Catalog of Pathways into Western North Carolina's Green Economy

Prepared for the YWCA of Asheville and Green Opportunities

By Erin P. Condo April, 2011



Project Partners



eliminating racism empowering women

VVC3



Table of Contents

Introduction	3
A-B Tech Air Conditioning, Heating, and Refrigeration Technology	4
A-B Tech Construction Science	5
A-B Tech Electrical/Electronics Technology	6
A-B Tech Engineering and Applied Technology	7
ABCCM Green Jobs Program	8
The Ashevillage Institute	9
Blue Ridge CC Air Conditioning, Heating, and Refrigeration Technology Program	10
Blue Ridge Community College Sustainability Program	11
The Global Institute for Sustainability Technologies	12
Green Opportunities (GO)	13
Haywood Community College Advanced Technologies	14
Home Energy Partners	15
Mountain Area Job Link	16
UNCA Department of Environmental Studies	17
Warren Wilson College: Business and Economics Degree	18
Warren Wilson Environmental Leadership Center	19
Warren Wilson College of Environmental Studies	20
Western North Carolina Green Building Council	21
YWCA New Choices	22

Catalog of Pathways into Western North Carolina's Green Economy

This catalog is part of a study examining the inclusiveness of the green economy with respect to women and people of color in Western North Carolina's Green Economy, sponsored by Green Opportunities and the YWCA of Asheville in partnership with the Western North Carolina Green Building Council, and funded by the Z. Smith Reynolds Foundation and the Women For Women Foundation.

Recent focus on strengthening the green economy holds promise in Western North Carolina. Green collar jobs represent an exciting new category of workforce opportunities because they are relatively good jobs, often providing a living wage, health benefits, a flexible schedule, and meaningful work.

One of the major challenges to staffing the green economy is the lack of technical skill of its potential employees. Job training specific to green jobs and technology is essential to bridging the gap between employers and potential green employees.

This catalog provides an overview of local training opportunities related to green jobs. While some listings in this directory are specific to green jobs, other training opportunities are more general in scope—such as electrician and heating, ventilation, and air conditioning (HVAC)—but still can lead to a green collar job as the skills learned are essential to the green building and energy efficiency industries.

Included in this guide are profiles from a number of technical and community colleges, non-profit organizations, and institutes of higher learning.

Each profile provides contact information as well as organizational mission and program description, eligibility requirements, degree and certification offerings, costs, and pathways and partnerships. Program information provided is relevant for 2011. The programs are listed in alphabetical order.

This catalog is intended to provide a broad overview of the green training opportunities available in Western North Carolina. Although it is part of a broader research project related to those with barriers to employment, the profiles are useful for everyone looking

A-B Tech Air Conditioning, Heating, and Refrigeration Technology

Name and Hosting Institution

Asheville-Buncombe Technical Community College

Key Contacts

William W. Wells, Chairperson

Address

340 Victoria Rd Asheville, NC 28801

Website

abtech.edu

Email

bwells@abtech.edu

Phone Number

828.254-1921 x222

Mission, Focus, and Impact

The Air Conditioning, Heating, and Refrigeration Technology curriculum, provides the basic knowledge to develop skills necessary to work with residential and light commercial systems and cooling theory, electricity, controls, and safety.

Program Description

The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. In addition, the A.A.S. degree covers residential building codes, residential system sizing, and advanced comfort systems.

Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair, and/or installation of residential and light commercial systems. A.A.S. degree graduates should be able to demonstrate an understanding of system selection and balance, and advanced systems. Air Conditioning, Heating and Refrigeration Technology.

Eligibility Requirements

College application, High School transcripts, placement tests.

Does Program offer Degree or Certification?

A.A.S. degree in **Air Conditioning**, **Heating**, and **Refrigeration**.

Diploma offered in Air Conditioning, Heating and Refrigeration.

Certification offered in **Basic**, **Intermediate**, and **Advanced Air Conditioning**, **Heating**, and **Refrigeration**

Program Costs and Program Assistance

The program costs \$3200 or \$50 per credit hour.

A-B Tech Foundation Scholarships up to \$2,500 based on need, performance, program of study.

Financial Aid is available (financialaidoffice@abtech.edu)

Pathways and Partnerships

Air Conditioning, Heating, and Refrigeration
Technology is an essential part of the green building industry because it is concerned with thermal comfort, indoor air quality, and increased energy efficiency.
Graduates from this program can use these skills to enter the green workforce in the construction trades.

