our physics graduates from the Engineering concentration described above, students from our other physics concentrations such as Environmental Physics, Astrophysics, Chemical Physics and others also have been accepted for graduate study at engineering universities.

DUAL DEGREE PROGRAMS WITH CLEMSON AND AUBURN UNIVERSITY

Dual degree programs are now offered in cooperation with Auburn and Clemson University. Students attend Appalachian for three years and either Auburn or Clemson for two years. The graduate is awarded a BS physics degree from Appalachian and a BS engineering degree from either Auburn or Clemson.

Study during the first three years includes course work in physics, mathematics and other sciences in addition to courses chosen to meet Appalachian's core curriculum requirements. These courses, plus two semesters of courses taken at Auburn or Clemson, are counted towards the requirements for the BS in physics from Appalachian.

Dual degree candidates from Appalachian are eligible to seek a bachelor degree from Auburn in the following areas.

Engineering - Aerospace, Chemical, Civil, Electrical,
Industrial, Materials, Mechanical, Textile

Management - Aviation, Textile

Chemistry - Textile

Dual degree candidates from Appalachian are eligible to seek a bachelor degree from Clemson in the following areas.

Engineering - Ceramic, Civil, Electrical, Industrial, Mechanical
and Engineering Analysis

CONTACTS AND ADDITIONAL INFORMATION

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Please also stop by our website at - www.phys.appstate.edu