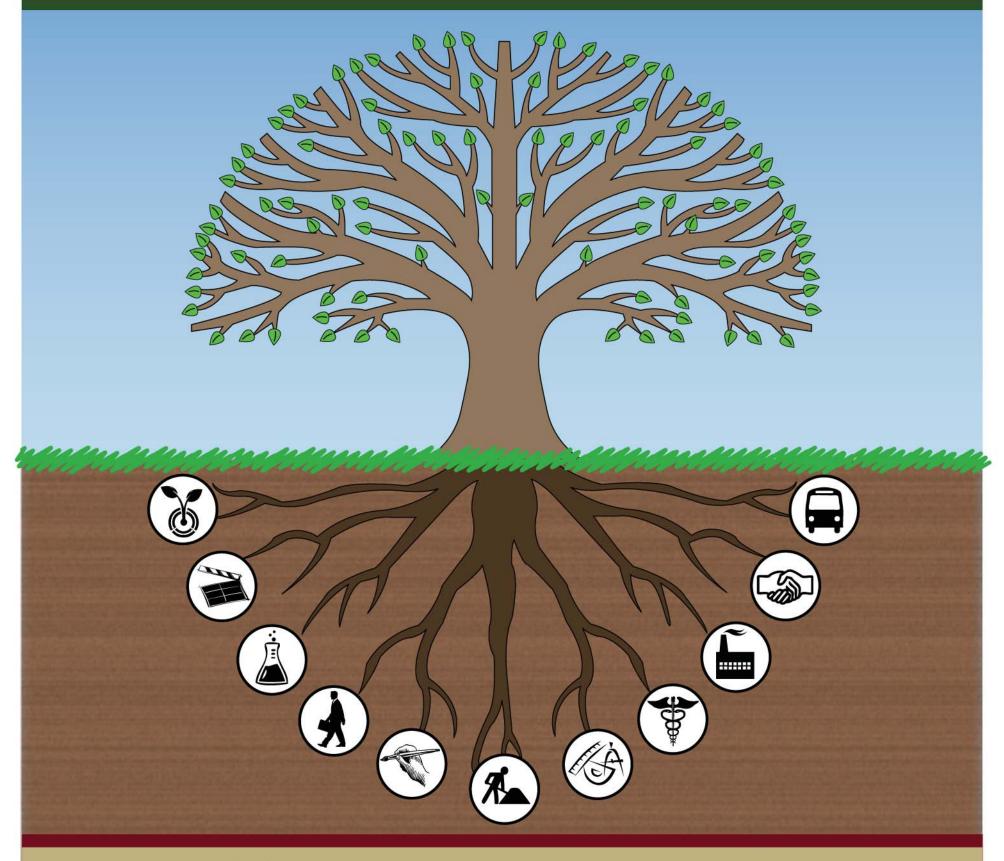


Number 25

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# Helping Careers Grow For 25 Years

# CAREER CHOICES

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### Employment Security Commission of North Carolina

Post Office Box 25903, Raleigh, North Carolina 27611 (919) 733-7546

Beverly Eaves Perdue Governor

Moses Carey, Jr.

Each year for the past 25 years, the Career Choices in North Carolina tabloid has become the tool of choice for career counselors, teachers, students and others across the state in exploring career possibilities.

May 18, 2009

Career counselors use the tabloid's self-assessment section to assist individuals in first learning about themselves before pursuing their dream jobs. Teachers consult the listing of career briefs to gauge which occupations will be in demand during the next 10 years so they can guide their students accordingly. And, students depend on information gleaned from the tabloid's various features — from budgeting income to profiles of people who are working in today's hot jobs.

The release of this 2009 edition is not only special because it's the 25th anniversary issue, but because of the economic climate that is in place. With daily headlines tallying the latest unemployment figures and job layoffs, the career information within Career Choices is more significant than ever. It reminds North Carolinians of the hope and bright future that lies ahead, especially with careers in education, health care and in "green" industries.

As our economy begins to regain strength and momentum, so will the career opportunities. What better way to prepare than by utilizing the self-awareness, career exploration and job search strategies available in Career Choices in North Carolina?

Let Career Choices help you be ready when opportunity comes your way.

Wishing you the best,

Misses Carey

Moses Carey





State of North Carolina Office of the Governor

April 24, 2009

Dear Friends,

Beverly Eaves Perdue

Governor

One of the most exciting journeys you will make in your lifetime is exploring the countless possibilities of available careers. For some of you, the journey is relatively short — you have known from an early age what you want to do. But for most, career exploration is a lifelong journey that begins with discovering your skills and talents, and then investigating various occupational pathways that showcase your strengths and abilities.

For 25 years, Career Choices in North Carolina has been a tool that has helped guide thousands of North Carolinians down the right path to interesting and satisfying careers.

The 2009 edition, while providing resources for identifying your interests and strengths, as well as interviewing skills and résumé tips, briefly showcases more than 285 careers, highlighting the necessary education, salary and future outlook for each occupation.

As both a former public school teacher and a health care administrator, I believe we never stop learning and that many of us will experience several career changes throughout the course of our lives. Whether you are a student, a recent graduate or someone who is considering switching careers, Career Choices in North Carolina can help you find the career that is right for you.

With kindest regards, I remain

Sincerely yours,

Seu Bev Perdue



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# CAREER PLANNING & MANAGEMENT

Career management is planning for a lifetime of change in the world of work as well as changes within yourself. Career management requires learning how to adjust to change, resolve difficulties and seize the challenges and opportunities that come our way. Managing our careers involves managing our lives, taking risks, learning new skills and adapting to new work environments, occupational demands and technological advances.

Equipping yourself with career management skills will allow you to make effective career choices throughout your lifetime. You will need to learn ways to cope with ongoing change while finding work you enjoy that provides you with monetary and personal satisfaction. The cornerstones of career management are the following "High Five" principles from The Real Game Series<sup>TM</sup>:

- Know yourself, believe in yourself and follow your heart.
- Focus on the journey, not the destination. Be a good traveler.
- Access your allies and be a good ally. You are not alone.
- Change is constant and brings with it new opportunities.
- Learning is lifelong. Learning opens the doors to future opportunities.

# Keep the "High Five" principles in mind as you plan your career:

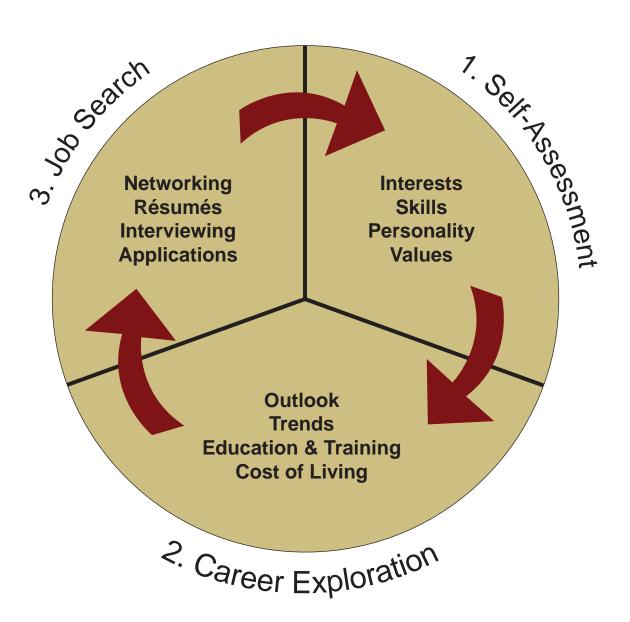
**1. Self-Assessment -** Know yourself and what makes you unique. What do you have to offer a business, organization, agency or society? Ask yourself:

- What do you like to do?
- What skills do you have or wish to develop?
- What is important for you to accomplish in your career and lifetime?
- What element(s) of your personal style, values, temperament or other characteristics may determine a good occupational fit for you?

The key to self-assessment is learning how to build and maintain a healthy self-image. This includes learning how to interact positively and effectively with others and looking for ways to change, grow and develop throughout your life.

**2. Career Exploration -** Investigate occupational pathways that are available currently or are projected to have a high demand in the future. Consider all possible occupations:

- Attend career fairs at your school or in your community.
- Ask everyone you know what they do, then ask yourself if that work is of interest to you.
- Research occupations on the Internet, in career centers and libraries. Notice the trends and find occupations' outlook for growth. Identify what training and education are needed to enter fields of interest.



Career exploration encompasses understanding the relationship between work and society. Good career explorers know how to research, locate and use career information to make good career decisions throughout their lives.

**3. Job Search -** Apply to training programs and educational settings required for the occupations of your choosing, and begin your job search strategy. Job search skills include how to:

- Network to learn where opportunities are available.
- Write effective résumés and cover letters that get results.
- Complete job applications accurately.
- Interview with confidence and determination.

Job search strategies involve learning how to find work and obtaining the education and training needed to be considered for specific occupations. Today's and tomorrow's workers need to participate in lifelong learning to continue to be employed. Sometimes workers may find that periods of unemployment provide time to update their job-seeking skills and to obtain additional education.

Contributed by Barbara Efird, MEd., NCC, LPC Director of Career Services Peace College, Raleigh, NC

Adapted from The Real Game Series TM by William Barry

# SELF-ASSESSMENT

Self-assessment is the ongoing process of evaluating specific types of information about yourself. Knowing who you are and what makes you tick will help you find a career that suits you. Examine the following areas:

**Interests** - Who am I, and what do I love to do? What am I passionate/excited/curious about? What occupations will allow me to pursue and express my interests?

**Skills** - What are my special skills and talents? What abilities do I have naturally? What kinds of things seem easy for me to learn or do? What occupations will allow me to use and expand these abilities?

**Personality** - Where do I fit in this world? How do I relate to other people? Do I prefer to work with a team or independently? What occupations offer the type of work environment in which I could be successful? What products and/or services are needed in the marketplace that connect with who I am?

**Values** - What motivates me? What do I care about? What do I see as my role and purpose in life? What occupations will help me reach career and life goals that match my values?

Assessing your unique personal qualities will help you determine which occupations will challenge you to grow and develop successfully, creating new possibilities for you throughout your lifetime. Because people change over time, it is important for everyone to re-assess themselves periodically in relation to their career choices. To learn more about self-assessment, visit *www.ncsoicc.org*.

The following tools can help you discover more about yourself.

## People, Data, Things and Ideas

Occupations with similar work tasks are often grouped together. Like the Holland Code, most occupations usually encompass more than one type of work or task. However, you can classify occupations according to workers' primary responsibilities, then determine their second and third most important work tasks.

Another method of classifying occupations is to look at whether workers deal primarily with **people**, **data**, **things** or **ideas**.

People and careers often fall into more than one category. You are probably suited for two or three categories. Use the Holland system to expand your options, then look for related occupations in the Career Briefs section of this publication.

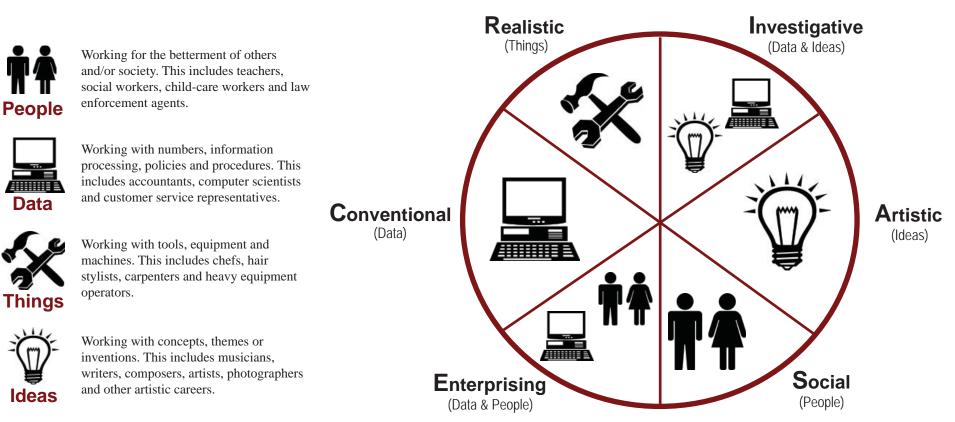
## Your Holland Code

The Holland Code was developed by Dr. John Holland and is widely used by career counselors and individuals. The theory explores six distinct personality types and six distinct work environments that relate to those personality types. Read the descriptions on the next page and see which types describe you.

First, choose which personality type defines you the best. Next, choose which would be second most like you and then third. Take the first letter of each category — R, I, A, S, E, C — to form your Holland Code. Write the letters in the spaces below:

You can now start exploring careers that have the same or similar codes. Look at careers that contain the same letters as your Holland Code, even if they are in a different order than yours. In the Career Briefs section (pages 10-31), there is a column labeled "HC." Look in this column to see what occupations match your Holland Code.

The RIASEC model of occupations is the copyrighted work of Dr. John L. Holland and his publisher, Psychological Assessment Resources Inc. (PAR).



# SELF-ASSESSMENT

## Realistic (R)

*Realistic People* like to work with machines, and they often like to work with their hands to build things. Their skills include having mechanical know-how, stamina to work outdoors and the ability to operate machinery. They are often practical, love nature and are good problem solvers. They like working with **things** and tools in occupations such as civil engineer, broadcast technician, landscape worker or barber.

- \_\_\_\_\_ Do you like to work outdoors?
- \_\_\_\_\_ Do you like to work on machinery/ equipment?
- \_\_\_\_\_ Do you have mechanical abilities?
- Are you skilled in carpentry or building things?
- \_\_\_\_\_ Are you considered a practical person?

### **Realistic Careers**

Surgical Technologist Correctional Officer Lineman Heavy Truck Driver Carpenter Fire Fighter Machinist Automobile Mechanic Pest Control Worker

*Social People* enjoy helping others and the community. They have skills in teaching, counseling and getting along with others and are sensitive to others' needs. They are cheerful, scholarly and verbally oriented. They like working with **people** in occupations such as teacher, home health aide or security guard.

Social (S)

- \_\_\_\_\_ Do you like to teach children or adults?
- \_\_\_\_\_ Do you like to help others solve problems?
- \_\_\_\_\_ Do you like to care for sick people?
- \_\_\_\_\_ Are you interested in community service?
- Are you an understanding and sympathetic person?

### **Social Careers**

Nurse Personal Aide Physical Therapist Teacher Assistant Dental Hygienist Rehabilitation Counselor Aerobics Instructor Pre-school Administrator Special Ed. Teacher Paramedic

## Investigative (I)

*Investigative People* like to explore ideas and analyze data. They have skills in math and science. Inquisitive, precise and sometimes abstract thinking are characteristics of their personality. They usually like working with **data and ideas** in occupational fields such as medicine, computer programming and science technologies.

- \_\_\_\_ Do you like math and science classes?
- \_\_\_\_\_ Do you like to solve technical problems?
- \_\_\_\_\_ Do you have an interest in medicine?
- \_\_\_\_\_ Are you competent with computer
  - applications or programming?
  - \_\_\_\_ Are you inquisitive and curious by nature?

## **Investigative Careers**

Conservation Scientist Computer Programmer Microbiologist Forensic Science Tech. Pharmacist Chemist Biomedical Engineer Food Scientist Veterinarian Management Analyst

# Artistic (A)

*Artistic People* like to create, sing, dance or write and prefer an unstructured work environment. They have skills in music, art and/or communication. They value aesthetic qualities and are more likely to relate by indirect means through their medium. They like working with **ideas** in occupations such as technical writer, musician, interior designer or architect.

- Do you like music, drama or art classes?
- Do you like writing stories or poems?
- Can you play a musical instrument?
- \_\_\_\_\_ Are you a talented actor?
  - Are you a creative person?

### **Artistic Careers**

Commercial DesignerCosReporterEditComposerArchGraphic DesignerAuthFilm EditorPho

Cosmetologist Editor Architect Author Photographer

## **Enterprising (E)**

*Enterprising People* like to persuade and influence others in areas of business or politics. They perceive themselves as popular, self-confident and social. They are skilled in public speaking and leadership. Enterprising types like working with **people and data** in occupations such as compensation and benefits specialist, interpreter/translator, judge or attorney.

- \_\_\_\_ Do you like competitive events or challenges?
- Do you like to influence others?
- Do you have the ability to sell products or services?
  - \_\_\_ Do you motivate others?
  - \_\_\_\_ Are you results oriented?

### **Enterprising Careers**

Travel Agent Real Estate Sales Agent Sales Manager Marketing Manager Optician Farm Manager Dir., Religious Education Lawyer Construction Manager Loan Counselor

## **Conventional (C)**

*Conventional People* like an organized and detailoriented work place. They are often skilled in finance, mathematics and keyboarding and see themselves as conforming, organized and practical. They like working with **data** in occupations such as accountant, bank teller, computer support specialist or administrative assistant.

\_\_\_\_\_ Do you like working with numbers or data?