Partners include:

- A-B Tech Construction Sciences
- A-B Tech Industrial Sciences

A-B Tech Construction Science

Name and Hosting Institution

Asheville-Buncombe Technical Community College

Key Contacts

Heath Moody, Carpentry Instructor Ken Czarnomski, Construction Management Department Head

Address

340 Victoria Road Asheville, NC 28801 Dogwood Building Rm 180

Website

abtechconstructionscience.com

Email

hmoody@abtech.edu kczarnomski@abtech.edu

Phone Number

Heath Moody-- 254-1921 x 349 Ken Czarnomski--254-1921 x 225

Mission, Focus, and Impact

A-B Tech Construction Science is Asheville's own green building school, providing training programs in carpentry, construction management and/or cabinetry with a focus on green and sustainable techniques and innovations.

Program Description

The program offers certification and degree programs of different lengths in **Carpentry, Cabinetmaking,** and **Construction Management.** The program offers a number of classroom and hands-on projects and learning experiences.

Several graduates run their own businesses or have gone on to become licensed builders and general contractors. Job placement examples include project managers,

Eligibility Requirements

College application, High School transcripts, placement tests, physical.

Does Program offer Degree or Certification?

- Certification in Carpentry, Cabinetmaking, & Construction Management Technologies (15-17 credit hours/2 semesters)
- Diploma in **Carpentry** (42 credits/3-4 semesters)
- Associates Degree in Construction Management Technologies (73 credits/4+ semesters)

Program Costs and Program Assistance

\$3200 or \$50 per credit hour

A-B Tech Foundation Scholarships up to \$2,500 based on need, performance, program of study.

Construction Management Technology offers 6 scholarships.

Pathways and Partnerships

With its focus on green building, the Construction Science program provides a clear pathway into the green building industry.

Some program partners include:

- A-B Tech Global Institute of Sustainability Technologies
- Many local green employers
- Green Opportunities!

A-B Tech Electrical/Electronics Technology

Name and Hosting Institution

Asheville-Buncombe Technical Community College

Key Contact

Vernon Daugherty, Dean

Address

340 Victoria Rd Asheville, NC 28801

Website

http://abtech.edu

Email

vdaugherty@abtech.edu

Phone Number

828.254-1921 x220

Mission, Focus, and Impact

This curriculum is designed to train technicians for jobs in industry requiring knowledge of electrical and electro-mechanical systems installation, repair, and maintenance.

Program Description

Courses are designed to develop technicians competent in the practical applications of electrical/electronic theory and procedures for industrial machines and controls. Students learn electrical code requirements, to read blueprints and schematics, to determine repair procedures, and to make necessary repairs and/or adjustments.

Graduates will be prepared to maintain computer-based systems, programmable logic controllers, and solid state AC & DC drives that are now becoming commonplace in automation applications.

Eligibility Requirements

College application, High School transcripts, placement tests.

Does Program offer Degree or Certification?

- Associate in Applied Science (AAS) and a Diploma can be earned in Electrical/Electrical Wiring
- Certification is available for Electrical Wiring, Instrumentation and Control, and Building Automation and Controls.

Program Costs and Program Assistance

\$3200 or \$50 per credit hour

A-B Tech Foundation Scholarships up to \$2,500 based on need, performance, program of study.

Financial Aid is available (financialaidoffice@abtech.edu)

Pathways and Partnerships

Electricians are a vital part of the green building industry, installing solar panels and other efficient electrical systems.

A-B Tech Engineering and Applied Technology

Name and Hosting Institution

Asheville-Buncombe Technical Community College

Key Contacts

Vernon Daugherty, Dean

Address

340 Victoria Rd Asheville, NC 28801

Website

abtech.edu

Email

vdaugherty@abtech.edu

Phone Number

828.254-1921 x220

Mission, Focus, and Impact

The Engineering and Applied Technology division offers a variety of Associate in Applied Science degree programs in engineering technologies and applied technologies.

Program Description

Students enrolled in this division are provided with a mix of theory and hands-on applications. Students in the diploma programs spend much of their time working under industrial shop conditions. Modern facilities include well-equipped laboratories and shops to support goals of the programs. Emphasis is placed on student proficiency in the use of procedures, equipment, and instruments related to the specific program area. Appropriate related and general education courses support these applied programs.

