

The NC Aerospace Initiative connects a variety of enterprises in the aerospace sector that are working to promote the industry's growth. The NCAI is a coalition of aerospace interests that have come together to align these enterprises and to act as a clearinghouse for all things aerospace. This resource guide is a product of the NCAI initiative.



Engineering Pathways

College and University Engineering Transfer Program (Statewide)

Engineering Pathways is a joint project of the North Carolina Community College System and the University of North Carolina engineering programs to build the pathways for students to begin engineering studies at a community college and transfer to one of the UNC engineering programs. This initiative seeks to improve flexibility in course taking, to improve academic advising and to provide access to engineering course content for students at community colleges before transferring to engineering programs. This program has been supported by the Golden LEAF Foundation to assist industries with obtaining skilled workers and upgrading the capacity of training institutions.

Participating Community Colleges

College of Albemarle	Piedmont Community College
Durham Technical Community College	Pitt Community College
Fayetteville Technical Community College	Sandhills Community College
Johnston Community College	Wake Technical Community College
Nash Community College	

Participating Universities

East Carolina University	University of North Carolina at Charlotte
North Carolina A&T University	Western Carolina University
North Carolina State University	

Participating Community Colleges Courses Required

College of Albemarle 1208 N. Road St. Elizabeth City, NC 27909 Contact Rhonda Watts Department Chair Math & Sciences 252-335-0821 Ext. 273 rwatts@albemarle.edu	Degree AA - Engineering Transfer Agreement to ECU Engineering Courses EGR 150 Intro to Engineering EGR 220 Engineering Statics	Calculus Based Physics PHY 251 General Physics I PHY 252 General Physics II Mathematics
---	---	--

Durham Technical Community College

1637 Lawson Street
27703 Durham, NC

Contact:

Chris Mansfield
919-536-7223 ext. 8026

mansfieldc@durhamtech.edu

www.ncengineeringpathways.org/nc-ccs-programs/durham-technical-community-college

Degree

Associate in Science

Engineering Courses

EGR 150 Intro to Engineering
EGR 220 Engineering Statics
DFT 170 Engineering Graphics

Calculus Based Physics

PHY 251 General Physics I
PHY 252 General Physics II

Mathematics

MAT 271 Calculus I
MAT 272 Calculus II
MAT 273 Calculus III
MAT 285 Differential Equations

Fayetteville Technical Community College

2201 Hull Road
28303 Fayetteville, NC

Contact:

J. Austin Hewin
Instructor, Engineering
Technologies & Pre-Engineering
910-678-8516

hewinj@faytechcc.edu

www.ncengineeringpathways.org/nc-ccs-programs/fayetteville-technical-community-college

Degree

AS in Engineering

Engineering Courses

EGR 150 Intro to Engineering
EGR 220 Engineering Statics

Calculus Based Physics

PHY 251 General Physics I
PHY 252 General Physics II

Mathematics

MAT 271 Calculus I
MAT 272 Calculus II
MAT 273 Calculus III
MAT 280 Linear Algebra
MAT 285 Differential Equations

Johnston Community College

245 College Road
Smithfield, NC 27577

Contact:

Don Warren
Director of Programs & QEP Project
Administrator
919-464-2383

d_warren@johnstoncc.edu

www.ncengineeringpathways.org/nc-ccs-programs/johnston-community-college

Degree

AS Pre-Major Engineering

Engineering Courses

EGR 150 Intro to Engineering

Calculus Based Physics

PHY 251 General Physics I
PHY 252 General Physics II

Mathematics

MAT 271 Calculus I
MAT 272 Calculus II
MAT 273 Calculus III
MAT 280 Linear Algebra
MAT 285 Differential Equations

Nash Community College

522 N. Old Carriage Road
27804 Rocky Mount, NC

Contact:

Shilo M. Lawrence
Mathematics & Sciences
Department
252-451-8398

slawrence@nashcc.edu

www.ncengineeringpathways.org/nc-ccs-programs/nash-community-college

Degree

Associate in Science

Engineering Courses

EGR 150 Intro to Engineering
EGR 220 Engineering Statics

Calculus Based Physics

PHY 251 General Physics I
PHY 252 General Physics II

Mathematics

MAT 271 Calculus I
MAT 272 Calculus II
MAT 273 Calculus III
MAT 280 Linear Algebra
MAT 285 Differential Equations

Piedmont Community College

331 Piedmont Dr
Yanceyville, NC 27379

Contact

Dr. Dawn Langley, Dean, General
Education and Developmental
Studies

336-322-2207

Dawn.langley@piedmontcc.edu

www.ncengineeringpathways.org/nc-ccs-programs/piedmont-community-college

Degree

Associate in Science

Engineering Courses

EGR 150 Intro to Engineering
EGR 220 Engineering Statics

Calculus Based Physics

PHY 251 General Physics I
PHY 252 General Physics II

Mathematics

MAT 271 Calculus I
MAT 272 Calculus II
MAT 273 Calculus III
MAT 285 Differential
Equations