- \_\_\_\_\_ Do you like word processing or data input?
- Are you accurate with numbers, data and information?
- Do you like to reconcile bank statements? Do you have the ability to handle details?

### **Conventional Careers**

AuditorStatisticianDispatcherParalegalBill CollectorCashierReal Estate AppraiserLibrary AssistantMedical Records Tech.Receptionist

# WORK-BASED LEARNING

Now that you've identified occupations that may fit your characteristics and abilities, it's time to explore the possibilities. Gather information about many occupations. Compare your interests, skills, personality and values with those in occupations that interest you. Consider work-based learning such as an apprenticeship to gain more knowledge about your career options.

## Explore and Get Valuable Experience Through Work-Based Learning

Getting experience, while exploring career options, will give you a head start on your future career. Take advantage of opportunities to "try out" a career through work-based learning programs, summer or part-time jobs or as a community volunteer. Your local school or college will offer some or all of the programs noted here. You'll find others by searching the Internet and by contacting community businesses and organizations.

Work-based learning is also appropriate if you want or need to change careers. For example, volunteering activities can help you connect with others in your community. You get a sense of accomplishment and fulfillment while also gaining or using your skills and building your job search network. You may be surprised at who you'll meet and the opportunities that can arise from being a volunteer.

Here are a few ways you can get involved in work-based learning:

- Job Shadowing programs usually involve going to work for one or several days with someone whose career interests you. You can observe tasks and skills required for the job, experience the work environment and interact with people who currently work in your potential career field.
- *Internships* usually last for a couple of weeks to several months. You not only observe individuals in your career field of interest, but also get a chance to perform some of the job tasks and duties. Internships may officially, or unofficially, incorporate mentoring by an experienced career professional who can support your career decisions and goals. Internships can be paid or unpaid and may be eligible for academic credit at a high school or college.
- Cooperative Education and School-Based Enterprises can easily become part of your high school and/or college program by integrating academics and vocational curricula and providing work-related experiences, often at an employer's job site.
- *Apprenticeships* offer a combination of academic instruction, structured vocational training and paid work experience, usually lasting one to two years. These programs are offered through employers in collaboration with the N.C. Department of Labor and the N.C. Department of Public Instruction. **Important Note for Military Veterans:** Some veterans and certain members of the Reserve/National Guard may be eligible for educational assistance for state-approved apprenticeship training in addition to their VA benefits. To determine if you are eligible for GI benefits, contact the Department of Veterans Affairs at 1-888-GIBILL-1 (1-800-442-4551) or visit *http://www.gibill.va.gov*.
- *Volunteering* is an excellent way to learn about a career possibility while developing new skills or applying existing skills. Volunteer opportunities are available everywhere—schools, businesses, hospitals, government agencies and community and nonprofit organizations.

Participating in work-based learning opportunities will give you the edge when applying for new jobs. Not only will you gain valuable work experience, but it also offers a world of networking opportunities—the best way to meet potential employers and other people who can provide job referrals. Get to work and start building your résumé today!

### **Profile: Volunteer Career Advisor**

Sometimes people find their true professional calling while working in a different career. For instance, a customer service manager for a company might realize that what she enjoys most about her job is the hiring process, a work-based revelation that results in deciding to become a recruiter.

Likewise, sometimes a person who has found her vocation chooses to volunteer her professional skills to help others in her community. Finding a fulfilling position as a recruiter might lead an individual to volunteer to help others gain the job search skills they need.

In this case, Candace Aldridge has managed to do both.

For the past two years, Aldridge has been recruiting candidates for available positions at Southern Community Bank and Trust in Winston-Salem. As a recruiter, Aldridge finds viable candidates through Internet searches, job boards, networking, job fairs and résumés that she has received from job postings. She also interviews candidates, conducts background checks and assessments and negotiates offers of employment.

The road to becoming a recruiter began in 1996 for Aldridge when she returned to school at the University of North Carolina at Greensboro and earned her bachelor's degree in psychology. "Psychology has been very useful

> in identifying the best candidate for a job, and in gaining insight into what makes people tick and what personalities excel in different occupations," Aldridge said.

From there, Aldridge worked as an entry-level recruiter for two years and then earned her Certified Personnel Consultant designation. Although it's not necessary to become certified, Aldridge said more employers are choosing to work only with certified recruiters because they are better versed in employment law, best practices, procedures and ethics, which are essential in this line of work. Away from work, Aldridge frequently volunteers at the Triad Job Search Network (*http://tjsn.net/default.aspx*) in Winston-Salem, where she advises job seekers on rèsumè preparation, interviewing and networking skills. She also gives presentations and workshops to help participants with their job search plans.

"I get personal satisfaction from knowing that my knowledge and networking skills have helped many who have lost their jobs find new jobs," said Aldridge. "There have been so many who have been impacted by the downturn of the economy. If my efforts result in employment for an individual, then I have made a difference and that feels good."

Aldridge advises job seekers to take personal development courses or self assessments to learn about themselves and how to relate to people. She also suggests developing communication skills — both verbal and written. "In today's competitive job market, presenting a professional demeanor and having great human relations and communication skills may make or break a person's chances of landing the job of their dreams," Aldridge said.



# WORK & LIFESTYLE

No matter how much — or how little — money you make in your chosen career, you'll need to know how to manage your finances. Knowing how to set priorities on spending will help you live the kind of lifestyle you desire, regardless of income level. In fact, budgeting is an important life skill that everyone needs to learn.

## The Cost of Living

The cost of living determines how much buying power your salary has, and it can vary widely across the state and across the country. Keep this in mind when job hunting: *Where* you live can make a big difference in *how* you live.

For example, if you want to rent a two-bedroom, unfurnished apartment in Raleigh, it will cost you about \$573 a month. That same apartment in Asheville will cost \$791— a \$218 difference. The chart on the right compares costs of other common items in different areas of North Carolina and other parts of the country.

## "Budget" Is Not a Four-Letter Word

What can you afford to spend on an apartment? Can you afford to buy a new car? How can you save enough money to go to the beach next summer? The simplest way to find out is to make—and stick to—a budget.

A budget is a money plan. With it you can organize and control your finances, plan for future expenses or determine how much rent you can afford to pay each month. First, figure out what your yearly essential financial needs are and divide that number by 12. Next, set up a bank account. If you have money left over at the end of the month, try to put most of the remainder into your account—you may need it next month. You'll also need an emergency fund to cover the unexpected costs that will inevitably come your way.

A successful budget will include categories that reflect the way **you** spend money. Think about your spending habits (buying a cup of coffee every day) to identify expense categories. The idea is to become more aware of where your money goes so you can make conscious decisions about spending.

The sample budget below is typical of a recent college graduate, earning \$26,400 per year and *sharing an apartment with a roommate* to save money.

Sample Monthly Budget	
I. Gross Monthly Income	\$2,298
II. Payroll Deductions	
Taxes (Federal, State, Social Security)	- \$460
Retirement Plan (6%)	- \$138
Other (medical, etc.)	- \$ 46
Total Deductions	- \$644
III. Monthly Take-Home Pay (Net)	\$1,654
IV. Expenses	
Housing (shared rent)	- \$331
Food (groceries & eating out)	- \$215
Utilities (electricity, gas, cable, etc.)	- \$132
Clothing	- \$ 83
Transportation (car payment, gas, etc.)	- \$314
Savings (at least 5%)	- \$116
Debt repayment (credit card, school loan, etc.)	- \$215
Misc. (insurance, entertainment, etc.)	- \$215
Total Expenses	- \$1,621

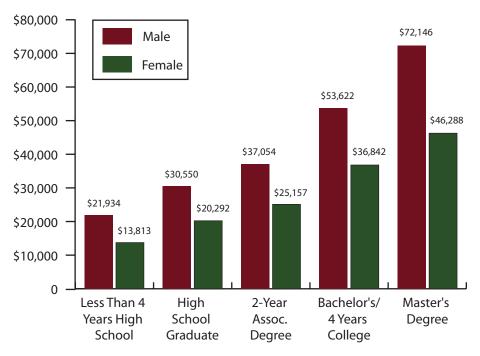
	Asheville	Charlotte	Fayetteville	Raleigh	Wilmington	Atlanta	New York
Apartment Rent	\$791	\$769	\$711	\$573	\$608	\$784	\$3,424
House Price	\$312,540	\$221,000	\$240,606	\$223,814	\$272,812	\$279,543	\$1,099,399
Pizza	\$9.25	\$9.49	\$10.26	\$9.25	\$11.32	\$9.98	\$9.99
Hamburger	\$2.29	\$2.43	\$2.29	\$2.37	\$2.40	\$2.48	\$3.23
Movie Ticket	\$7.85	\$8.50	\$7.92	\$7.65	\$7.00	\$8.33	\$10.42
2-Liter Coke	\$1.16	\$1.19	\$1.39	\$1.09	\$1.17	\$1.44	\$1.59

Source: ACCRA Cost of Living Index 2008

## Learn More to Earn More

The fastest-growing and highest-paying jobs usually require some kind of post-secondary education or skills training for entry and additional training throughout your career. Recent trends also suggest a connection between your level of education and your earning power. Even so, pay can vary widely between and within occupations.

The chart below shows the median—not entry level—salary you can expect to earn in North Carolina based on your education and gender. The key is to decide what you want to do and then get the education or training that will best prepare you for that type of work. Proper planning makes reaching your goals much easier.



Source: U.S. Census Bureau American Community Survey 2008

# TRENDS

Understanding the labor market can help you direct your job search to where the jobs are. Labor market projections for 2006 - 2016 show that job growth in Service industries will continue to outpace that of all other industries in North Carolina, representing an ongoing transition from agriculture and our traditional manufacturing-based economy.

## Labor Market Projections

Labor market projections of expected job growth, job openings and other statistics are compiled every two years at the national and state levels. Labor market information helps you identify where jobs are currently and where they are expected to be in the future. Projections data include individual occupations as well as entire industries.

### Industry versus Occupation

Industries are divided into two broad categories: those providing services and those producing tangible goods. An industry can employ workers in many different types of occupations. For example, hospitals (within the HealthServices industry) not only employ doctors and nurses, they also employ administrative assistants, accountants, human resources managers, computer support specialists, housekeeping workers, cooks and a host of others.

When considering an occupation, also consider different industries and settings in which it can be found. Growing industries are more likely to employ workers in many occupations.

### Service Industries Continue to Grow

North Carolina's primary employment growth over the next several years will be in service-providing industries.

Overall growth in this category is expected to increase by 20.7 percent over the next 10 years, adding 655,330 jobs to the state's economy for total employment of 3,821,770 by 2016.

During this same span of time, goods-producing industries will experience negative growth, losing .8 percent of jobs over 10 years for a total loss of 13,580 jobs. With a projected employment of 819,520 jobs, positions will still be available to replace existing workers due to retirement, turnover or other reasons.

### NC Industry Projections 2006 - 2016

Industry	Annual Growth Rate (%)
Professional & Business Services	2.6
Educational & Health Services	2.6
Construction	2.3
Leisure & Hospitality	2.1
Other Services Except Government	1.8
Financial Activities	1.6
Government	1.2
Trade, Transportation & Utilities	1.1
Self-Employed Workers, Primary Job	0.9
Information	0.5
Manufacturing	-1.2
Natural Resources & Mining	-2.2
Unpaid Family Workers, Primary Job	-4.1

### Fastest Growing Jobs

Occupation	Total Annual Openings	Annual Growth Rate (%)
Personal & Home Care Aides	1,701	5.8
Social & Human Service Assistants	978	5.22
Mental Health Counselors	150	4.35
Mental Health & Substance Abuse Social Workers	256	4.34
Network Systems & Data Commun. Analysts	506	4.17
Medical Assistants	581	4.08
Substance Abuse & Behavioral Disorder Counselors	79	3.99
Physical Therapist Assistants	122	3.97
Veterinary Technologists & Technicians	167	3.93
Skin Care Specialists	45	3.91
Computer Software Engineers, Applications	696	3.9
Manicurists & Pedicurists	41	3.78
Medical Scientists, Except Epidemologists	197	3.67
Pharmacy Technicians	704	3.57
Marriage & Family Therapists	12	3.51
Physician Assistants	164	3.5
Veterinarians	121	3.48
Psychiatric Aides	23	3.37
Medical & Public Health Social Workers	200	3.34
Social & Community Service Managers	155	3.33
Home Health Aides	3,432	3.32
Physical Therapists	209	3.29
Biomedical Engineers	35	3.28
Paralegals & Legal Assistants	402	3.28

### Occupations Projected To Lose the Most Jobs

Occurrention	Annual Growth	Total Net
Occupation	Rate (%)	Loss
Sewing Machine Operators	-5	-5,703
Textile Knitting & Weaving Machine Setters, Operators & Tenders	-5.89	-4,342
Textile Winding, Twisting & Drawing Out Machine Setters, Operators & Tenders	-5.38	-4,260
Upholsterers	-5.98	-3,816
Packers & Packagers, Hand	-0.86	-2,482
Inspectors, Testers, Sorters, Samplers & Weighters	-1.21	-2,398
First-Line Supervisors/Managers of Production & Operating Workers	-0.74	-1,987
Stock Clerks & Other Fillers	-0.42	-1,974
Textile Bleaching & Dyeing Machine Operators & Tenders	-4.88	-1,879
Cabinetmakers & Bench Carpenters	-3.41	-1,871
Farmworkers & Laborers, Crop, Nursery & Greenhouse	-1.51	-1,774
Order Clerks	-3.26	-1,633
Electrical & Electronic Equipment Assemblers	-2.4	-1,344
Furniture Finishers	-4.55	-1,324
Machine Feeders & Offbearers	-1.74	-1,134
File Clerks		
	-4.33	-1,125

### Where The Jobs Are

**Job Growth versus Job Openings** There is a difference between job growth and job openings.

Job growth is the percentage of increase or decrease expected. An occupation can have a high projected rate of growth, but actually offer relatively few job openings per year. For example, jobs for Certified Marriage and Family Therapists are projected to grow by 3.5 percent annually — well above average; however, only about 12 openings are likely to be available each year in our state. When the existing number of jobs in an occupation is small, it only takes a small number of additional jobs to show a large percentage increase.

Job openings are the number of available positions expected. An occupation can have a relatively low rate of growth—or even be in decline—and still have a significant number of job openings available. For example, jobs for Cashiers are projected to have a below average annual growth rate of .41 percent, but will average 5,187 jobs each year—of which 4,767 are to replace existing workers due to retirement, turnover or other reasons.

### **Jobs With Most Annual Openings**

	Annual	Total
	Growth	Annual
Occupation	Rate (%)	Openings
Retail Salespersons	1.62	6,512
Waiters & Waitresses	2.11	5,307
Cashiers	0.41	5,187
Combined Food Prep. & Serving Workers	2.36	4,466
Customer Service Representatives	2.48	3,891
Registered Nurses	2.79	3,820
Home Health Aides	3.32	3,432
Laborers & Freight, Stock & Material Moves, Hand	0.73	3,202
Office Clerks, General	1.48	2,190
First-Line Sup./Mgrs. of Retail Sales Workers	0.94	2,189
Postsecondary Teachers (all subjects)	2.96	2,063
Janitors & Cleaners*	1.83	2,022
Executive Secretaries & Admin. Assistants	1.86	1,977
Food Preparation Workers	2.2	1,819
Bookkeeping, Accounting & Auditing Clerks	1.48	1,817
Team Assemblers	0.79	1,738
Truck Drivers, Heavy & Tractor-Trailer	1.17	1,728
Personal & Home Care Aides	5.8	1,701
Elementary School Teachers**	2.17	1,676
Receptionists & Information Clerks	2.38	1,605
General & Operations Manager	0.42	1,572
Sales Rep., Wholesale & Manufacuring***	1.31	1,562
* Except Maids & Housekeeping Cleaners		
** Except Special Education		
*** Except Technical & Scientific Products		

# TRENDS

## **Connecting Your Talents** With Industry Trends

Knowing which industries are likely to grow helps us all. The more information we have, the better our chances of finding a job that's secure and meets our needs. But how do these trends connect with your own career future?

If you have a clear idea of what you're good at, like to do and have experience in, you're ready to explore industry trends. Next, you'll want to think about the kind of setting in which you'd like to work.

For example, perhaps you're interested in working for the government, but can't imagine enjoying a desk job. Or maybe you're concerned because overall government job growth is likely to be just average. How can you find out if any public service occupations match your skills, interests and needs?

One way to connect your talents with industry trends is to explore the *Where* column on the **Career Briefs** pages. Scan the column looking for the word *government*. You may discover an unexpected variety of career options such as those in the graphic to the right..

Interested in a different industry or setting? Look for it in the *Where* column in Career Briefs.



Select government occupations with above average growth.

## It's Rewarding Being Green

Whether your notion of green-ness is recycling plastic bags, using a solar water heater or manufacturing wiring for solar panels, most of us see an ultimate reward in making the environment healthy. Whenever society values something, chances are also good that employment connected with that concept will grow.