Eligibility Requirements

College application, High School transcripts, placement

Does Program offer Degree or Certification?

An A.A.S. degrees are offered in Electrical/Electronics Technology, Electronics Engineering, Construction Management, and Sustainable Technologies.

A Diploma is offered in Air Conditioning, Heating and Refrigeration, Carpentry, and Electrical/Electronics Technology.

A Certification is offered in **Basic**, **Intermediate**, and **Advanced Air Conditioning**, **Heating**, and **Refrigeration**, **Basic Carpentry**, **Basic Cabinetry**, **Construction**

Program Costs and Program Assistance

The program costs \$3200 or \$50 per credit hour.

A-B Tech Foundation Scholarships up to \$2,500 based on need, performance, program of study. Financial Aid is available (financialaidoffice@abtech.edu)

Pathways and Partnerships

Electricians are a vital part of the green building industry, installing solar panels and other efficient electrical systems. Air Conditioning, Heating, and Refrigeration Technology is also a pathway into the green economy, because it is concerned with thermal comfort, indoor air quality, and increased energy efficiency.

Graduates from these programs can use these skills to enter the green workforce in the construction trades.

The Engineering and Applied Technology program partners with the A-B Tech Small Business Incubator for those starting or managing their own business.

ABCCM Green Jobs Program

Hosting Institution

Asheville Buncombe Community Christian Ministry

Key Contact

Susan Garrett

Address

1401 Tunnel Rd Asheville, NC 28805

Website

abccm.org

Email

green.jobs@abccm.org

Phone Number

828/259-5333

Mission, Focus, and Impact

ABCCM offers crisis, jail, homeless, and medical ministry as well as job placement assistance for qualifying individuals with the goal of engendering positive work habits and life skills.

Program Description

ABCCM provides training and case management services both in-house and through contracts with other community organizations to provide training as a Weatherization Technician, Solar Thermal Installer, LEED Green Associate, and Biofuels Technician.

Eligibility Requirements

Participants must live in a target Asheville neighborhood and be at least 18 years old. Participants must also meet any one of the following four criteria: be unemployed or low income or have a criminal record or lack a high school diploma. Qualifying veterans are given priority for services.

Does Program offer Degree or Certification?

Through contracts with other community organizations, ABCCM provides certificates for **Weatherization Technician**, **BPI**, **Biofuels TEchnician**, **LEED Green Associate**, and **Solar Thermal Installer**.

Program Costs and Program Assistance

The program is free for qualifying participants in the Weatherization Technician and Biofuels Technician tracks. There are scholarships available based on need, level of motivation and experience for the LEED Green Associate and Solar Thermal Installer tracks.

Pathways and Partnerships

ABCCM contracts with local companies and community organizations to provide green jobs training for those with barriers to employment. Its main partners include:

- Green Opportunities (GO!) provides weatherization training.
- Blue Ridge Biofuels provides biofuels training.
- AB Tech and Green Brothers provide **solar installation** training.
- Home Energy Partners provides the LEED Associate training.

The Ashevillage Institute

Hosting Institution

Kleiwerks International

Key Contacts

Janell Kapoor Brandy Hall

Address

80 Buchanan Ave Asheville, NC 28801

Website

www.ashevillage.org

Email

info@ashevillage.org brandy@ashevillage.org

Phone Number

828/255-8820 434/284-3057

Mission, Focus, and Impact

The Ashevillage Institute creates sustainable living solutions through education, demonstration and action.

Program Description

Ashevillage provides various courses related to sustainability, natural building, local food production and permaculture design. Education includes hands-on learning on a living permaculture design site as well as some classroom discussion and lectures.

Ecological Leadership Training is a full-time experiential program that includes Permaculture Design Certification, site management and design, an independent learning project, and a 6-week placement with a local organization.

Ashevillage also offers a **Permaculture Design** certification course, a series of hands-on sustainability workshops varying from **Natural Building**, **Wild Food & Fermentation**, and **Non-Violent Communication**.

The site itself is a demonstration project that features aquaculture, a greenhouse, an edible and medicinal landscape, compost systems, and more. Tours and volunteer opportunities are available.

Eligibility Requirements

A simple application process is required for the **Ecological Leadership Training.**

Does Program offer Degree or Certification?