Pitt Community College

1986 Pitt Tech Rd
Winterville, NC 28590

Contact:

Charles Goodman
Physics, Astronomy, Pre-
engineering

252 493-7269

cegoodman222@my.pittcc.edu

Degree

Associate of Science in
Engineering

Engineering Courses

EGR 150 Intro to Engineering
EGR 220 Engineering Statics
DFT 170 Engineering Graphics

Calculus Based Physics

PHY 251 General Physics I
PHY 252 General Physics II

Calculus Based Physics

PHY 251 General Physics
I
PHY 252 General Physics
II

Mathematics

MAT 271 Calculus I
MAT 272 Calculus II
MAT 273 Calculus III
MAT 285 Differential
Equations

Sandhills Community College

3395 Airport Road
Pinehurst, NC 28374

Contact:

Dr. Richard Swanson
Science Department
910-246-4951

swansonr@sandhills.edu

www.ncengineeringpathways.org/nc-ccs-programs/pitt-community-college

Degree

AS in Engineering

Engineering Courses

EGR 150 Intro to Engineering
EGR 220 Engineering Statics

Calculus Based Physics

PHY 251 General Physics I
PHY 252 General Physics II

Mathematics

MAT 271 Calculus I
MAT 272 Calculus II
MAT 273 Calculus III
MAT 285 Differential
Equations

Wake Technical Community College

9101 Fayetteville Road
Raleigh, NC 27603

Contact:

Susan Meardon
919-866-5344

smeardon@waketech.edu

www.ncengineeringpathways.org/nc-ccs-programs/wake-technical-community-college

Degree

Associate in Science pre-major
Engineering

Engineering Courses

EGR 150 Intro to Engineering
EGR 220 Engineering Statics
DFT 170 Engineering Graphics

Calculus Based Physics

PHY 251 General Physics I
PHY 252 General Physics II

Calculus Based Physics

PHY 251 General Physics
I
PHY 252 General Physics
II

Mathematics

MAT 271 Calculus I
MAT 272 Calculus II
MAT 273 Calculus III
MAT 280 Linear Algebra
MAT 285 Differential
Equations

Participating Universities Courses Required

East Carolina University

1001 E 5th St
Greenville, NC 27858

Contact:

Karen De Urquidi
Coordinator of Advising and
Retention

Department of Engineering
252-737-1033

deurquidik@ecu.edu

www.ncengineeringpathways.org/university/c-programs/east-carolina-university

Engineering Areas

Biomedical Engineering
Bioprocess Engineering
Electrical Engineering
Industrial and Systems
Engineering
Mechanical Engineering

Degree

Associate in Science
Engineering Transfer Course

Credit Hours by Course Type

NCCCS

Engineering - 11
Math - 18
Physics - 8

University

Engineering - 11
Math - 13
Physics - 8

North Carolina A&T University

1601 E Market St
Greensboro, NC 27411

Contact:

Leotis Parrish
Assistant Dean of Student Affairs,
College of Engineering
336-285-2648

parrishl@ncat.edu

www.ncengineeringpathways.org/university/c-programs/ncat-state-university

Degree

Associate in Science
Engineering Transfer Course

Credit Hours by Course Type

NCCCS

Engineering - 8
Math - 15
Physics - 8

University

Engineering - 7
Math - 15
Physics - 8

North Carolina State University

203 Peele Hall
27695 Raleigh, NC

Contact:

Jerome P. Lavelle
Associate Dean, Academic Affairs
College of Engineering, NC State
University

919-515-3263

jerome_lavelle@ncsu.edu

www.ncengineeringpathways.org/university/c-programs/north-carolina-state-university

Degree

Associate in Science
Engineering Transfer Course

Credit Hours by Course Type

NCCCS

Engineering - 13
Math - 18
Physics - 8

University

Engineering - 13
Math - 18
Physics - 8

University of North Carolina at Charlotte

The William States Lee College of
Engineering
9201 University City Blvd.
28223 Charlotte, NC

Contact:

Dr. Cricket Bonnetaud
Director of Transition Advising
704-687-7890

cdbonnet@uncc.edu

www.ncengineeringpathways.org/university/c-programs/unc-charlotte

Engineering Areas

Civil Engineering
Computer Engineering
Electrical Engineering
Mechanical Engineering
Systems Engineering

Degree

Associate in Science
Engineering Transfer Course

Credit Hours by Course Type

NCCCS

Engineering - 8
Math - 15
Physics - 8

University

Engineering - 7
Math - 12
Physics - 8

Western Carolina University

1 University Way
28723 Cullowhee, NC

Contact:

Dr. Robert Adams
Department Head
Department of Engineering and
Technology
828-227-2153

radams@wcu.edu

www.ncengineeringpathways.org/university

Engineering Areas

Electrical Engineering
General Engineering

Degree

Associate in Science
Engineering Transfer Course

Credit Hours by Course**Type****NCCCS**

Engineering - 8
Math - 12
Physics - 8

University

Engineering - 8
Math - 12
Physics - 8