Green is everywhere now: green jobs, green economy, green-collar employment, green industry. But when it comes to the working world, just what does this green trend mean?

At this point, it depends upon whom you ask. In general though, you might think of green occupations as those that manage, clean or restore the environment as well as produce and distribute energy in a fashion that does not harm the environment.

To think about where these jobs are (or will be), apply the above definition to occupations within specific industries. For example, workers in the construction industry may move toward creating LEED\* certified buildings. Or they may weatherize older houses to make them more energy efficient. The manufacturing industry may shift toward creating parts for new energy products, such as reformulating composite materials to make more efficient wind turbine blades. Education will have a major role in training workers to learn new skills or transfer their expertise to green products and services. All industries will include some green occupations.

If green is a concept you find meaningful, but doesn't seem obviously connected to your training or experience, keep in mind that green businesses have the same needs as traditional ones. They need administrators, accountants, building and grounds workers, human resource professionals, marketers and many other types of employees. No doubt about it, green employment can be rewarding!

#### \* Leadership in Energy and Environmental Design

## Change: It's Trend-y

Most of us don't find tea leaves or Ouija boards very helpful when we're trying to make career plans. We need labor market information to help us predict job and industry growth. Additionally, we can teach ourselves to anticipate some workplace trends.

**The process**: Pay attention to what's changing, ask analytical questions and imagine what employment and workplace adjustments might occur. Look at the following examples and think about which jobs may increase or be created and which jobs may decrease.

**Graying of America**: The balance of the U.S. population is tipping toward the older end of the scale. What services and products will this growing population need? As more people approach retirement, what is likely to happen in the workplace?

**Economic changes**: We live in very changeable economic times. Home ownership, retirement funds and financial uncertainty from job loss are just a few of our challenges. What kinds of jobs might result from economic changes?

**Technology's impact**: Being able to use technology is a requirement for a growing number of occupations. While software can make some complex tasks easier, workers who have not had to use technology before discover that they must learn a new set of skills. What will these workers need? How will technological changes affect each industry?

Got the idea? Then give this process a try. You'll be learning to manage your career while also practicing skills that employers greatly value: research, analysis and creativity.

This section outlines 264 occupations — only a sample of those available in N.C. Occupations are selected based on their projected growth, the number of jobs available and to encompass the full range of educational requirements. NOTE: An asterisk (\*) anywhere means data are unavailable, under research or unreleasable for confidentiality reasons. The following information is included:

**Occupation** — Titles and definitions are from O\*NET.

**Clusters** — Occupations are grouped by N.C. Pathway.

Holland Code (HC) — Holland personality types (3-letter codes) corresponding to work environments, taken from O\*NET Interest codes. With O\*NET research ongoing, some occupations have only one or two codes, others have no code assigned yet and others have multiple codes.

**Work Description** — The nature of the duties performed in the occupation, taken from O\*NET.

**Education** — Includes an Educational Attainment Cluster from the U.S. Bureau of Labor Statistics. The minimum level of education or training suggested to enter and perform the job effectively appears in bold.

#### Codes Used:

Index

Ag

Aı

Bi

Βı

Co Co

- Apprent. Apprenticeable occupation
- HS High school or less

**Occupations** 

- SC Some college
- C College degree or higher
- ST OJT Short-term on-the-job training
- MT OJT Moderate-term OJT (1-12 mos.)
- LT OJT Long-term OJT (>12 mos.)
- Wk. Exp. Work experience in a related occupation
- PS Voc. Postsecondary vocational training
- Assoc. Associate degree
- Bach. Bachelor's degree
- Bach. + Bachelor's degree or higher plus work
- experience
- Master's Master's degree
- **Ph.D.** Doctorate degree
- 1st Prof. First professional degree, such as Juris Doctor (J.D.) for law or Medical Doctor (M.D.)

Licensed Occupations — Occupations that require a license, certification, registration or driver's license in North Carolina. Codes Used: L

Where — Types of businesses, industries or employers that hire workers for the occupation in North Carolina.

**Salary** — The first (top) salary amount (followed by e) is the average entry wage for the occupation. The second salary amount is the average pay for experienced employees, based on survey data collected by the Labor Market Information Division of the Employment Security Commission of N.C. Wage data are annualized;

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**Occupations** 

therefore, averages may be high or low if an occupation requires more or less than 40 hours a week. Also, the actual pay for a specific job may vary according to geographic areas, the qualifications of the person holding the job and the employer's pay scale.

**Outlook** — This gives the projected rate of increase for each occupation based on North Carolina labor market information. It is an indicator of projected growth rather than projected openings.

#### Codes Used:

- Above Average The occupation is expected to grow by more than 2.1 percent per year.
- Average The occupation is expected to grow between 1 percent and 2.1 percent per year.
- Below Average The rate of growth is less than 1 percent per year.

#### **Did You Know?**

O\*NET, the nation's occupational information network, is the primary source of occupational information in the United States. The O\*NET database contains information on hundreds of occupations and is updated twice a year. The National Center for O\*NET Development is housed within the Employment Security Commission of North Carolina.

Agricultural & Natural Resources Occupations	 Engineering Technologies Occupations	21-22
Arts & Sciences Occupations	 Health Sciences Occupations	
Biological & Chemical Occupations	 Industrial Technologies Occupations	
Business Technologies Occupations	 Public Service Technologies Occupations	
Commercial & Artistic Production Occupations	Transport Systems Technologies Occupations	29
Construction Technologies Occupations		

# Agricultural & Natural Resources Occupations 👸

These occupations deal with sales and marketing of agricultural products; agricultural economics; conservation and protection of our natural resources; forest and forest machinery management; production of plants, trees and shrubs for home and business use; horticultural business management; crop, poultry and livestock production and management; animal health care; and providing supplies and services for all these areas. People in these occupations are interested primarily in "things," with some interest in "data" and/or "ideas."

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Agricultural & Food Science Technicians	RIC	Work with agricultural scientists in food, fiber & animal research, production & processing; assist with animal breeding & nutrition; conduct tests to improve crop yield, quality & resistance to disease.	HS/SC/C Assoc.		Agricultural & food production service	\$25,319e \$40,093	Average
Agricultural Inspectors	Iltural Inspectors RIC Inspect agricultural commodities, processing equipment & facilities, fish & logging operations, to ensure compliance w regulations & laws governing health, quality & safety.		HS/SC/C Wk. Exp.	L	Agricultural services; government agencies	\$28,786e \$42,194	Below Average
Conservation Scientists	IRC/ IR/ SRI	Manage, improve & protect natural resources to maximize their use without damaging the environment.	Apprent. C <b>Bach.</b>		Agricultural production services; government agencies, parks, forests & wildlife preserves	\$34,281e \$62,141	Average
Farm & Home Management Advisors	SRE/ SRC	Advise, instruct & assist individuals & families engaged in agriculture or related processes or home economics activities.	C <b>Bach.</b>		State & county agricultural agencies	\$28,086e \$53,607	Below Average



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Farm Equipment Mechanics	R	Diagnose, adjust, repair or overhaul farm machinery & vehicles, such as tractors, harvesters, etc.	Apprent. HS/SC <b>PS Voc.</b>	L	Farm equipment dealerships & repair shops; self-employed	\$26,047e \$37,115	Below Average
Farm, Ranch & Other Agricultural Managers	ERC	Manage farms, ranches, aquacultural operations, greenhouses or other agricultural establishments. May perform physical work & operate machinery.	HS/SC Bach. +		Agricultural production companies; government agencies; self-employed	\$31,716e \$57,344	Below Average
Farmworkers & Laborers, Crop, Nursery & Greenhouse	R/RE	Plant, cultivate & harvest vegetables, fruits, nuts, horticultural specialties & field crops. May include tilling soil; transplanting, weeding & fertilizing crops; applying pesticides; sorting & packing harvested products.	HS <b>ST OJT</b>		Farms & agricultural (crop) production services; nurseries	\$14,139e \$19,844	Below Average
Farmworkers, Farm & Ranch Animals	RCI	Attend to animals including cattle, sheep, swine, goats, horses, poultry, fish, shellfish & bees for animal products (meat, fur, etc.) & byproducts (eggs, milk, honey, etc.).	Apprent. HS <b>ST OJT</b>		Farms; agricultural & food production services	\$16,679e \$23,324	Below Average
First-Line Sup./Mgrs of Landscaping, Lawn Service & Grounds	ERC/ RE	Plan, organize, direct or coordinate activities of workers engaged in landscaping or groundskeeping activities. May review contracts, answer inquiries & prepare estimates.	HS/SC Wk. Exp.		Landscaping companies; amusement & recreation services; local government agencies; real estate developers; educational services	\$26,605e \$44,150	Average
Forest & Conservation Technicians	*	Compile data pertaining to size, content, condition & other characteristics of forest tracts, under direction of foresters; train & lead forest workers in forest propagation & fire prevention. May assist in managing natural resources.	HS/SC/C Assoc.		Government agencies; environmental research & testing services; pulp & paper companies	\$27,929e \$41,894	Below Average
Geoscientists, Except Hydrologists & Geographers	IRC	Study the composition, structure & other physical aspects of the earth. May use knowledge to explore for oil, gas, minerals or underground water; or in waste disposal, land reclamation or other environmental problems. May study the earth's internal composition, atmospheres, oceans & its magnetic, electrical & gravitational forces.	C Master's	L	Government; private consulting firms; scientific research & development services	\$33,937e \$74,246	Above Average
Graders & Sorters, Agricultural Products	RC	Grade, sort or classify unprocessed food & other agricultural products by size, weight, color or condition.	HS Wk. Exp.		Farms; orchards; grocery wholesalers	\$14,321e \$19,516	Below Average
Landscape Architects	ARI	Plan & design land areas as parks & recreational facilities, airports, highways, hospitals, schools, land subdivisions & commercial, industrial & residential sites.	C Bach.	L	Architectural services; landscaping companies; agricultural services; self-employed	\$43,224e \$74,714	Average
Landscaping & Groundskeeping Workers	R	Landscape or maintain grounds of property using hand or power tools or equipment. Tasks include laying sod, mowing, trimming, planting, watering, fertilizing & installing sprinklers.	Apprent. HS ST OJT		Landscaping companies; amusement & recreation services; business & local government agencies; real estate developers; educational services	\$16,604e \$23,943	Above Average
Logging Equipment Operators	R	Drive logging tractors or vehicles to fell trees; to skid, load, unload,or stack logs; or to pull stumps or clear brush.	HS MT OJT		Lumber & logging companies; paper companies	\$20,529e \$32,836	Below Average
Natural Sciences Managers	IER	Plan, direct or coordinate activities in such fields as life sciences, physical sciences, mathematics, statistics & research & development in these fields.	C <b>Bach.</b> +		Scientific research & development companies; pharmaceutical companies; federal government agencies	\$71,090e \$132,887	Above Average
Pest Control Workers	RC	Spray or release chemical solutions or toxic gases & set traps to kill pests such as mice, termites & roaches.	Apprent. HS/SC MT OJT	L	Pest control companies; building services; self-employed	\$20,119e \$33,538	Average
Soil & Plant Scientists	IRC/ IR	Conduct research in breeding, physiology, production, yield & management of crops & agricultural plants, their growth & control of pests; study chemical, physical, biological & mineralogical composition of soils.	Apprent. SC/C <b>Bach.</b>	L	Agricultural services; government agencies	\$37,236e \$72,711	Average
Zoologists & Wildlife Biologists	IR	Study the origins, behavior, diseases, genetics & life processes of animals & wildlife.	C Bach.		Government agencies; zoological & biological research companies; wildlife preserves & zoos	\$40,219e \$62,391	Below Average

# Arts & Sciences Occupations

These occupations pertain to the natural sciences, social sciences, arts and humanities. People in these occupations are creative thinkers who generally have interests in "people" and "ideas."

Occupation	НС	Work Description	Education	Lic.	Where	Salary	Outlook
Athletes & Sports Competitors	ERS	Compete in athletic events.	SC/C LT OJT		Commercial sports; educational services	\$16,519e \$139,149	Above Average
Coaches & Scouts	ERS	Instruct or coach groups or individuals in sports.	SC/C <b>LT OJT</b>		Commercial sports; educational services; amusement & recreational services; self-employed; civic & social associations	\$18,515e \$42,600	Above Average
Editors	AES	Perform editorial duties such as laying out, indexing & revising content of written materials in preparation for final publication.	C Bach.		Printing & publishing companies; radio & TV broadcasters; computer companies; business & professional services	\$28,667e \$60,079	Average
Floral Designers	ARE	Design, cut & arrange live, dried or artificial flowers & foliage.	Apprent. SC/C MT OJT		Florists, food & other retail stores; wholesale companies selling to grocery & home furnishings; self-employed	\$15,657e \$26,075	Below Average
Graphic Designers	AER	Design or create graphics to meet specific commercial or promotional needs, such as packaging, displays or logos.	Apprent. SC/C <b>Bach.</b>		Printing, publishing, media & communications companies; advertising & PR firms; business services; self-employed	\$25,692e \$46,694	Below Average
Interior Designers	AER	Plan, design & furnish interiors of residential, commercial or industrial buildings.	Apprent. SC/C Assoc.		Design consulting businesses; architectural, residential & business design services; building material & supplies dealers; furniture stores; self-employed	\$27,525e \$50,891	Average
Merchandise Displayers & Window Trimmers	ARE	Plan & erect commercial displays in windows & interiors of retail stores & at trade exhibitions.	SC/C MT OJT		Department & retail stores; trade show services	\$16,251e \$30,669	Average
Multi-Media Artists & Animators	*	Create special effects, animation or other visual images using film, video, computers or other electronic tools & media for use in products or creations, such as computer games, movies, music videos & commercials.	SC/C Bach.		Business services; computer & other tech companies; advertising agencies; self-employed; printing & motion picture companies	\$32,261e \$62,011	Above Average
Producers & Directors	AES/ EAC/ EAS/ RAE	Produce or direct stage, television, radio, video or motion picture productions for entertainment, information or instruction.	Apprent. SC/C <b>Bach.</b> +		Broadcast communications & motion picture production companies; theater companies	\$24,288e \$61,029	Below Average
Reporters & Correspondents	AIE	Collect & analyze facts about newsworthy events. Report & write stories for newspaper, news magazine, radio or television.	C <b>Bach.</b> +		Newspapers, magazines & media companies; radio & TV broadcasters	\$22,092e \$40,160	Below Average
Statisticians	IC	Develop mathematical theory or apply statistical theory & methods to collect, organize, interpret & summarize numerical data to provide usable information.	C Master's		Government agencies; research & testing services; research & development companies	\$46,235e \$82,755	Above Average
Technical Writers	AI	Write technical materials such as equipment manuals, appendices or operating & maintenance instructions.	SC/C Bach.		Business & professional services; communications firms; computer, engineering & other technology firms; technical consulting services	\$38,544e \$69,816	Above Average
Writers & Authors	AI/A/ ACS/ AES	Originate & prepare written material such as scripts, stories & advertisements.	C Bach.		Printing, publishing, media & communications companies; newspapers; self-employed; advertising & public relations companies; educational services	\$29,338e \$58,661	Average

# **Biological & Chemical Occupations**

These occupations are involved in food science, nutrition, agriscience and environmental science activities. This pathway is concerned with food production, packaging and distribution; quality control, processing and development of food products; food sales and research; research laboratory environments; care for and testing of experimental plants and living cells; conservation and improvement of environmental resources; managing forest crops and forest equipment. People in these occupations often have interests and skills in "ideas" and/or "things."