Ashevillage offers a **Permaculture Design Certification**.

Program Costs and Program Assistance

The Permaculture Design Certification costs \$1,250. The Ecological Leadership Training costs \$8,000. Hands-on 1-3 day sustainability workshops cost \$140.

All programs offer some community sponsorships, work-trade opportunities and payment plans.

Pathways and Partnerships

Ashevillage has multiple partnerships with community organizations and local homesteads that serve as demonstration and training sites for program participants.

Blue Ridge CC Air Conditioning, Heating, and Refrigeration Technology Program

Hosting Institution

Blue Ridge Community College

Key Contacts

James Hutcherson 828/694-1837 jamesh@blueridge.edu

Monique Eaker, Solar & Weatherization 828/694-1744 moniquee@blueridge.edu

Ruth Kidd, Environmental & Safety Training 828/694-1744 ruthk@blueridge.edu

Address

180 W. Campus Dr Flat Rock, NC 28731

Website

www.blueridge.edu/curriculum/environmentalscience

Mission, Focus, and Impact

The Environmental Science
Technology curriculum is
designed to prepare individuals
for employment in environmental
testing/consulting and related
individuation of man's impact on

Program Description

Course work in **Environmental Science Technology** includes general education, computer applications, biology, chemistry, industrial safety, and an extensive array of detailed environmentally specific classes.

A certificate program in **Sustainable Technology** is also offered.

Classes in Weatherization, Thermal Solar Installation, Photovoltaic Renewable Technologies, and Health and Safety Training are offered through Continuing Education and Workforce Development.

The Small Business Center offers Green Business

Eligibility Requirements

Placement tests, application, High School Diploma/equivalent.

Does Program offer Degree or Certification?

This program offers an Associate of Applied Science (A.A.S.), a diploma, and/or a certificate in **Environmental Science Technology**.

A Certificate is offered in **Sustainable Technology.**

Program Costs and Program Assistance

Tuition is \$56.50 per credit hour with a maximum tuition of \$904 per semester for North Carolina residents.

Financial Aid is available.

Pathways and Partnerships

Graduates in Environmental Science Technology should qualify for numerous positions within the industry. Employment opportunities include, but are not limited to, the following: Chemical Analysis, Biological Analysis, Water/Wastewater Treatment, EP Compliance Inspection, Hazardous Material Handling, Waste Abatement/Removal, and Contaminated Site Assessment/Remediation.

Blue Ridge Community College Sustainability Program

Hosting Institution

Blue Ridge Community College

Key Contacts

James Hutcherson 828/694-1837 jamesh@blueridge.edu

Monique Eaker, Solar & Weatherization 828/694-1744 moniquee@blueridge.edu

Ruth Kidd, Environmental & Safety Training 828/694-1744 ruthk@blueridge.edu

Address

180 W. Campus Dr Flat Rock, NC 28731

Website

www.blueridge.edu/curriculum/environmentalscience

Mission, Focus, and Impact

The Environmental Science
Technology curriculum is designed
to prepare individuals for
employment in environmental
testing/consulting and related
individuation of man's impact on

Program Description

Course work in **Environmental Science Technology** includes general education, computer applications, biology, chemistry, industrial safety, and an extensive array of detailed environmentally specific classes.

A certificate program in **Sustainable Technology** is also offered.

Classes in Weatherization, Thermal Solar Installation, Photovoltaic Renewable Technologies, and Health and Safety Training are offered through Continuing Education and Workforce Development.

The Small Business Center offers Green Business

Eligibility Requirements

Placement tests, application, High School Diploma/equivalent.

Does Program offer Degree or Certification?

This program offers an Associate of Applied Science (A.A.S.), a diploma, and/or a certificate in **Environmental Science Technology**.

A Certificate is offered in Sustainable Technology.

Program Costs and Program Assistance

Tuition is \$56.50 per credit hour with a maximum tuition of \$904 per semester for North Carolina residents.

Financial Aid is available.

The costs of green business workshops vary.

Pathways and Partnerships

Graduates in **Environmental Science Technology** should qualify for numerous positions within the industry. Employment opportunities include, but are not limited to, the following: Chemical Analysis, Biological Analysis, Water/Wastewater Treatment, EP Compliance Inspection, Hazardous Material Handling, Waste Abatement/Removal, and Contaminated Site Assessment/Remediation.