Occupation	нс	Work Description	Education	Lic.	Where	Salary	Outlook
Biochemists & Biophysicists	IR/ IRC	Study the chemical composition & physical principles of living cells & organisms, their electrical & mechanical energy & related phenomena. May research complex chemical combinations & reactions involved in metabolism, reproduction, growth & heredity. May determine effects of foods, drugs, serums, hormones & other substances on living organisms.	С Р <b>h.D.</b>		Pharmaceutical companies; pesticide, fertilizer & other agricultural chemical manufacturers; scientific research, development & consulting services	\$44,937e \$84,107	Above Average
Biological Technicians	RIC	Assist biological & medical scientists in laboratories. Set up, operate & maintain laboratory instruments & equipment, monitor experiments, make observations & calculate & record results. May analyze organic substances, such as blood, food & drugs.	Apprent. HS/SC/C Assoc.		Scientific research & testing services; chemical, food companies; government agencies; medical & dental labs	\$28,472e \$46,673	Above Average
Biomedical Engineers	*	Apply knowledge of engineering, biology & biomechanical principles to the design, development & evaluation of biological & health systems & products, such as artificial organs, prostheses, instrumentation, medical information systems & health management & care delivery systems.	SC/C Bach.		Hospitals; chemical companies; pharmaceutical companies; scientific & technical consulting services	\$50,489e \$87,016	Above Average
Chemical Engineers	IR	Design chemical plant equipment & devise processes for manufacturing chemicals & products, such as gasoline, synthetic rubber, plastics, detergents, cement, paper & pulp, by applying principles & technology of chemistry, physics & engineering.	C <b>Bach.</b>		Chemical companies; engineering services; plastic materials & synthetic manufacturers; research & testing services; paper mills	\$57,752e \$88,441	Below Average
Chemical Technicians	RIC	Conduct lab tests to assist in making qualitative & quantitative analyses of solids, liquids & gaseous materials for research & development of new products or processes, quality control, maintenance of environmental standards & other work involving chemistry & related sciences.	Apprent. HS/SC/C Assoc.		Scientific research & testing services; chemical, food companies; government agencies; medical & dental labs	\$28,148e \$43,762	Below Average
Chemists	IRC	Conduct qualitative & quantitative chemical analyses or chemical experiments in laboratories for quality or process control or to develop new products or knowledge.	C <b>Bach.</b>		Chemical manufacturers; research & testing services; tobacco companies; government agencies	\$40,973e \$75,437	Average
Environmental Engineering Technicians	*	Apply theory & principles of environmental engineering to modify, test & operate equipment & devices used in prevention, control & remediation of environmental pollution.	HS/SC Assoc.		Engineering & architectural firms; government agencies; utilities & sanitary services; chemical companies; research & testing services; manufacturers	\$30,106e \$45,352	Average
Environmental Engineers	*	Design, plan or perform engineering duties in the prevention, control & remediation of environmental health hazards using engineering disciplines. May include waste treatment, site remediation or pollution control technology.	C <b>Bach.</b>		Engineering & architectural firms; government; utilities & sanitary services; chemical companies; research & testing services; manufacturers	\$49,917e \$81,778	Above Average
Environmental Science & Protection Technicians, Including Health	IR	Perform laboratory & field tests to monitor the environment & investigate sources of pollution, including those that affect health. May collect samples of gases, soil, water & other materials for testing & take corrective actions as assigned.	Apprent. HS/SC/C Assoc.		Government agencies; research & testing services; engineering, architectural & utilities services; chemical companies	\$28,334e \$45,883	Average
Environmental Scientists & Specialists, Including Health	IR	Conduct research to identify, abate or eliminate sources of pollutants or environmental hazards. May collect, synthesize, study, report & take action based on data derived from measurements or observations of air, food, soil, water & other sources.	Aprent. C Master's		Government; private consulting firms; architectural & engineering companies	\$36,266e \$62,396	Above Average
Medical & Clinical Laboratory Technicians	RIC	Perform routine medical laboratory tests for the diagnosis, treatment & prevention of disease. May work under supervision of a medical technologist.	Apprent. SC/C Assoc.		Hospitals; medical & dental laboratories; offices & clinics of medical doctors; government agencies	\$26,288e \$39,729	Average



Medical & Clinical Laboratory Technologists	IR	Perform complex medical laboratory tests for diagnosis, treatment & prevention of disease. May train or supervise staff.	SC/C Bach.	Hospitals; medical & dental laboratories; offices & clinics of medical doctors; government agencies	\$35,272e \$53,613	Average
Microbiologists	IR	Investigate the growth, structure, development & other characteristics of microscopic organisms, such as bacteria, algae or fungi. Includes studying relationship between organisms & disease or the effects of antibiotics on microorganisms.	C <b>Ph.D.</b>	Pharmaceutical companies; government; scientific research, development & consulting services	\$37,042e \$67,128	Average
Water & Liquid Waste Treatment Plant & System Operators	RC	Operate or control an entire process or system of machines, often using control boards, to transfer or treat water or liquid waste.	Apprent. HS/SC LT OJT	Government agencies; utilities & sanitary services; chemical products manufacturers	\$25,391e \$37,488	Average

# **Business Technologies Occupations**

These careers pertain to all areas of business, including: accounting and finance for businesses and individuals; business administration and management; small business management; entrepreneurship; planning, promoting, merchandising and selling fashion apparel; processing, managing and communicating information by computers; directing the transfer of goods and services from producer to consumer; office, project and human resource management; office administration; sales; and marketing of travel, tourism and recreation activities. People in these occupations usually have interests in "data" and/or "people."

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Accountants & Auditors	CE/ CEI	Examine, analyze & interpret accounting records for the purpose of giving advice or preparing statements. Install or advise on systems of recording costs or other financial & budgetary data.	C <b>Bach.</b>	L	Accounting, management & business services; government agencies; self- employed	\$39,061e \$69670	Average
Advertising Sales Agents	ECS	Sell or solicit advertising, including graphic art, advertising space in publications, custom-made signs or TV & radio advertising time.	SC/C MT OJT		Newspapers, magazines & media companies; radio & TV broadcasters	\$24,097e \$57,985	Above Average
Appraisers & Assessors of Real Estate	CE/ ECR/ ECS	Appraise real property to determine its fair value. May assess taxes in accordance with prescribed schedules.	SC/C PS Voc.	L	Realty companies; financial institutions; self-employed	\$29,659e \$60,137	Average
Bill & Account Collectors	CE	Locate & notify customers of delinquent accounts to solicit payment. Duties include receiving payment & posting amount to customer's account; preparing statements to credit department; initiating repossession proceedings or service disconnection; keeping records of collection & status of accounts.	HS/SC ST OJT		Personal credit institutions; hospitals & medical offices; credit collections agencies; banks & business services; variety of businesses	\$21,693e \$35,460	Above Average
Bookkeeping, Accounting & Auditing Clerks	CE	Compute, classify & record numerical data to keep financial records complete & up to date.	Apprent. HS/SC MT OJT		Variety of companies & businesses; banks; government agencies; auto dealers; hospitals & medical offices	\$22,002e \$35,048	Average
Cashiers	CER	Receive & disburse money in establishments other than financial institutions. Often involved in processing credit or debit card transactions & validating checks.	HS/SC <b>ST OJT</b>		Retail stores; eating & drinking places	\$14,137e \$18,536	Below Average
Claims Adjusters, Examiners & Investigators	CE/ EIC/ S	Investigate, analyze & determine the extent of insurance company's liability concerning personal, casualty or property loss or damages, & attempt to effect settlement with claimants.	HS/SC/C <b>LT OJT</b>	L	Insurance agents, brokers & companies; government, business & health services	\$33,281e \$62,464	Average
Compensation & Benefits Managers	ESC	Plan, direct or coordinate compensation & benefits activities & staff of an organization.	SC/C Bach. +		Business services; variety of wholesale, retail & private-sector businesses; government agencies	\$57,091e \$108,206	Average
Compensation, Benefits & Job Analysis Specialists	ICE/ ICS	Conduct programs of compensation & benefits & job analysis for employer. May conduct position classification & pension programs.	SC/C Bach.		Variety of businesses; government agencies; colleges; employment service agencies	\$36,155e \$59,620	Above Average
Computer & Information Scientists, Research	*	Conduct research into fundamental computer & information science as theorists, designers or inventors. Solve or develop solutions to problems in the field of computer hardware & software.	SC/C <b>Ph.D.</b>		Research & development companies; information services; government agencies	\$52,412e \$109,793	Above Average

Computer & Information Systems Managers	ECI/ ECR	Plan, direct or coordinate activities in such fields as electronic data processing, information systems, systems analysis & computer programming.	SC/C <b>Bach.</b> +	Computer & data processing services; banks; educational services; research & testing firms; hospitals; government agencies; variety of businesses	\$74,308e \$128,375	Average
Computer Programmers	IRC	Convert project specifications & statements of problems & procedures to detailed logical flow charts for coding into computer language. Develop & write computer programs & develop web sites.	SC/C <b>Bach.</b>	Software development companies; computer & data processing services; Internet service providers & website development services	\$46,104e \$87,744	Below Average
Computer Software Engineers, Applications	IRC	Develop, create & modify general computer applications software or specialized utility programs. Analyze user needs & develop software solutions. Design or customize software for client use. May analyze & design databases.	Apprent. C <b>Bach.</b>	Software development companies; computer & data processing services; electronics manufacturers; banks; management & business services; government agencies	\$58,056e \$98,500	Above Average
Computer Software Engineers, Systems Software	IRC	Research, design, develop & test operating systems-level software, compilers & network distribution software for medical, industrial, military, communications, aerospace, business, scientific & general computing applications. Set specifications, formulate & analyze software requirements.	C <b>Bach.</b>	Computer systems design companies; software development companies; variety of technology companies	\$62,671e \$104,317	Above Average
Computer Support Specialists	CIR	Provide technical assistance to computer system users. Answer questions or resolve computer problems for clients.	Apprent. SC/C Assoc.	Computer & data processing services; banks & business services; educational services; variety of companies; government agencies; hospitals	\$29,442e \$51,835	Average
Computer Systems Analysts	ICR	Analyze science, engineering, business & other data processing problems for application to electronic data processing systems. Analyze user requirements, procedures & problems to automate or improve existing systems.	Apprent. SC/C <b>Bach.</b>	Computer & data processing services; banks; manufacturers; hospitals; government agencies; utilities services; variety of businesses & business services	\$49,510e \$87,316	Above Average
Cost Estimators	CE	Prepare cost estimates for product manufacturing, construction projects or services to aid management in bidding on or determining price of product or service.	HS/SC/C Wk. Exp.	Manufacturers; building & trade contractors; plumbing, heating, air-conditioning & electrical contractors	\$36,883e \$60.861	Above Average
Counter & Rental Clerks	CER	Receive orders for repairs, rentals & services. May describe options, compute cost & accept payment.	HS/SC <b>ST OJT</b>	Automobile rental companies; automotive dealers & repair shops; automobile services	\$14,807e \$26,039	Average
Customer Service Representatives	*	Interact with customers in response to inquiries about products & services & to handle & resolve complaints.	HS/SC/C MT OJT	Banks; telephone & communication companies; insurance companies; utilities services; variety of companies	\$20,674e \$34,944	Above Average
Database Administrators	ICR	Coordinate changes to computer databases, test & implement the database applying knowledge of database management systems. May plan, coordinate & implement security measures to safeguard computer databases.	Apprent. C <b>Bach.</b>	Computer & data processing services; communications & business services; banks; hospitals; health, education & government services	\$46,636e \$80,036	Above Average
Demonstrators & Product Promoters	ERS	Demonstrate merchandise & answer questions for the purpose of creating public interest in buying the product.	HS/SC/C MT OJT	Advertising & public relations services; retail & wholesale businesses	\$17,010e \$33,015	Above Average
Employment, Recruitment & Placement Specialists	SEC/ ES	Recruit & place workers.	Apprent. SC/C <b>Bach.</b>	Employment agencies; government services; business & management services	\$28,085e \$57,869	Above Average
Executive Secretaries & Administrative Assistants	CE	Provide high-level administrative support by conducting research, preparing reports, handling information requests & preparing correspondence, receiving visitors, arranging conference calls & scheduling meetings.	Apprent. HS/SC <b>MT OJT</b>	Variety of companies; religious organizations; banks; government; manufacturers; hospitals; education services	\$26,599e \$40,719	Average
Financial Analysts	ICE	Conduct quantitative analyses of information affecting investment programs of public or private institutions.	C <b>Bach.</b>	Security & commodity brokers & services; banks & financial services institutions; insurance services	\$49,420e \$81,945	Above Average

Financial Managers	EC/ ECS	Plan, direct & coordinate accounting, investing, banking, insurance, securities & other financial activities of a branch, office or department of an establishment.	SC/C <b>Bach.</b> +		Commercial banks; savings & credit institutions; business & health services; variety of businesses	\$59,385e \$120,374	Average
General & Operations Managers	*	Plan, direct or coordinate the operations of companies or public & private sector organizations. Includes formulating policies, managing daily operations & planning use of materials & human resources.	HS/SC/C <b>Bach.</b> +		Variety of public & private companies; business & professional services; manufacturers; wholesale & retail trade companies; government agencies	\$55,777e \$134,595	Below Average
Insurance Sales Agents	ESC	Sell life, property, casualty, health, automotive or other types of insurance. May refer clients to independent brokers, work as independent broker or be employed by an insurance company.	HS/SC/C <b>Bach.</b>	L	Insurance agencies; self-employed	\$23,170e \$65,207	Average
Interviewers, Except Eligibility & Loan	CSE	Interview by telephone, mail, in person or by other means for the purpose of completing forms, applications or questionnaires. Ask specific questions, record answers & assist persons with completing forms. May sort, classify & file forms.	HS/SC <b>ST OJT</b>		Hospitals; business & research services; management & public relations firms; medical offices & clinics	\$20,013e \$29,013	Average
Legal Secretaries	CE	Perform secretarial duties using legal terminology, procedures & documents. Prepare legal papers & correspondence & assist with legal research.	Apprent. HS/SC <b>PS Voc.</b>		Legal firms & services	\$23,409e \$40,190	Above Average
Loan Officers	ESC	Evaluate, authorize or recommend approval of commercial, real estate or credit loans. Advise borrowers on financial status & methods of payments.	SC/C Bach.	L	Commercial banks; credit & savings institutions; mortgage bankers & brokers	\$33,561e \$61,776	Average
Management Analysts	CEI	Conduct organizational studies & evaluations, design systems & procedures, conduct work simplifications & measurement studies & prepare operations & procedures manuals to improve operations.	C <b>Bach.</b> +		Self-employed; banks, business & professional services; computer & data processing services	\$47,056e \$93,747	Average
Marketing Managers	EC	Determine demand for products & services offered by a firm & its competitors & identify potential customers. Develop pricing strategies, oversee product development or monitor trends indicating new products & services.	SC/C Bach. +		Business & professional services; product development companies; public relations & advertising agencies; manufacturers; wholesale & retail trade companies	\$62,995e \$128,384	Average
Network & Computer Systems Administrators	*	Install, configure & support an organization's local area network (LAN), wide area network (WAN) & Internet system or a segment of a network system. Maintain network hardware & software & monitor to ensure network availability & security.	Apprent. SC/C <b>Bach.</b>		Computer & data processing services; educational services; communications, financial & business services; government agencies; hospitals; variety of companies	\$42,798e \$75,701	Above Average
Network Systems & Data Communications Analysts	IR	Analyze, design, test & evaluate network systems, such as local area networks (LAN), wide area networks (WAN), Internet, intranet & other data communications systems.	Apprent. SC/C <b>Bach.</b>		Computer & data processing services; banks; communications & business services; hospitals, health services; variety of companies	\$43,149e \$79,078	Above Average
Office Clerks, General	С	Varied duties, requiring limited knowledge of office management systems & procedures. Duties may include answering telephones, bookkeeping, typing or word processing, stenography, office machine operation & filing.	Apprent. HS/SC ST OJT		Financial & business services	\$16,600e \$27,970	Average
Payroll & Timekeeping Clerks	CE	Compile & post employee time & payroll data. May compute employees' time worked, production & commission. May compute wages & prepare paychecks.	HS/SC MT OJT		Variety of companies; manufacturers; government agencies	\$23,276e \$35,770	Below Average
Personal Financial Advisors	SEC	Advise clients on financial plans; uses expertise in tax & investment strategies, securities, insurance, pension plans & real estate. Duties include assessing clients' assets, liabilities, cash flow, insurance coverage, tax status & financial objectives.	C <b>Bach.</b>		Banks, security brokers, dealers & financial services; insurance companies & services	\$40,976e \$80,124	Above Average
Postal Service Mail Sorters, Processors & Processing Machine Operators	*	Prepare incoming & outgoing mail for distribution. Examine, sort & route mail. Load, operate & repair mail processing machinery. Must complete a competitive exam.	HS/SC <b>ST OJT</b>		US Postal Service	\$29,432e \$45111	Below Average

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Property, Real Estate & Community Association Managers	EC	Plan, direct, or coordinate selling, buying, leasing or governance activities of commercial, industrial or residential real estate properties.	Apprent. HS/SC/C Bach.		Real estate & leasing agencies or operators	\$40,732e \$93,806	Below Average
Real Estate Brokers	*	Operate real estate office or work for commercial real estate firm, overseeing real estate transactions. Includes selling real estate or renting properties & arranging loans.	HS/SC/C Wk. Exp.	L	Real estate & leasing agencies or operators	\$24,907e \$60,609	Below Average
Real Estate Sales Agents	ECS	Rent, buy or sell property for clients. List property, interview prospective clients, accompany clients to property site, discuss conditions of sale & draw up real estate contracts.	HS/SC/C PS Voc.	L	Real estate & leasing agencies or operators; self-employed	\$27,715e \$80,342	Average
Receptionists & Information Clerks	CES	Answer inquiries & provide information pertaining to an organization for general public, customers, visitors & other interested parties.	HS/SC <b>ST OJT</b>		Medical & dental offices & clinics; hospitals; government agencies; educational, variety of businesses	\$17,313e \$26,373	Above Average
Retail Salespersons	ES	Sell merchandise, such as furniture, motor vehicles, appliances or apparel in a retail establishment.	HS/SC/C <b>ST OJT</b>		Retail & department stores; automotive dealers	\$15,251e \$27,239	Average
Sales Managers	EC	Direct the distribution or movement of a product or service to the customer. Coordinate sales distribution by territories, quotas & goals, & establish training programs for sales representatives. Analyze sales statistics to determine sales potential & inventory requirements & monitor customer preferences.	SC/C Bach. +		Variety of wholesale & retail companies; business & professional services; advertising & public relations services	\$46,475e \$120,490	Average
Sales Representatives, Wholesale & Mfg., Except Technical & Scientific Products	ESC/ ESR	Sell goods for wholesalers or manufacturers to businesses or groups of individuals.	HS/SC/C MT OJT		Wholesale manufacturing companies	\$27,621e \$65,685	Average
Sales Representatives, Wholesale & Mfg., Technical & Scientific Products	ERS/ ERC/ ESR/ ESC	Sell goods for wholesalers or manufacturers where technical or scientific knowledge is required in such areas as biology, engineering, chemistry & electronics.	HS/SC/C MT OJT		Wholesale manufacturing companies of technical & scientific products	\$32,836e \$75,962	Average
Social & Community Service Managers	SEA	Plan, organize or coordinate the activities of a social service program or community outreach organization. Oversee budget & policies regarding participant involvement, program requirements & benefits.	C Bach.		Religious, civic & social organizations; local & state government; nursing, residential care; social, family services; hospitals	\$34,532e \$61,263	Above Average
Tellers	CE	Receive & pay out money. Keep records of money & negotiable instruments involved in a financial institution's transactions.	Apprent. HS/SC ST OJT		Commercial & savings banks; credit unions	\$20,490e \$25,310	Above Average
Training & Development Specialists	SEC	Conduct training & development programs for employees.	Apprent. SC/C <b>Bach.</b>		Private companies; business & professional services; banks; government agencies; computer & software development companies; hospitals; variety of wholesale & retail businesses	\$33,111e \$59,595	Average

# Commercial & Artistic Production Occupations



These occupations involve using state-of-the-art equipment to design and produce newspapers, magazines, reports, advertising information and other graphic images. Also included in this pathway are careers intended to enhance the beauty or aesthetic qualities of interior spaces. People in these careers often have interests in "ideas" and/or "things," and sometimes "people."