The Global Institute for Sustainability Technologies

Hosting Institution

Asheville-Buncombe Technical Community College

Key Contacts

Jonathan Snover PhD, Director.

Address

340 Victoria Rd Asheville, NC 28801

Website

http://abtech.edu

Email

jsnover@abtech.edu

Phone Number

828/254-191 ext. 5858 or ext. 7637

Mission, Focus, and Impact

The Global Institute for Sustainability Technologies trains the green collar workforce, helps develop new clean energy businesses, cultivates and supports existing green businesses and promotes clean energy technologies and green businesses.

Program Description

The **GIST** coordinates the 2-year Sustainable Technologies program designed to prepare students for employment in environmental, construction, alternative energy, manufacturing, or related industries where key emphasis is placed on energy production and waste reduction along with sustainable technologies.

Eligibility Requirements

College application, High School transcripts, placement tests.

Does Program offer Degree or Certification?

Associate in Applied Science (AAS) in Sustainable Technologies.

Program Costs and Program Assistance

\$3200 or \$50 per credit hour

A-B Tech Foundation Scholarships up to \$2,500 based on need, performance, program of study.

Financial Aid is available (financialaidoffice@abtech.edu)

Pathways and Partnerships

Graduates should qualify for positions within the alternative energy, construction, environmental, and/or manufacturing industries.

Some partners include:

- A-B Tech Construction Science
- Green Opportunities

Green Opportunities (G0)

Key Contacts

Anthony Beurskens, **GO Training Team**

tony@greenopportunities.org

Torin Kexel, **Go WATT** torin@greenopportunities.org

Anthony Thomas, **Green Jobs** anthony@greenopportunities.org

DeWayne Barton, **Hood Huggers** blove@greenopportnities.org

Go Energy Team

energyteam@greenopportunities.org

Address

133 Livingston St Asheville, NC 28801

Website

www.greenopportunities.org

Phone Number

828/398-4158

Mission, Focus, and Impact

Green Opportunities (GO) is an Asheville-based, community-based development organization dedicated to improving lives, communities and the health of the planet through innovative green collar job training and placement programs.

GO is committed to empowering low-income neighborhoods in Asheville by preparing residents for well-paying jobs, completing hands-on projects that make these neighborhoods safer and more sustainable, and linking the residents to jobs and other community resources that lead to greater empowerment.

Program Description

The **GO Training Team** is a paid pre-apprenticeship program that includes life skills training, service-learning projects, apprenticeships, community college coursework, and mentoring.

The GO Weatherization Assistance Training Team (WATT) is a paid apprenticeship program where participants work in the community providing free energy audits and weatherization services and gain on-the-job training.

Pathways to Green Jobs partners with the Asheville-Buncombe Community Christian Ministry to train and place eligible adults in clean energy jobs while receiving life skills training, case management, and technical certifications.

Hood Huggers, International is an after school program designed to introduce elementary, middle, an high school students from low-income neighborhoods to green collar careers through green service-learning projects.

The GO Energy Team is a building performance business

Eligibility Requirements

GO programs serve individuals from low to moderate income households in target Asheville neighborhoods who have one or more barriers to employment.

Does Program offer Degree or Certification?

OSHA 10-hour construction safety certification, Building Performance Institute (BPI)-Air Sealing Technician certification, and CPR/First Aid training are offered.

Program Costs and Program Assistance

All GO programs are free and some are paid. Programs also offer case management and support services.

Pathways and Partnerships

Green Opportunities has a number of community and business partners that help facilitate service-learning projects, support services on-the-job training, and the transition into the green collar work force.

Haywood Community College Advanced Technologies

Hosting Institution

Haywood Community College

Key Contact

John Mark Roberts

Address

185 Freelander Dr. Clyde, NC 28721

Website

haywood.edu

Email

jroberts@haywood.edu

Phone Number

828/627-3606

Mission, Focus, and Impact

The Advanced Technologies
Department is dedicated to handson and personal instruction of
vocational-technical skills for
students of all ages to qualify for
jobs today.

Program Description

Students in Advanced Technologies programs at Haywood Community College gain technical skills through on-site labs and state-of-the-art equipment. From volunteer community projects, students work on real life projects using hands-on-skills.