Occupation	НС	Work Description	Education	Lic.	Where	Salary	Outlook
Archivists	IC	Appraise, edit & direct safekeeping of permanent records & historically valuable documents. Participate in research activities based on archival materials.	C Master's		Colleges; museums; government	\$27,073e \$43,334	Average
Audio & Video Equipment Technicians	CS	Set up &/or operate audio & video equipment & related electronic equipment for concerts, sports events, meetings & conventions, presentations & news conferences.	Apprent. HS/SC/C LT OJT		Motion picture production companies; radio & TV broadcasters	\$23,799e \$42,404	Above Average

Broadcast Technicians	RA	Set up, operate & maintain electronic equipment used to transmit radio & television programs.	Apprent. HS/SC/C <b>Assoc.</b>	Radio & TV broadcasters	\$19,726e \$41,948	Below Average
Camera Operators, Television, Video & Motion Picture	AR	Operate television, video or motion picture camera to photograph images or scenes for TV broadcasts, advertising, video production, motion pictures, etc.	Apprent. SC/C MT OJT	Film, television & motion picture production companies	\$20,951e \$44,150	Below Average
Etchers & Engravers	R/ RA/ RC	Engrave or etch metal, wood, rubber or other materials for identification or decorative purposes.	Apprent. HS/SC <b>LT OJT</b>	Manufacturing	\$19,719e \$31,158	Below Average
Film & Video Editors	AE	Edit motion picture soundtracks, film & video.	Apprent. SC/C <b>Bach.</b>	Motion picture production companies; radio & TV broadcasters; training & consulting companies; video production companies	\$26,706e \$49,402	Average
Jewelers & Precious Stone & Metal Workers	REC/ RC/ R	Design, fabricate, adjust, repair or appraise jewelry, gold, silver, other precious metals or gems.	Apprent. HS/SC/C <b>PS Voc.</b>	Jewelry stores; self-employed	\$21,260e \$42,108	Below Average
Job Printers	RC	Set type according to copy, operate press to print job order, read proof for errors & clarity of impression & correct imperfections.	Apprent. HS/SC <b>LT OJT</b>	Printing & publishing companies; duplication services	\$23,013e \$39,430	Below Average
Museum Technicians & Conservators	ARI	Prepare specimens, such as fossils, skeletal parts, lace & textiles, for museum collection & exhibits. May restore documents or install, arrange & exhibit materials.	C Master's	Colleges; museums; government	\$26,742e \$40,945	Below Average
Painting, Coating & Decorating Workers	R	Paint, coat or decorate articles, such as furniture, glass, plateware, pottery, jewelry, cakes, toys, books or leather.	Apprent. HS ST OJT	Manufacturing	\$16,898e \$25,776	Below Average
Photographers	ARE/ ARI	Photograph people, subjects, merchandise or other commercial products. May develop negatives & produce finished prints.	Apprent. HS/SC/C LT OJT	Printing & publishing companies, including newspapers, magazines & books; broadcasting companies; self-employed	\$18,460e \$50,146	Average
Prepress Technicians & Workers	RC/ RA	Set up & prepare material for printing presses.	Apprent. HS/SC <b>PS Voc.</b>	Printing & publishing companies; duplication services	\$22,746e \$38,878	Below Average
Printing Machine Operators	RC/R	Set up or operate various types of printing machines, such as offset, letterset, intaglio or gravure presses or screen printers to produce print on paper or other materials.	Apprent. HS/SC <b>MT OJT</b>	Printing & publishing companies; paper & paperboard companies; textiles & apparel manufacturers.	\$19,971e \$37,314	Below Average

# **Construction Technologies Occupations**

These occupations involve a wide variety of construction activities, including general carpentry work; cabinetmaking and installation; framing and hanging of walls, doors and windows; furniture design and production; installation, repair and maintenance of electrical systems for buildings and equipment; and building walls, doors, fireplaces and other structures using a variety of masonry materials and techniques. People in these careers typically have interests in "things" and sometimes "ideas."

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Brickmasons & Blockmasons	R	Lay & bind building materials, such as brick, to construct or repair walls, partitions, arches, sewers & other structures.	Apprent. HS <b>LT OJT</b>		Masonry, stonework & plastering contractors; building & special trades contractors; self-employed	\$25,243e \$40,350	Average
Carpenters	R/RC	Construct, erect, install or repair structures & fixtures made of wood. May also install cabinets, siding, drywall & batt or roll insulation.	Apprent. HS/SC LT OJT		Residential & commercial building contractors; self-employed; lumber & wood products companies	\$24,025e \$34,979	Average
Cement Masons & Concrete Finishers	R	Smooth & finish surfaces of poured concrete, such as floors, walks, sidewalks, roads or curbs.	Apprent. HS MT OJT		Building & highway contractors; concrete product manufacturers	\$21,215e \$31,101	Above Average

Construction & Building Inspectors	CRI/ CRE	Inspect structures using engineering skills to determine structural soundness & compliance with specifications, building codes & other regulations. Inspections may be general in nature or may be limited to a specific area, such as electrical systems or plumbing.	Apprent. HS/SC /C <b>Wk. Exp.</b>		Local & state government; engineering & architectural firms; research & testing services	\$33,449e \$51,073	Average
Construction Laborers	RC	Perform physical labor at building, highway & heavy construction projects, tunnel & shaft excavations & demolition sites. May clean & prepare sites, erect scaffolding, clean up rubble & debris & remove hazardous waste materials.	Apprent. HS MT OJT		Commercial & residential building contractors; highway construction contractors	\$18,170e \$27,497	Above Average
Construction Managers	ERC	Plan, direct, coordinate or budget activities concerned with the construction & maintenance of structures, facilities & systems. Participate in the conceptual development of a construction project & oversee its organization, scheduling & implementation.	HS/SC/C Bach.	L	Building & highway construction contractors; special trades; masonry, stonework, carpentry, flooring, other construction projects	\$55,868e \$89,849	Above Average
Drywall & Ceiling Tile Installers	R	Apply plasterboard or other wallboard to ceilings or interior walls of buildings. Apply or mount acoustical tiles or blocks, strips or sheets of shock-absorbing materials to reduce or reflect sound.	Apprent. HS <b>MT OJT</b>		Masonry, stonework & plastering companies; residential & commercial building contractors; self-employed	\$22,825e \$31,906	Average
Electrical Power-Line Installers & Repairers	RC	Install or repair cables or wires used in electrical power or distribution systems. May erect poles & light or heavy duty transmission towers.	Apprent. HS/SC LT OJT		Utility companies	\$32,439e \$51,515	Average
Electricians	RI	Install, maintain & repair electrical wiring, equipment & fixtures. Ensure work is in accordance with relevant codes.	Apprent. HS/SC <b>LT OJT</b>	L	Building contractors; manufacturers; utilities services; self-employed	\$27,306e \$40,155	Average
Fence Erectors	R	Erect & repair metal & wooden fences & fence gates around highways, industrial establishments, residences or farms, using hand & power tools.	Apprent. HS MT OJT		Building contractors; fencing installation services	\$20,253e \$26,400	Above Average
First-Line Sup./Mgrs of Construction Trades & Extraction Workers	ERC	Directly supervise & coordinate activities of construction or extraction workers.	HS/SC Wk. Exp.		Building & highway contractors	\$34,845e \$55,694	Above Average
Heating, Air Conditioning & Refrigeration Mechanics & Installers	RC	Install or repair heating, central air conditioning or refrigeration systems.	Apprent. HS/SC LT OJT	L	Plumbing, heating, air conditioning businesses; wholesale companies selling plumbing & heating equipment	\$27,287e \$42,598	Above Average
HelpersBrickmasons, Blockmasons, Stonemasons & Tile & Marble Setters	RC	Help brickmasons, blockmasons, stonemasons or tile & marble setters by performing duties of lesser skill. Use, supply or hold materials or tools; clean work area & equipment.	Apprent. HS <b>ST OJT</b>		Commercial & residential building contractors	\$17,764e \$24,179	Average
HelpersCarpenters	RC	Help carpenters by performing duties of lesser skill. Duties include using, supplying or holding materials or tools & cleaning work area & equipment.	Apprent. HS <b>ST OJT</b>		Commercial & residential building contractors	\$17,587e \$25,021	Above Average
HelpersElectricians	RC	Help electricians by performing duties of lesser skill. Duties include using, supplying or holding materials or tools & cleaning work area & equipment.	HS ST OJT		Electrical & residential building contractors; plumbing, heating, air conditioning & utilities services; self-employed	\$19,700e \$27,131	Above Average
HelpersPipelayers, Plumbers, Pipefitters & Steamfitters	RC	Help plumbers, pipefitters, steamfitters or pipelayers by performing duties of lesser skill. Duties include using, supplying or holding materials or tools & cleaning work area & equipment.	HS ST OJT		Plumbing, heating & air conditioning contractors; heavy construction & special trades contractors	\$19,424e \$27,793	Above Average
Operating Engineers & Other Construction Equipment Operators	RC/ RI	Operate power construction equipment such as motor graders, bulldozers, etc., to excavate, move & grade earth, erect structures or pour concrete or other surface pavement.	Apprent. HS/SC MT OJT		Building & highway contractors; utility companies; government	\$25,026e \$34,990	Above Average
Painters, Construction & Maintenance	R	Paint walls, equipment, buildings, bridges & other structural surfaces. May prepare surface prior to painting. May mix colors or oils to obtain desired color/consistency.	Apprent. HS <b>MT OJT</b>		Painting companies; self-employed; building contractors	\$21,852e \$31,397	Above Average

Paving, Surfacing & Tamping Equipment Operators	R	Operate equipment used for applying concrete, asphalt or other materials to road beds, parking lots or airport runways, or equipment used for tamping gravel, dirt or other materials.	Apprent. HS MT OJT		Highway construction & maintenance contractors	\$21,765e \$30,509	Above Average
Pipelayers	RC	Lay pipe for storm or sanitation sewers, drains & water mains. May grade trenches or culverts, position pipe or seal joints.	HS/SC MT OJT		Plumbing, heating & air conditioning contractors; heavy construction & special trades contractors	\$20,902e \$30,090	Above Average
Plumbers, Pipefitters & Steamfitters	R	Assemble, install, alter & repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating & cooling equipment & mechanical control systems.	Apprent. HS/SC <b>LT OJT</b>	L	Plumbing, heating & air conditioning contractors; heavy construction & special trades contractors	\$26,506e \$40,439	Above Average
Roofers	R	Cover roofs of structures with shingles, slate, asphalt, aluminum, wood & related materials. May bind, seal, insulate or soundproof sections of structures.	Apprent. HS MT OJT		Roofing, siding & sheet metal contractors; self-employed; building contractors	\$20,823e \$31,383	Above Average
Security & Fire Alarm Systems Installers	*	Install, program, maintain & repair security & fire alarm wiring & equipment according to relevant codes.	HS/SC PS Voc.	L	Building equipment contractors; investigation & security services	\$26,748e \$40,913	Above Average
Sheet Metal Workers	R	Fabricate, assemble, install & repair sheet metal products & equipment, such as ducts, control boxes, drainpipes & furnace casings. May involve setting up & operating fabricating machines; shaping metal over anvils, blocks or other forms.	Apprent. HS/SC LT OJT		Building contractors; roofing, siding & sheet metal work contractors; fabricated metal, structural metal & industrial machinery manufacturers	\$23,261e \$36,357	Above Average
Telecommunications Line Installers & Repairers	R	String & repair telephone & television cable, including fiber optics & other equipment for transmitting messages or television programming.	Apprent. HS/SC <b>LT OJT</b>		Communications & heavy construction companies; electrical contractors	\$27,137e \$46,387	Average
Tile & Marble Setters	RC	Apply hard tile, marble & wood tile to walls, floors, ceilings & roof decks.	Apprent. HS/SC LT OJT		Commercial & residential building contractors; self-employed	\$21,790e \$33,392	Above Average

# Engineering Technologies Occupations



These occupations involve using computer-aided design (CAD) and other complex tools and software to design, draw and produce computer-generated drawings of environmental and structural models and to control machines used in design and manufacturing. Workers in these occupations also design, build, install and repair developmental and production electronic systems and equipment; produce, process and market plants, trees and shrubs for home and commercial use; manage and maintain horticultural businesses; and use computers to generate charts, 3-D graphics and animations used in engineering, architecture and science. People in these careers typically have interests in "things" and/or "ideas."

Occupation	НС	Work Description	Education	Lic.	Where	Salary	Outlook
Aerospace Engineers	IRC	Perform a variety of engineering work in designing, constructing & testing aircraft, missiles & spacecraft. May conduct basic & applied research to evaluate adaptability of materials & equipment to aircraft design & manufacture.	C <b>Bach.</b>		Aerospace product & parts manufacturing; government agencies; technical consulting services	\$59,130e \$83,387	Above Average
Architects, Except Landscape & Naval	AIR/ AIE	Plan & design structures, such as private residences, office buildings, theaters, factories & other structural property.	C Bach.	L	Self-employed; engineering & architectural firms	\$45,866e \$85,982	Average
Civil Engineering Technicians	RIC	Apply theory & principles of civil engineering in planning, designing & overseeing construction & maintenance of structures & facilities under the direction of engineering staff or physical scientists.	HS/SC Assoc.		Engineering & architectural services; business & professional services; technical consulting services	\$29,685e \$46,757	Below Average
Civil Engineers	RIC	Plan, design & oversee construction & maintenance of buildings & facilities such as roads, railroads, airports, bridges, harbors, channels, dams, pipelines, power plants, water & sewage systems & waste disposal units.	C <b>Bach.</b>		Engineering & architectural firms; government agencies; construction contractors	\$48,070e \$78,308	Average
Computer Hardware Engineers	IRC	Research, design, develop & test computer or computer-related equipment for commercial, industrial, military or scientific use. May supervise the manufacturing & installation of computer or computer-related equipment & components.	SC/C <b>Bach.</b>		Computer manufacturers	\$59,639e \$106,291	Average

Electrical & Electronic Engineering Technicians	RIC/ RCI/ RI	Apply electrical & electronic theory & related knowledge to design, build, repair, calibrate & modify electrical components, circuitry, controls & machinery for subsequent evaluation & use by engineering staff in making engineering design decisions.	Apprent. HS/SC Assoc.	Communications, machinry & electronics equipment manufacturers; engineering & architectural firms; government agencies; utilities; technical consulting services	\$35,961e \$56,538	Below Average
Electrical Engineers	IR	Design, develop, test or supervise the manufacturing & installation of electrical equipment, components or systems for commercial, industrial, military or scientific use.	C <b>Bach.</b>	Industrial machinery & equipment companies; computer, electronics & communications equipment companies; business services; engineering services	\$49,952e \$87,961	Below Average
Electronics Engineers, Except Computer	IR	Research, design, develop & test electronic components & systems for commercial, industrial, military or scientific use utilizing knowledge of electronic theory & materials properties. Design electronic circuits & components.	C <b>Bach.</b>	Electronic, electrical equipment & industrial machinery manufacturers; communication companies; engineering & architectural firms	\$57,227e \$92,833	Below Average
Health & Safety Engineers, Except Mining Safety Engineers & Inspectors	IEC/ IER/ IES/ EC/ IRC	Promote worksite or product safety by applying knowledge of industrial processes, mechanics, chemistry, psychology & industrial health & safety laws.	SC/C Bach.	Government agencies; wholesale manufacturers	\$47,798e \$75,636	Below Average
Industrial Engineering Technicians	IC	Apply engineering theory & principles to problems of industrial layout or manufacturing production. May study & record time, motion, method & speed of production & other worker operations to improve efficiency.	Apprent. HS/SC <b>Assoc</b> .	Product development companies; wholesale manufacturers	\$33,587e \$59,172	Average
Industrial Engineers	EIR/ EIC	Design, develop, test & evaluate integrated systems for managing industrial production processes including human work factors, quality control, inventory control, logistics & material flow, cost analysis & production coordination.	Apprent. SC/C <b>Bach.</b>	Product development companies; wholesale manufacturers; technical consulting services	\$48,182e \$77,605	Average
Mechanical Engineering Technicians	RI	Apply theory & principles of mechanical engineering to modify, develop & test machinery & equipment under direction of engineering staff or physical scientists.	Apprent. HS/SC <b>Assoc.</b>	Engineering, management & architectural services; business & professional services; industrial machinery, electronic & electric equipment companies; fabricated metal- producers; technical consulting services	\$33,779e \$60,604	Average
Mechanical Engineers	RI	Perform engineering duties in planning & designing tools, engines, machines & other mechanically functioning equipment. Oversee installation, operation, maintenance & repair of such equipment as centralized heat, gas, water & steam systems.	Apprent. C <b>Bach.</b>	Engineering services; industrial machinery, electronics & transportation equipment manufacturers; business services; technical consulting services	\$49,383e \$76,170	Below Average
Surveying & Mapping Technicians	RCI/ CR	Perform surveying & mapping duties to obtain data used for construction, mapmaking, boundary location, mining or other purposes. May calculate mapmaking information, create maps & verify accuracy & completeness of maps.	Apprent. HS/SC <b>MT OJT</b>	Engineering, management & architectural services; government agencies; business services; technical consulting services	\$23,133e \$37,069	Average
Surveyors	IER/ IEC	Make exact measurements & determine property boundaries. Provide data regarding shape, contour, gravitation, location, elevation or dimension of land & features on or near the earth's surface for engineering, mapmaking, mining, construction & other purposes.	С L <b>Васh.</b>	Architectural & engineering firms; government; construction companies	\$37,490e \$64,496	Above Average

# Health Sciences Occupations **\***-

These occupations pertain to providing health care services to individual patients, clients or groups. Workers gather information to form diagnoses, develop treatment and care regimens to maintain or improve health; document client/patient care; provide safe and healthy surroundings for the delivery of health care/maintenance; and provide the community with wellness information, resource management and health education. People in these occupations have interests and skills primarily in "people" and/or "ideas," and sometimes "data."

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Chiropractors	IRS/ IRA/ IRE	Adjust spinal column & other articulations of the body to correct abnormalities of the human body believed to be caused by interference with the nervous system. Examine patient to determine nature & extent of disorder. Manipulate spine or other involved area. May utilize supplementary measures.	C 1st Prof.	L	Health services; private practice offices; physical rehabilitation facilities	\$61,390e \$134,891	Above Average

Clinical, Counseling & School Psychologists	IS/ IAS/ SIA	Diagnose & treat mental disorders; learning disabilities; & cognitive, behavioral & emotional problems. May design & implement behavior modification programs.	C <b>Ph.D.</b>	L	Government; hospitals; private practice offices; outpatient clinics; colleges	\$40,677e \$73,152	Above Average
Dental Assistants	SRE	Assist dentist, set up patient & equipment & keep records.	Apprent. HS/SC MT OJT		Offices & clinics of dentists	\$26,114e \$37,462	Above Average
Dental Hygienists	SCR/ SCE	Clean teeth & examine oral areas, head & neck for signs of oral disease. May educate patients on oral hygiene, take & develop X-rays or apply fluoride or sealants.	SC/C Assoc.	L	Offices & clinics of dentists; government agencies	\$47,962e \$66,453	Above Average
Diagnostic Medical Sonographers	*	Produce ultrasonic recordings of internal organs for use by physicians.	SC/C Assoc.		Hospitals; offices & clinics of medical doctors	\$48,149e \$63,933	Above Average
Emergency Medical Technicians & Paramedics	SRI	Assess injuries, administer emergency medical care & extricate trapped individuals. Transport injured or sick persons to medical facilities.	Apprent. SC <b>PS Voc.</b>	L	Local government agencies; local & suburban transportation services; hospitals	\$21,436e \$33,410	Average
Family & General Practitioners	IES/ IER	Diagnose, treat & help prevent diseases & injuries that commonly occur in the general population	C 1st Prof.	L	Physician offices; hospitals; outpatient care centers; self-employed	\$117,333e \$198,343	Average
Home Health Aides	SR	Provide routine, personal healthcare, such as bathing, dressing or grooming elderly, convalescent or disabled persons in their homes or in a residential care facility.	Apprent. HS/SC ST OJT		Home health care services; residential care & nursing care facilities; hospitals; social service agencies	\$16,382e \$21,293	Above Average
Licensed Practical & Licensed Vocational Nurses	SRI	Care for ill, injured, convalescent or disabled persons in hospitals, nursing homes, clinics, private homes & group homes.	Apprent. HS/SC <b>PS Voc.</b>	L	Nursing & personal care facilities; hospitals; offices & clinics of medical doctors	\$31,182e \$41,265	Average
Massage Therapists	*	Massage customers for hygienic or remedial purposes.	SC/C PS Voc.	L	Private practice offices; health services; self-employed	\$19,931e \$49,197	Above Average
Medical & Health Services Managers	ESI	Plan, direct or coordinate medicine & health services in hospitals, clinics, managed care organizations, public health agencies or similar organizations.	Apprent. SC/C <b>Bach.</b> +		Hospitals; nursing & personal care facilities; offices & clinics of health practitioners	\$55,804e \$96,172	Above Average
Medical & Public Health Social Workers	SIA	Provide persons, families or vulnerable populations with psychosocial support needed to cope with chronic, acute or terminal illnesses. Advise family care givers, provide patient education & counseling.	C <b>Bach.</b>	L	Hospitals; government; outpatient clinics & homes; community & residential care facilities	\$32,600e \$46,381	Above Average
Medical Assistants	SCR	Perform administrative & clinical duties under direction of physician: scheduling appointments, maintaining medical records, billing & coding for insurance purposes, taking & recording vital signs & medical histories, preparing patients for examination, drawing blood & administering medications as directed.	Apprent. HS/SC MT OJT	L	Offices & clinics of medical doctors & health practitioners; hospitals; government agencies	\$20,951e \$29,677	Above Average
Medical Records & Health Information Technicians	CR	Compile, process & maintain medical records of hospital & clinic patients per regulatory requirements. Process, maintain, compile & report patient information for health requirements & standards.	Apprent. HS/SC Assoc.		Hospitals; offices & clinics of medical doctors; nursing & personal care facilities	\$20,642e \$32,430	Above Average
Medical Scientists, Except Epidemiologists	IRS	Conduct research dealing with the understanding of human diseases & the improvement of human health. Engage in clinical investigation or other research, production, technical writing or related activities.	C <b>Ph.D.</b>		Research & testing services; chemical companies; government, education & health agencies	\$47,391e \$97,669	Above Average
Medical Transcriptionists	*	Use transcribing machines to transcribe dictated reports & translate medical jargon & abbreviations into their expanded forms. Edit as necessary & return reports for review.	Apprent. HS/SC <b>PS Voc.</b>		Offices & clinics of medical doctors & health practitioners; hospitals	\$25,702e \$35,293	Average
Mental Health & Substance Abuse Social Workers	SIA	Assess & treat individuals with mental, emotional or substance abuse problems, including abuse of alcohol, tobacco &/or other drugs. Activities may include individual & group therapy, crisis intervention, case management, client advocacy, prevention & education.	C Master's	L	Government; outpatient clinics; residential care facilities; hospitals; private practice offices	\$31,035e \$44,805	Above Average
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Mental Health Counselors	SIA	Counsel with emphasis on prevention. Work with individuals & groups to promote optimum mental health. May help individuals with addictions; family, parenting & marital problems; suicide; stress management; self-esteem; & issues with aging & emotional health.	C Master's	L	Social, family & health services; private practice offices; residential care facilities	\$27,496e \$45,342	Above Average
Nursing Aides, Orderlies & Attendants	SRE	Provide basic patient care under direction of nursing staff. Perform duties, such as feed, bathe, dress, groom or move patients, or change linens.	Apprent. HS/SC <b>PS Voc.</b>	L	Nursing, residential & personal care facilities; hospitals; employment services; home health care services; social service agencies; education services	\$18,342e \$25,117	Above Average
Occupational Therapist Assistants	SR	Assist occupational therapists in providing occupational therapy treatments & procedures. May assist in development of treatment plans, carry out routine functions, direct activity programs & document progress of treatments.	SC Assoc.	L	Offices of health practitioners; hospitals; residential, nursing & personal care facilities; home health services	\$27,443e \$50,676	Above Average
Occupational Therapists	SRI⁄ SRA	Assess, plan, organize & participate in rehabilitative programs to help restore vocational, homemaking, daily living skills & general independence to disabled persons.	C Master's	L	Hospitals; nursing & personal care facilities; offices & clinics of medical doctors & health professionals; home health care services; nursing care facilities; educational services	\$46,174e \$72,097	Above Average
Pharmacists	ICR/ ICE	Compound & dispense medications following prescriptions issued by physicians, dentists or other authorized medical practitioners.	C 1st Prof.	L	Drug stores & pharmacies; hospitals; general merchandise & food stores; government; pharmaceutical companies	\$81,379e \$113,026	Above Average
Pharmacy Technicians	CRI	Prepare medications under the direction of a pharmacist. May measure, mix, count out, label & record amounts & dosages of medications.	Apprent. HS/SC MT OJT		Pharmacies; retail & general merchandise stores; hospitals	\$18,083e \$28,003	Above Average
Physical Therapist Assistants	SR	Assist physical therapists in providing treatments & procedures. May assist in developing treatment plans, carry out routine actions, document progress & modify treatments	SC/C Assoc.	L	Hospitals; offices & clinics of medical & health practitioners; home health care services; nursing & personal care facilities	\$35,634e \$50,687	Above Average
Physical Therapists	SRI	Assess, plan, organize & participate in rehabilitative programs that improve mobility, relieve pain, increase strength & decrease or prevent deformity of patients suffering from disease or injury.	C Master's	L	Hospitals; offices of health professionals; home health care agencies; physical rehabilitation care facilities	\$55,318e \$79,422	Above Average
Physician Assistants	ISA/ ISR	Provide services typically performed by a physician, under the supervision of a physician; conduct physicals, provide treatment & counsel patients. May prescribe medication. Must graduate from an accredited educational program for physician assistants.	SC/C Bach.	L	Offices & clinics of medical doctors & health practitioners; hospitals; government agencies	\$65,785e \$85,246	Above Average
Psychiatric Technicians	SR	Care for mentally impaired or emotionally disturbed individuals; monitor patients' physical & emotional well-being & report to medical staff. May participate in rehabilitation & treatment programs, help with personal hygiene & administer medications.	HS/SC <b>MT OJT</b>		Hospitals; government	\$19,719e \$29,480	Above Average
Radiologic Technologists & Technicians	RIS/ RCI	Take X-rays & CAT scans or administer nonradioactive materials into patient's blood stream for diagnostic purposes.	SC/C Assoc.		Hospitals; offices & clinics of medical doctors	\$38,492e \$54,320	Average
Registered Nurses	SIR	Assess patient health problems & needs, develop & implement nursing care plans & maintain medical records. May advise patients on health maintenance & disease prevention or provide case management.	SC/C Assoc.	L	Hospitals; offices & clinics of doctors; nursing, personal care, residential care facilities; medical, home health & family services; schools & government agencies	\$43,269e \$62,246	Above Average
Respiratory Therapists	IRS/ IRA	Assess, treat & care for patients with breathing disorders. Initiate & conduct therapeutic procedures; maintain patient records; & select, assemble, check & operate equipment.	SC/C Assoc.	L	Hospitals; offices of health practitioners	\$39,582e \$51,946	Above Average
Respiratory Therapy Technicians	SRI	Provide specific, well defined respiratory care procedures under the direction of respiratory therapists & physicians.	HS/SC Assoc.		Hospitals; nursing, personal & residential care facilities	\$29,025e \$44,006	Below Average

Speech-Language Pathologists	SIR	Assess & treat persons with speech, language, voice & fluency disorders.	C Master's	L	Education services; offices & clinics of health professionals & medical doctors; hospitals; self-employed	\$43,602e \$70,346	Average
Surgical Technologists	RSC	Assist in operations under supervision of surgeons, registered nurses or others. May help set up operating room, prepare & transport patients, adjust lights & equipment & pass & hold instruments & other supplies.	Apprent. HS/SC <b>PS Voc.</b>		Hospitals	\$28,452e \$39,370	Above Average
Veterinarians	IR	Diagnose & treat diseases & dysfunctions of domestic pets &/or farm animals.	C 1st Prof.		Agricultural services; veterinary hospitals; agricultural production; self-employed	\$51,452e \$102,292	Above Average
Veterinary Assistants & Laboratory Animal Caretakers	RIS	Feed, water & examine pets & other nonfarm animals for signs of illness, disease or injury in laboratories & animal hospitals & clinics. Clean & disinfect cages & work areas; sterilize laboratory & surgical equipment. May provide post-operative care, administer medication or prepare samples for lab work.	Apprent. HS/SC ST OJT		Animal hospitals & clinics; veterinarian's offices; agricultural, research & testing services; education services	\$15,740e \$22,622	Average
Veterinary Technologists & Technicians	*	Perform medical tests for use in the treatment & diagnosis of diseases in animals. Prepare vaccines & serums, prepare tissue samples, take blood samples, execute laboratory tests, clean & sterilize instruments & maintain equipment & machines.	HS/SC Assoc.		Agricultural services; veterinary hospitals or clinics; agricultural production	\$19,871e \$29,690	Above Average

# Industrial Technologies Occupations

These occupations pertain to installation, maintenance and/or servicing of electrical, mechanical, hydraulic and plumbing systems; design, manufacture and marketing of fabrics; and fabrication and repair of metal products using metal working and welding processes. People in these occupations usually have interests and skills in "things."