The **Building Construction** degree offers a Green Building concentration and includes the following areas of study: general construction, estimating, project management, electrical wiring, construction surveying, plumbing, statics/strength of materials, and HVAC.

Other degree programs in this department include: **Electronics Technology, Industrial Systems,** and

Eligibility Requirements

High school diploma/equivalent or placement tests and participation in the Adult Basic Skills program, an application. Certificate programs do not require high school diploma.

Does Program offer Degree or Certification?

Graduates earn an Associates of Applied Science (A.A.S), diploma, or certificate in **Building Construction Technology**, **Electrical/Electronics Technology**, and **Automotive Systems**.

A certificate is offered for the **Green Building Concentration** in Building Construction Technology.

Program Costs and Program Assistance

Tuition is \$56.50 per credit hour or a maximum of \$906 per semester. Financial Aid is available. There is some assistance available for on-site childcare.

Pathways and Partnerships

Degrees and certifications in **Building Construction**, **Electronics Technology, Industrial Systems**, and **Automotive Systems** prepare students for the jobs in the green building, clean energy, and biofuels industries.

The **Green Building Concentration** provides specific training needed in the green building industry.

Home Energy Partners

Key Contact

Isaac Savage

Address

167 Haywood Rd Asheville, NC 28806

Website

homeenergypartners.com

Email

isaac@homeenergypartners.com

Phone Number

828/350-1155

Mission, Focus, and Impact

To provide comprehensive training and education to prepare for certification tests such as the Home Energy Rating System (HERS) and Building Performance Institute (BPI) credentials.

Program Description

Home Energy Partners programs involve classes to prepare students for certification tests. The program targets professionals already in the building (new construction and retrofit) trade.

Trainings offered include the **Home Energy Rating System** and the **Building Performance Institute** certification classes.

Eligibility Requirements

Programs offered by Home Energy Partners are open to anyone.

Does Program offer Degree or Certification?

The training program offers **HERS** and **BPI** training and certification

Program Costs and Program Assistance

HERS training is \$1,400.

BPI training ranges from \$1,150 to \$2,295 depending on specialty (HVAC, Science, etc).

Pathways and Partnerships

BPI and HERS training are important certifications for those in the green building field, as they work to increase efficiency and building performance in homes.

Mountain Area Job Link

Hosting Institution

Buncombe County

Key Contacts

Helen Beck, Director

Address

340 Victoria Rd Maple Building, AB Tech PO Box 729 Asheville, NC 28802

Website

<u>buncombecounty.org/governing/depts/joblink/</u>

Email

helen.beck@buncombecounty.org

Phone Number

828/250-4760

Mission, Focus, and Impact

The purpose of Mountain Area Job Training Services is to provide job seekers and employers a single place to address their employment and training needs.

JobLink Career Centers provide access to a variety of employment and training services, programs, and referrals. These services are provided through the Mountain Area Workforce Development Board.

Program Description

Mountain Area Job Link is career readiness program offering basic skills training, career planning, career placement, and workshops for adults and youth.

Although training opportunities are not specific to green jobs, this program offers basic skills training and workshops relevant to those with barriers to employment.

Eligibility Requirements

Adult participants must be either an unemployed, underemployed, or dislocated worker.

Youth participants must be aged 16-21 and meet income eligibility requirements.

Does Program offer Degree or Certification?No.

Program Costs and Program Assistance

The program is free for participants.

Pathways and Partnerships

Job Link works with the following partners to provide career placement:

- A-B Tech Community College
- Division of Services for the Blind
- Vocational Rehabilitation
- Employment Security Commission
- Buncombe County DSS
- Community Action Opportunities
- Schenck Job Corps
- Workforce Investment Act

UNCA Department of Environmental Studies

Hosting Institution

University of North Carolina--Asheville

Key Contact

J. William Miller, Jr. Professor and Chair.

Address

1 University Heights Asheville, NC 28804

Website

www2.unca.edu/envr_studies

Email

drobbins@unca.edu

Phone Number

828-251-6441

Mission, Focus, and Impact

The Environmental Studies program at UNCA prepares students for graduate studies or for employment in government, education, industry, consulting, and nonprofit organizations.