Occupation	НС	Work Description	Education	Lic.	Where	Salary	Outlook
Architectural & Civil Drafters	RAC/ RC	Prepare detailed drawings of architectural & structural features of buildings or drawings & topographical relief maps used in civil engineering projects such as highways, bridges & public works.	Apprent. SC/C <b>PS Voc.</b>		Engineering & architectural services; business & professional services; technical consulting services	\$31,695e \$50,240	Below Average
Cabinetmakers & Bench Carpenters	R	Cut, shape & assemble wooden articles or set up & operate woodworking machines such as power saws, jointers & mortisers to surface, cut or shape lumber or to fabricate parts for wood products.	Apprent. HS/SC LT OJT		Furniture & cabinet manufacturers	\$19,093e \$31,215	Below Average
Coating, Painting & Spraying Machine Setters, Operators &Tenders	RC	Set up, operate or tend machines to coat or paint food, glassware, cloth, ceramics, metal, plastic, paper or wood with lacquer, silver, copper, rubber, varnish, glaze, enamel, oil or rust-proofing materials.	Apprent. HS MT OJT		Manufacturing	\$21,073e \$31,812	Below Average
Computer, Automated Teller & Office Machine Repairers	RCE/ RCI/ RC	Repair, maintain or install computers, word processing systems, automated teller machines & electronic office machines, such as duplicating & fax machines.	Apprent. HS/SC/C PS Voc.		Wholesale companies; computer & data processing services; furniture & electrical repair shops; industrial machinery & equipment manufacturers	\$26,086e \$44,305	Below Average
Computer-Controlled Machine Tool Operators, Metal & Plastic	RC	Operate computer-controlled machines or robots to perform one or more machine functions on metal or plastic work pieces.	Apprent. HS/SC MT OJT		Industrial machinery, electronics equipment & fabricated metal products manufacturers	\$25,432e \$35,986	Average
Cutting, Punching & Press Machine Setters, Operators & Tenders, Metal & Plastic	RC	Set up, operate or tend machines to saw, cut, shear, slit, punch, crimp, notch, bend or straighten metal or plastic material.	Apprent. HS/SC MT OJT		Fabricated metal products & industrial machinery & equipment manufacturers	\$17,709e \$30,498	Below Average
Electrical & Electronic Equipment Assemblers	RC	Assemble or modify electrical or electronic equipment, such as computers, test equipment telemetering systems, electric motors & batteries.	Apprent. HS/SC ST OJT		Electronics equipment, industrial machinery & transportation equipment manufacturers	\$20,637e \$34,525	Below Average
Electrical & Electronics Repairers, Commercial & Industrial Equipment	RIC	Repair, test, adjust or install electronic equipment, such as industrial controls, transmitters & antennas.	Apprent. HS/SC <b>PS Voc.</b>		Electronic equipment repair & maintenance businesses; manufacturers; wireless telecommunications carriers	\$32,689e \$52,648	Below Average

Electrical & Electronics Repairers, Powerhouse, Substation & Relay	RCI	Inspect, test, repair or maintain electrical equipment in generating stations, substations & in-service relays.	Apprent. HS/SC <b>PS Voc.</b>	Utility companies	\$39,931e \$59,718	Below Average
Electronic Home Entertainment Equipment Installers & Repairers	RC	Repair, adjust or install audio or television receivers, stereo systems, camcorders, video systems or other electronic home entertainment equipment.	Apprent. HS/SC <b>PS Voc.</b>	Home entertainment & electronics retail stores; department stores	\$21,389e \$32,663	Average
Extruding & Drawing Machine Setters, Operators & Tenders, Metal & Plastic	RC	Set up, operate or tend machines to extrude or draw thermoplastic or metal materials into tubes, rods, hoses, wire, bars or structural shapes.	Apprent. HS/SC <b>MT OJT</b>	Primary metals industries; rubber, plastics & fabricated metal products manufacturers; industrial machinery, equipment, electrical & electronic & transportation equipment manufacturers	\$21,424e \$33,040	Below Average
Fiberglass Laminators & Fabricators	*	Laminate layers of fiberglass on molds to form boat decks & hulls, bodies for golf carts, automobiles or other products.	Apprent. HS/SC <b>MT OJT</b>	Automobile, recreational vehicle & boat manufacturing	\$19,611e \$28,989	Average
First-Line Sup./Mgrs of Mechanics, Installers & Repairers	ERC	Supervise & coordinate the activities of mechanics, installers & repairers.	HS/SC Wk. Exp.	Automotive repair & maintenance shops; building equipment contractors; auto dealer-ships; automotive parts stores; government	\$37,309e \$63,037	Average
First-Line Sup./Mgrs of Production & Operating Workers	ERC	Supervise & coordinate activities of production & operating workers such as inspectors, precision workers, machine setters & operators, assemblers, fabricators & plant & system operators.	HS/SC Wk. Exp.	Manufacturers; printing companies	\$31,573e \$56,067	Below Average
HelpersInstallation, Maintenance & Repair Workers	RC	Help installation, maintenance & repair workers in maintenance, parts replacement & repair of vehicles, industrial machinery & electrical & electronic equipment.	Apprent. HS/SC <b>ST OJT</b>	Automobile dealerships; government; auto parts stores; auto repair & maintenance businesses; freight trucking companies	\$16,637e \$26,745	Average
HelpersProduction Workers	R	Help production workers by performing duties of lesser skill. Duties include supplying or holding materials or tools & cleaning work area & equipment.	HS ST OJT	Manufacturing & industrial processing plants	\$16,785e \$25,215	Below Average
Industrial Machinery Mechanics	R	Repair, install, adjust or maintain industrial production & processing machinery or refinery & pipeline distribution systems.	Apprent. HS/SC/C Wk. Exp.	Business services; engineering services; manufacturers	\$50,846e \$92,350	Below Average
Industrial Production Managers	EC	Plan, direct or coordinate work activities & resources necessary for manufacturing products according to cost, quality & quantity specifications.	Apprent. HS/SC/C <b>Wk. Exp.</b>	Business services; engineering services; manufacturers	\$50,846e \$92,350	Below Average
Inspectors, Testers, Sorters, Samplers & Weighers	RC/ RCI	Inspect, test, sort, sample or weigh nonagricultural raw materials or processed, machined, fabricated or assembled parts or products for defects, wear & deviations from specifications.	Apprent. HS/SC MT OJT	Manufacturing	\$19,347e \$33,837	Below Average
Laundry & Dry-Cleaning Workers	RC/ RCI	Operate or tend washing or dry-cleaning machines to wash or dry-clean industrial or household articles, such as cloth garments, suede, leather, furs, blankets, draperies, fine linens, rugs & carpets.	Apprent. HS <b>MT OJT</b>	Laundry & dry cleaning businesses; hotels & motels; nursing, personal care & residential care facilities; hospitals	\$14,380e \$19,674	Below Average
Machine Feeders & Offbearers	RC	Feed materials into or remove materials from machines or equipment that is automatic or tended by other workers.	HS <b>ST OJT</b>	Manufacturing	\$17,402e \$27,918	Below Average
Machinists	RIC	Set up & operate machine tools to produce precision parts & instruments. May fabricate, modify or repair mechanical instruments or parts.	Apprent. HS/SC <b>LT OJT</b>	Fabricated metal products, industrial machinery & electronics equipment manufacturers; transportation equipment companies	\$22,598e \$39,419	Average
Maintenance & Repair Workers, General	RC	Keep machines, mechanical equipment or the structure of an establishment in repair. May involve pipe fitting; boiler making; insulating; welding; machining; carpentry; repairing electrical or mechanical equipment; installing, aligning & balancing new equipment & making building repairs.	Apprent. HS/SC <b>MT OJT</b>	Manufacturers; government agencies; hotels & motels; variety of businesses & industries	\$23,115e \$39,289	Below Average

Mechanical Drafters	RCI	Prepare detailed working diagrams of machinery & mechanical devices, including dimensions, fastening methods & other engineering information.	Apprent. SC/C <b>PS Voc.</b>	Engineering services; business & professional services; industrial machinery & electronics equipment manufacturers; technical consulting services	\$33,818e \$57,877	Average
Millwrights	RI	Install, dismantle or move machinery & heavy equipment according to layout plans, blueprints or other drawings.	Apprent. HS/SC	Manufacturers & processing plants	\$27,887e \$43,727	Average
Mixing & Blending Machine Setters, Operators & Tenders	RC	Set up, operate, or tend machines to mix or blend materials, such as chemicals, tobacco, liquids, color pigments, or explosive ingredients.	Apprent. HS/SC MT OJT	Chemical & industrial processing plants	\$21,128e \$34,911	Below Average
Multiple MachineTool Setters, Operators & Tenders, Metal & Plastic	RC	Set up, operate or tend more than one type of cutting or forming machine tool or robot.	Apprent. HS/SC <b>MT OJT</b>	Industrial machinery, electronic, electrical equipment manufacturers	\$23,828e \$42,121	Above Average
Outdoor Power Equipment & Other Small Engine Mechanics	RC	Diagnose, adjust, repair or overhaul small engines used to power lawn mowers, chain saws & related equipment.	Apprent. HS/SC MT OJT	Engine repair companies; self-employed	\$21,627e \$30,385	Average
Packaging & Filling Machine Operators & Tenders	RC	Operate or tend machines to prepare industrial or consumer products for storage or shipment. Includes cannery workers who pack food products.	HS <b>ST OJT</b>	Manufacturers	\$16,607e \$32,362	Below Average
Packers & Packagers, Hand	RC	Pack or package by hand a wide variety of products & materials.	HS ST OJT	Grocery stores; mills & manufacturers of plastics products, furniture & paper products	\$14,642e \$21,570	Below Average
Paper Goods Machine Setters, Operators & Tenders	RC	Set up, operate or tend paper goods machines that convert, saw, corrugate, band, wrap, box, stitch, form or seal paper or paperboard sheets into products.	Apprent. HS/SC MT OJT	Pulp & paper processing & products companies	\$19,343e \$33,202	Below Average
Team Assemblers	*	Work as part of a team responsible for assembling an entire product or component of a product. Assemblers can perform all tasks conducted by the team & rotate through them rather than being assigned a specific task on a permanent basis.	Apprent. HS/SC MT OJT	Manufacturers	\$17,902e \$30,093	Below Average
Telecommunications Equipment Installers & Repairers, Except Line Installation	RCI/ RC/ REI	Set up, rearrange or remove switching & dialing equipment used in central offices. Service or repair telephones & other communication equipment on customers' property. May install equipment in new locations or install wiring & telephone jacks.	Apprent. HS/SC LT OJT	Telephone & telecommunications companies	\$38,866e \$57,807	Below Average
Tool & Die Makers	RC	Analyze specifications, lay out metal stock, set up & operate machine tools & fit & assemble parts to make & repair dies, cutting tools, jigs, fixtures, gauges & machinists' hand tools.	Apprent. HS/SC <b>LT OJT</b>	Fabricated metal products & industrial machinery manufacturers	\$29,840e \$45,030	Below Average
Welders, Cutters, Solderers & Brazers	R/ RC/ RI	Use hand-welding, flame-cutting, hand soldering or brazing equipment to weld or join metal components or to fill holes, indentations or seams of fabricated metal products.	Apprent. HS/SC <b>LT OJT</b>	Industrial machinery & equipment manufacturers; fabricated metal products & transportation equipment manufacturers; plumbing, heating, air conditioning contractors	\$24,327e \$37,477	Average
Woodworking Machine Setters, Operators & Tenders, Except Sawing	R/RC	Set up, operate or tend woodworking machines, such as drill presses, lathes, shapers, routers, sanders, planers & wood nailing machines.	Apprent. HS <b>MT OJT</b>	Wood product & furniture manufacturers	\$18,884e \$28,520	Below Average

# Public Service Technologies Occupations 3

These occupations include work in cosmetology, food service production, food service management and sales and early childhood education. People in these occupations usually have interests in "people" and/or "ideas," and sometimes in "data."

Oc	cupation	НС	Work Description	Education	Lic.	Where	Salary	Outlook
Ren & (	ult Literacy, medial Education GED Teachers & tructors	SA	Teach or instruct out-of-school youths & adults in remedial education classes, preparatory classes for the General Educational Development test, literacy or English as a Second Language. May not take place in a traditional educational institution.	SC/C Bach.	L	Educational services; self-employed	\$29,283e \$43,685	Average

Amusement & Recreation Attendants	RCE	Perform attending duties at amusement or recreation facilities. May schedule use of facilities, maintain & provide equipment or operate amusement concessions & rides.	HS/SC/C <b>ST OJT</b>		Amusement & recreation services; commercial sports	\$14,152e \$18,231	Above Average
Animal Control Workers	SR	Handle animals for the purpose of investigations of mistreatment or control of abandoned, dangerous or unattended animals.	HS/SC MT OJT	L	Government agencies	\$20,108e \$31,436	Average
Chefs & Head Cooks	ER	Direct the preparation, seasoning & cooking of foods. May plan & price menu items, order supplies & keep records & accounts. May participate in cooking.	Apprent. HS/SC <b>Wk. Exp.</b>		Eating & drinking places; hotels & motels; recreation services	\$22,152e \$43,855	Average
Child Care Workers	SA	Attend to children at schools, businesses, private homes & child care institutions. May include dressing, feeding, bathing & overseeing play.	Apprent. HS/SC <b>ST OJT</b>		Child care services; religious organizations; self-employed; amusement & recreational services; hospitals; residential care facilities; government & social service agencies	\$14,420e \$21,327	Average
Child, Family & School Social Workers	SAE	Provide social services & assistance to improve the social & psychological functioning of children & their families & to maximize the family well-being & the academic functioning of children. May assist single parents, arrange adoptions & find foster homes for children. May address teenage pregnancy, misbehavior & truancy & advise teachers.	C <b>Bach.</b>	L	Local government agencies; social service agencies; schools, colleges & universities; residential care facilities; religious organizations	\$31,200e \$45,779	Above Average
Clergy	SAE	Conduct religious worship & perform spiritual functions associated with a religious faith or denomination. Provide spiritual & moral guidance & assistance.	C Master's		Churches, synagogues, mosques & religious organizations; hospitals, residential care facilities; government agencies	\$32,897e \$55,659	Above Average
Combined Food Preparation & Serving Workers, Including Fast Food	R	Perform duties which combine both food preparation & food service.	HS/SC <b>ST OJT</b>		Eating & drinking places; hotels & motels; recreation services	\$14,143e \$16,565	Above Average
Cooks, Restaurant	REA	Prepare, season & cook foodstuffs in restaurants. May order supplies, keep records & accounts, price items on menu or plan menu.	Apprent. HS LT OJT		Eating & drinking places; recreational services; hotels & motels; food stores	\$15,316e \$22,810	Above Average
Correctional Officers & Jailers	RS	Guard inmates in penal or rehabilitative institution according to regulations & procedures. May guard prisoners in transit between jail, courtroom, prison or other point.	Apprent. HS/SC MT OJT	L	Government agencies & police departments	\$27,929e \$32,365	Average
Detectives & Criminal Investigators	ESI/ EIS/ ESC/ CRS/ CER/ CEI	Conduct investigations related to suspected violations of Federal, State or local laws to prevent or solve crimes.	SC/C Wk. Exp.	L	Government agencies & police departments	\$33,270e \$54,427	Above Average
Directors, Religious Activities & Education	SEA	Direct & coordinate activities of a denominational group to meet religious needs of students. Plan, direct or coordinate church school programs to promote religious educationp. Provide counseling & guidance related to marital, health, financial & religious problems.	SC/C <b>Bach.</b>		Religious organizations	\$33,311e \$74,229	Above Average
Education Administrators, Elementary & Secondary School	SEI	Plan, direct or coordinate the academic, clerical or auxiliary activities of public or private elementary or secondary level schools.	C <b>Bach.</b> +		State government; educational services; social services; religious organizations	\$47,376e \$75,399	Average
Education Administrators, Postsecondary	ECI/ ECS	Plan, direct or coordinate research, instructional, student administration & services & other educational activities at universities, colleges & junior & community colleges.	C <b>Bach.</b> +		Schools, public & private colleges & universities; private business & trade schools; government agencies	\$43,683e \$92,940	Above Average
Education Administrators, Preschool & Child Care Center/Program	SEI	Plan, direct or coordinate the academic & nonacademic activities of preschool & child care centers or programs.	C <b>Bach.</b> +		State government; educational services; social services; child day care centers; religious organizations; self-employed	\$27,719e \$43,994	Above Average