Program Description

The curriculum addresses environmental issues from an interdisciplinary perspective that includes biology, ecology, geology, chemistry, physics, economics, public policy, and other natural and social sciences. The department offers students the opportunity to pursue one of three concentrations: Earth Science, Ecology and Environmental Biology, or Environmental Management and Policy. Individualized options can be developed for students interested in other areas of environmental studies. Integral to all degrees concentrations is an on-the-job internship, which allows students to make connections between academics and organizations involved with environmental

Eligibility Requirements

College application, SAT/ACT scores, High School Diploma/equivalent, transcripts, personal essay.

Does Program offer Degree or Certification?

Bachelor of Science in Environmental Studies.

Program Costs and Program Assistance

Tuition for a full-time student (12+ credit hours) is \$2386 for North Carolina residents.

Financial aid is available.

There are a number of scholarships specific to the Environmental Studies major.

Pathways and Partnerships

The UNCA Environmental Studies program works with local, state, and federal government agencies, non-profit organizations and businesses to provide internships. Graduation from this program leads to jobs related to environmental science, consultation, and education.

Warren Wilson College: Business and Economics Degree

Key Contact

Janice J. Jackson, Business Administration

Address

WWC CPO 6083 PO Box 9000 Asheville, NC 28815-9000

Website

www.warren-wilson.edu

Email

janice.jackson@warrenwilson.edu

Phone Number

828/771-3714

Mission, Focus, and Impact

The mission of the Business and Economics Department is to prepare and develop students as business and organizational workers and leaders with the skills and experience necessary to make decisions, solve problems, and devise policies that are socially, environmentally, and economically

Program Description

Studies are clustered around four basic areas of competence - the core of business and economics education. These competencies include quantitative/financial skills, people skills, knowledge of external environments, and strategic planning /integration skills.

Concentrations within this major include **General Business Administration**, **Entrepreneurship/Small Business Management**, **Non-Profit Management**, and **Sustainable Economic Development**.

All of these concentrations focus in environmental responsibility and sustainability.

Eligibility Requirements

High School Equivalency, transcripts, evaluation report form, personal essay, and recommendations.

Does Program offer Degree or Certification?

Bachelor of Science in Business and Economics

Program Costs and Program Assistance

The program costs \$25,626 per year for tuition only. Total cost including tuition and room and board total \$33,654 per year. Other fees apply.

Warren Wilson offers a variety of merit, work and service, and honor scholarships. The program offers two scholarships. Financial aid is available.

Pathways and Partnerships

Graduation from this program leads to jobs related to environmental science, consultation, and education.

The Business and Economics Department works with the Warren Wilson Environmental Learning Center to facilitate service-learning and work trade opportunities.

Warren Wilson Environmental Leadership Center

Name and Hosting Institution

Warren Wilson College

Key Contact

Margo Flood

Address

WWC CPO 6323 PO Box 9000 Asheville, NC 28815-9000

Website

www.warren-wilson.edu

Email

mflood@warren-wilson.edu

Phone Number

828/771-2002

Mission, Focus, and Impact

The mission of the ELC is to raise awareness of local, national and global environmental realities and to inspire caring citizens--especially our youth--to reflect, communicate, and to act as responsible caretakers of the earth.

Program Description

The ELC is integral to and supports the central mission of Warren Wilson College - to provide an education combining liberal arts study, work, and service, with a strong commitment to environmental responsibility and experiential opportunities for international and cross-cultural understanding in a setting that promotes wisdom, spiritual growth, and contribution to the common good.

The Environmental Leadership Center is determined to foster the dialog, develop the leaders, and apply the practices required to implement systemic change. Its vision is global, its focus is regional, and its initiatives are action-oriented and designed to address the most pressing environmental issues.

Eligibility Requirements

High School Equivalency, transcripts, evaluation report form, personal essay, and recommendations.

Does Program offer Degree or Certification?

Program participants can earn a Bachelor of Arts or a Bachelor of Science.

Program Costs and Program Assistance

The program costs \$25,626 per year for tuition only. Total cost including tuition and room and board total \$33,654 per year. Other fees apply.

Warren Wilson offers a variety of merit, work and service, and honor scholarships. Financial aid is available.

Pathways and Partnerships

The Warren Wilson Environmental Learning Center facilitates service-learning and work trade opportunities for multiple departments at the college.

Warren Wilson College of Environmental Studies

Key Contact

Mark Vincent Brenner

Address

WWC CPO 6061 PO Box 9000 Asheville, NC 28815-9000

Website

warren-wilson.edu

Email

mbrenner@warren-wilson.edu

Phone Number

828/771-3701

Mission, Focus, and Impact

The mission of the Environmental Studies Department is to provide an understanding of the applications of theory to problem solving through first-hand knowledge and field experience. We seek to help students learn not only the what and the how, but the why. Graduates are prepared for advanced study or to enter various job markets after completing their Bachelors Degrees.

Program Description

Warren Wilson offers a 4-year degree in Environmental Science with concentrations in Conservation Biology, Environmental Chemistry, Environmental Education, Environmental Policy, Sustainable Agriculture, and Sustainable Forestry.

The program integrates service, work, and academics.

Eligibility Requirements

High School Equivalency, transcripts, evaluation report form, personal essay, and recommendations.

Does Program offer Degree or Certification?

Program participants can earn a Bachelor of Arts or a Bachelor of Science.

Program Costs and Program Assistance

The program costs \$25,626 per year for tuition only. Total cost including tuition and room and board total \$33,654 per year. Other fees apply.

Warren Wilson offers a variety of merit, work and service, and honor scholarships. Financial aid is available.

Pathways and Partnerships

Graduation from this program leads to jobs related to environmental science, consultation, and education.

The Environmental Studies Department works with the Warren Wilson Environmental Learning Center to facilitate service-learning and work trade opportunities.

Western North Carolina Green Building Council

Key Contacts

Matt Siegel

Address

Po Box 17026 Asheville, NC 28816

Website

wncgbc.org

Email

info@wncgbc.org

Phone Number

828/254-1995

Mission, Focus, and Impact

WNCGBC is a 501C3 non-profit organization whose mission is to promote environmentally sustainable and health conscious building practices through community education.

Program Description

The **Green Professional Accreditation (GPA)** program requires 36 credit hours of green building education and a test for certification. The program can be completed in one year.

The WNCGBC offers workshops and certification training as part of its services including the **Home Energy Rating System (HERS)** training, a 5.5 day intensive program to provide the core skills needed to perform energy ratings.

WNCGBC also publishes the Green Building Directory (wncgreenbuilding.com) which provides an exhaustive list of local green businesses and resources.

Eligibility Requirements

Workshops and programs are open to anyone.

Does Program offer Degree or Certification?

The GBC offers the **Home Energy Rating Systems** (HERS) certification and the **Green Professional Accreditation** certification.

Program Costs and Program Assistance

The HERS certification class costs \$1,400. Other workshops vary from \$40-\$60.

Pathways and Partnerships

The WNCGBC is a good resource for those with green jobs training or who are already in the construction trades and are looking to green their business. It is also a good resource for networking with other green collar workers and professionals.

The WNCGBC partners with green businesses and professionals to provide trainings.

YWCA New Choices

Hosting Institution

YWCA of Asheville

Key Contact

Missy Summers, Director

Address

185 S. French Broad Ave. Asheville, NC 28801

Website

ywcaofasheville.org

Email

missy.summers@ywcaofasheville. org

Phone Number

828/254-7206 ext. 113

Mission, Focus, and Impact

This program is structured to assist our participants move out of financial crisis and put the essential components of stability in place so they can become more economically self-sufficient.

Program Description

New Choices offers case management for displaced homemakers. Participants create their own action plans with both short term and long term goals to move toward earning a greater income. Counseling, advocacy, and resource and referral are all key components of this program. Participants have a review at least every six months to review and set new goals.

Eligibility Requirements

New Choices is available to displaced homemakers, defined as an individual who:

- Does unpaid labor in the home (this includes caregiving for other family members, cooking, cleaning, and general household upkeep.
- Is unemployed, underemployed or in need of more education or training to secure gainful employment.
- · Has lost financial support from another household

Does Program offer Degree or Certification?No.

Program Costs and Program Assistance

The program is free. New Choices offers free drop-in child care for anyone in the community doing job training. There are also regular women's support group meetings open to any woman in the community.

Pathways and Partnerships

New Choices meets with clients about job training and placement and informs them about green jobs and green jobs training available to them. In the past, New Choices has worked with Green Opportunities to refer and counsel displaced homemakers going through their training program.

New Choices also acts as an advocate for women and minorities with barriers to employment in the community, ensuring that they are an ongoing part of green jobs creation and training.