Educational, Vocational & School Counselors	SAC/ SAE	Counsel individuals & provide group educational & vocational guidance services.	Apprent. C Master's	L	Schools, colleges & universities; social services; government agencies; residential care facilities; job training services	\$33,526e \$51,242	Average
Elementary School Teachers, Except Special Education	SAI/ SAC	Teach pupils in public or private schools at the elementary level basic academic, social & other formative skills.	C <b>Bach.</b>	L	Public & private elementary schools	\$29,969e \$44,521	Above Average
Fire Fighters	RS	Control & extinguish fires or respond to emergency situations where life, property or the environment is at risk. May include fire prevention, emergency medical service, hazardous material response, search & rescue & disaster management.	Apprent. HS/SC LT OJT		Fire departments; government agencies; business services	\$22,428e \$38,111	Average
First-Line Sup./Mgrs of Food Preparation & Serving Workers	ERC	Supervise workers engaged in preparing & serving food.	HS/SC Wk. Exp.		Eating & drinking places; hotels & motels	\$19,494e \$32,935	Average
First-Line Sup./Mgs of Housekeeping & Janitorial Workers	ECR/ ERC	Supervise work activities of cleaning personnel in hotels, hospitals, offices & other establishments.	Apprent. HS/SC Wk. Exp.		Building services; educational services; government agencies; hospitals; variety of businesses	\$20,707e \$38,559	Above Average
Fitness Trainers & Aerobics Instructors	SRE	Instruct or coach groups or individuals in exercise activities & the fundamentals of sports. Demonstrate techniques & methods of participation. Observe participants & inform them of corrective measures needed to improve skills.	SC/C PS Voc.		Gymnasiums; amusement & recreation services; hospitals; self-employed	\$17,399e \$34,923	Above Average
Forensic Science Technicians	ICR	Collect, identify, classify & analyze physical evidence related to criminal investigations. Perform tests on weapons or substances to determine significance to investigation. May testify as expert witnesses or serve as specialists in area of expertise.	Apprent. HS/SC/C Assoc.		Crime labs; scientific research & testing services	\$27,772e \$42,650	Above Average
Hairdressers, Hairstylists & Cosmetologists	EAS	Provide beauty services such as shampooing, cutting, coloring & styling hair & massaging & treating scalp. May also apply makeup, dress wigs, perform hair removal & provide nail & skin care services.	Apprent. HS/SC <b>PS Voc.</b>	L	Beauty shops; self-employed; department stores	\$14,575e \$33,670	Above Average
Health Educators	SEI/ SEA	Promote, maintain & improve individual & community health by assisting in adoption of healthy behaviors. Collect & analyze data to identify community needs. May administer fiscal resources for health education programs.	SC/C Master's		Government; medical research services; hospitals; private practice offices	\$32,831e \$53,235	Above Average
Instructional Coordinators	SIA/ SIE	Develop instructional material, coordinate educational content & incorporate current technology in the development of curricula & courseware.	C Master's		Business, professional & educational services; technical consulting services; training & consulting services; variety of companies	\$36,719e \$59,846	Above Average
Interpreters & Translators	ASI/ ASC	Translate or interpret written, oral or sign language text into another language for others.	SC/C <b>LT OJT</b>		Educational, medical, legal & community services; self-employed; government	\$21,821e \$36,219	Above Average
Janitors & Cleaners, Except Maids & Housekeeping Cleaners	R	Keep buildings in clean & orderly condition. Involves cleaning floors & carpets, washing walls & glass & removing rubbish. May include tending furnace & boiler, performing routine maintenance activities & cleaning debris from sidewalks.	Apprent. HS ST OJT		Building services; educational services; government agencies; hospitals; variety of businesses	\$15,272e \$22,239	Average
Kindergarten Teachers, Except Special Education	SAI	Teach elemental natural & social science, personal hygiene, music, art & literature to children from 4 to 6 years old. Promote physical, mental & social development. May be required to hold State certification.	HS/SC/C Bach.	L	Private day cares; elementary schools; individual & family service organizations	\$27,777e \$43,232	Above Average
Lawyers	ECI/ ECS	Represent clients in criminal & civil litigation & other legal proceedings, draw up legal documents & manage or advise clients on legal transactions.	C 1st Prof.	L	Law firms & legal agencies; government agencies; self-employed; commercial banks & business services	\$50,699e \$130,067	Above Average
Librarians	ACI	Administer libraries & perform related library services. Select, acquire, catalogue, classify, circulate & maintain library materials. Furnish reference, bibliographical & readers' advisory services. Perform research & work with databases & information systems.	C Master's		Schools, colleges & universities; government agencies & libraries; legal services; hospitals	\$35,524e \$53,141	Average

Lifeguards, Ski Patrol & Other Recreational Protective Service Workers	RS	Monitor recreational areas, such as pools, beaches or ski slopes to provide assistance & protection to participants.	HS/SC/C <b>ST OJT</b>		Recreational, sports & amusement services	\$14,399e \$18,940	Above Average
Lodging Managers	ECS	Plan, direct or coordinate activities of an organization or department that provides lodging & other accommodations.	HS/SC/C Wk. Exp.		Hotels & motels; inns & resorts; self-employed	\$29,148e \$51,677	Average
Middle School Teachers, Except Special & Vocational Education	SAI	Teach students in public or private schools in one or more subjects at the middle, intermediate or junior high level.	C <b>Bach.</b>	L	Public & private middle/junior high schools	\$27,876e \$44,647	Average
Nonfarm Animal Caretakers	R	Feed, water, groom, bathe, exercise or otherwise care for pets & other nonfarm animals. May keep records of feedings, treatments & animals received or discharged. May clean, disinfect & repair cages, pens or fish tanks.	Apprent. HS/SC ST OJT		Animal shelters; pet stores; pet grooming & boarding businesses	\$14,843e \$22,035	Below Average
Paralegals & Legal Assistants	ECS	Assist lawyers by conducting research, investigating facts or preparing legal documents.	Apprent. SC/C Assoc.		Legal firms & services; government agencies; banks, security brokers	\$27,121e \$43,741	Above Average
Personal & Home Care Aides	SR	Assist elderly or disabled adults with daily living activities at the person's home or in a daytime non-residential facility. May include keeping house & preparing meals. May advise families, the elderly & disabled on nutrition, cleanliness & household utilities.	HS/SC <b>ST OJT</b>		Residential & nursing care facilities; home health care services; social services; government agencies	\$15,756e \$19,713	Above Average
Police & Sheriff's Patrol Officers	RSE/ RSC/ REI/ ESR/ ESC	Maintain order, enforce laws & ordinances & protect life & property in an assigned patrol district. May patrol specific areas, direct traffic, issue traffic summonses, investigate accidents, apprehend & arrest suspects or serve legal processes of courts.	Apprent. SC/C <b>LT OJT</b>	L	Government agencies & police departments	\$29,287e \$44,615	Average
Postsecondary Teachers (all subjects)	IS/ SIA/ ASI/ ISR/ IC/ ICS/ ICR/ SRE	Teach courses in subject area(s) of specialization at 2- or 4-year public or private colleges or universities.	C Master's		Junior colleges, colleges & universities		Above Average
Preschool Teachers, Except Special Education	SAC/ SAI	Instruct children (normally up to age 5) in activities to promote social, physical & intellectual growth needed for primary school in preschool, day care center or other child development facility.	HS/SC/C <b>PS Voc.</b>	L	Private day cares; elementary schools; individual & family service organizations	\$15,913e \$23,803	Above Average
Recreation Workers	SAR	Conduct recreation activities with groups in public, private or volunteer agencies or recreation facilities. Organize & promote activities such as arts & crafts, sports, games, music, dramatics, social recreation, camping & hobbies.	SC/C <b>ST OJT</b>		Civic & social associations; nursing & personal care facilities; amusement & recreation parks & services	\$15,579e \$27,967	Average
Refuse & Recyclable Material Collectors	RC	Collect & dump refuse or recyclable materials from containers into truck. May drive truck.	HS <b>ST OJT</b>		Government & private waste collection, treatment & disposal companies	\$16,583e \$26,707	Below Average
Rehabilitation Counselors	*	Counsel individuals to maximize independence & employability of persons coping with personal, social & vocational difficulties. Coordinate activities for residents of care & treatment facilities.	C Master's	L	Residential care facilities; educational, social & health services; job training & government agencies; hospitals	\$21,667e \$36,913	Above Average
Security Guards	SEC	Guard, patrol or monitor premises to prevent theft, violence or infractions of rules.	Aprent. HS/SC <b>ST OJT</b>	L	Education, business & financial services; eating & drinking places; hospitals; retail stores; real estate & building services; recreation services; hotels & motels	\$16,132e \$26,663	Average
Self-Enrichment Education Teachers	SA	Teach or instruct courses other than those that normally lead to an occupational objective or degree, such as self-improvement, nonvocational or nonacademic subjects.	SC/C Wk. Exp.		Educational services; religious organizations; civic, social associations; government & job training agencies; self-employed	\$21,988e \$42,871	Above Average

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Service Station Attendants	REC	Service automobiles, buses, trucks, boats & other automotive or marine vehicles with fuel, lubricants & accessories. Collect payment for services & supplies. May lubricate vehicle, change motor oil, install antifreeze or replace lights or other accessories, such as windshield wiper blades or fan belts.	HS/SC <b>ST OJT</b>		Auto dealers & service stations; auto rental & services	\$14,316e \$20,016	Above Average
Skin Care Specialists	*	Provide skin care treatments to face & body to enhance an individual's appearance.	HS/SC PS Voc.		Beauty shops; department stores	\$16,681e \$41,639	Above Average
Social & Human Service Assistants	SC	Assist professionals from fields such as psychology, rehabilitation or social work to provide client services & support for families. May assist in identifying benefits & social & community services.	Apprent. SC/C MT OJT		Government agencies; social service agencies; residential care facilities; religious organizations; job training services	\$19,890e \$29,450	Above Average
Special Education Teachers, Middle School	SAI	Teach middle school subjects to educationally & physically handicapped students. Includes teachers who work with audibly & visually handicapped students & those who teach basic academic & life skills to the mentally impaired.	C <b>Bach.</b>	L	Public & private middle/junior high schools	\$29,782e \$45,768	Above Average
Special Education Teachers, Preschool, Kindergarten & Elementary School	SAI	Teach elementary & preschool school subjects to educationally & physically handicapped students.	C <b>Bach.</b>	L	Schools; rehabilitation facilities for disabled children	\$30,975e \$45,704	Above Average
Special Education Teachers, Secondary School	SAI	Teach secondary school subjects to educationally & physically handicapped students. Includes teachers who specialize & work with audibly & visually handicapped students & those who teach basic academic & life processes skills to the mentally impaired.	C <b>Bach.</b>	L	Public & private high schools	\$31,378e \$46,275	Average
Substance Abuse & Behavioral Disorder Counselors	SIA	Counsel & advise individuals with alcohol, tobacco, drug or other problems, such as gambling & eating disorders. May counsel individuals, families or groups or engage in prevention programs.	C Master's	L	Social, family & health services; hospitals & outpatient care facilities	\$25,774e \$41,597	Above Average
Teacher Assistants	SC	Perform duties that are instructional in nature or deliver direct services to students or parents. Serve in a position for which a teacher or another professional has ultimate responsibility for the design & implementation of educational programs & services.	Apprent. HS/SC ST OJT		Elementary, middle/junior & high schools; government agencies; child care & social services agencies	\$16,369e \$20,887	Average
Vocational Education Teachers, Secondary School	SAI	Teach or instruct vocational or occupational subjects at the secondary school level.	C <b>Bach.</b> +	L	Public & private high schools	\$33,272e \$49,838	Below Average

# Transport Systems Technologies Occupations

These occupations include collision repair, rebuilding and refinishing of automobiles and maintenance and repair of all transportation vehicles. People in these occupations typically have interests in "things" and sometimes "data."

**%** 

Occupation	HC	Work Description	Education	Lic.	Where	Salary	Outlook
Aircraft Mechanics & Service Technicians	RI⁄ RC	Diagnose, adjust, repair or overhaul aircraft engines & assemblies, such as hydraulic & pneumatic systems.	Apprent. HS/SC <b>PS Voc.</b>		Major airlines, airports & flying services; government agencies	\$30,862e \$46,996	Above Average
Automotive Body & Related Repairers	RC	Repair & refinish automotive vehicle bodies & straighten vehicle frames.	Apprent. HS/SC LT OJT		Auto repair shops; new & used car dealers & service stations; self-employed	\$25,196e \$47,971	Average
Automotive Service Technicians & Mechanics	RC	Diagnose, adjust, repair or overhaul automotive vehicles.	Apprent. HS/SC <b>PS Voc.</b>	L	Automotive dealers & service stations; auto repair shops; commercial sports; automobile services	\$22,901e \$44,004	Average
Bus & Truck Mechanics & Diesel Engine Specialists	RC	Diagnose, adjust, repair or overhaul trucks, buses & all types of diesel engines.	Apprent. HS/SC <b>PS Voc.</b>	L	Trucking & warehousing companies; education services; rentals & repair shops; heavy construction contractors	\$27,718e \$42,779	Average

Bus Drivers, School	RS	Transport students or special clients, such as the elderly or persons with disabilities. Ensure adherence to safety rules & assist passengers in boarding or exiting.	HS/SC ST OJT	L	School systems	\$18,582e \$25,541	Average
Bus Drivers, Transit & Intercity	RSC	Drive bus or motor coach, including regular route operations, charters & private carriage. May assist passengers with baggage & collect fares or tickets.	HS/SC MT OJT	L	Local suburban, intercity & rural bus transportation companies; local government; charter services	\$18,002e \$32,548	Average
Driver/Sales Workers	ERS	Drive truck or other vehicle over established routes or within an established territory & sell /pick up / deliver goods such as newspapers, food products or laundry. May also take orders & collect payments.	HS/SC <b>ST OJT</b>	L	Trucking & warehousing companies; wholesale companies; restaurants; airlines, food & retail stores; building materials, garden supplies & furniture stores	\$14,139e \$28,633	Below Average
Excavating & Loading Machine & Dragline Operators	RC	Operate or tend machinery equipped with scoops, shovels or buckets, to excavate & load loose materials.	Apprent. HS MT OJT		Highway & heavy construction companies; special trade contractors; stone companies	\$23,853e \$34,442	Average
First-Line Sup./Mgrs of Helpers, Laborers & Material Movers	ECR	Supervise & coordinate the activities of helpers, laborers or material movers.	HS/SC <b>Wk. Exp.</b>		Airports, railroads, shipping & exporting businesses	\$26,746e \$45,234	Average
First-Line Sup. /Mgrs of Transp. & Material- Moving Machine & Vehicle Operators	ERC	Directly supervise & coordinate activities of transportation & material-moving machine & vehicle operators & helpers.	HS/SC Wk. Exp.		Trucking & freight companies; construction	\$32,037e \$54,056	Below Average
Industrial Truck & Tractor Operators	RC	Operate industrial trucks or tractors equipped to move materials around a warehouse, storage yard, factory, construction site or similar location.	HS <b>ST OJT</b>		Warehouses; building material & supplies companies; courier businesses; trucking companies	\$20,008e \$30,534	Below Average
Laborers & Freight, Stock & Material Movers, Hand	RC	Manually move freight, stock or other materials or perform other unskilled general labor.	HS/SC ST OJT		Temporary services; warehouses; grocery wholesalers; furniture manufacturers; government	\$16,187e \$25,315	Below Average
Mobile Heavy Equipment Mechanics, Except Engines	R	Diagnose, adjust, repair or overhaul mobile mechanical, hydraulic & pneumatic equipment, such as cranes, bulldozers, graders & conveyors, used in construction, logging & surface mining.	HS/SC PS Voc.	L	Wholesale companies; equipment rental companies; highway & heavy construction contractors; lumber products manufacturers; government agencies	\$29,357e \$44,806	Average
Taxi Drivers & Chauffeurs	RE	Drive automobiles, vans or limousines to transport passengers or cargo.	HS/SC <b>ST OJT</b>	L	Taxi & limousine services; self-employed	\$15,997e \$24,587	Average
Tire Repairers & Changers	R	Repair & replace tires.	HS ST OJT		Automotive parts stores; auto repair & maintenance businesses; automotive dealerships; service stations	\$16,925e \$25,613	Above Average
Transportation, Storage & Distribution Managers	EC/ ECR	Plan, direct or coordinate transportation, storage or distribution activities in accordance with governmental policies & regulations.	HS/SC/C Wk. Exp.		Trucking & warehousing, transport services; wholesale companies; government; chemical, rubber products; furniture companies	\$47,470e \$90,555	Below Average
Truck Drivers, Heavy & Tractor-Trailer	R/RC	Drive a tractor-trailer combination or a truck with a capacity of at least 26,000 GVW, to transport & deliver goods, livestock or materials in liquid, loose or packaged form. Requires commercial drivers' license.	Apprent. HS/SC MT OJT	L	Trucking & warehousing services; wholesale & retail companies; food stores; lumber products; building & garden supplies	\$25,605e \$43,558	Average
Truck Drivers, Light or Delivery Services	RC	Drive a truck or van with a capacity of under 26,000 GVW, primarily to deliver or pick up merchandise or to deliver packages within a specified area. May load & unload truck.	HS/SC ST OJT	L	Trucking & warehousing services; wholesale companies; furniture, building materials & garden supplies; retail stores	\$19,278e \$33,450	Average

# CAREER BRIEFS / PROFILES

### **Profile: Pre-School Administrator**

People decide upon a career in various ways. Some read about occupations or interview people who are working in careers in which they have an interest; some peg their skills or talents to a specific occupation; and some are just lucky to know from an early age what their career path should be.

Amy Giles often thought about becoming a teacher as a young girl, but it wasn't until her oldest child turned one-year old that she became serious about a career in education.

"Every child needs to be loved and nurtured, and as I watched my son grow and develop, I began to see how other children his age didn't seem to have the same environment that we provided for our son," she said. "It was then that I decided to pursue my interest in the Early Childhood Education field."

As assistant director of the Harrisburg Ruckus House Learning Center, a Christian-based educational childcare facility for infants through kindergarten-aged children, Giles wears many hats. Primarily, she is responsible for ensuring that the center is in compliance with state regulations. However, she also oversees staff scheduling, facilitating daily routines and enrollment of the children and addressing parents' questions and concerns.

Giles said she was drawn to Ruckus House by the staff members, whom she credits with providing a friendly and

### **Profile: Lineman**

Tom Wachira is a lineman for the county — Wake County, that is. But it's not the career path that he envisioned for himself several years ago while a student in his native country of Kenya.

Wachira attended Nairobi University where he majored in Computer Information, but after two years, the thought of being stuck behind a desk just wasn't appealing to him. He left Kenya for the United States in 2001 and joined his brother in Charlotte, NC, with the hope of finding better job opportunities.

One day, Wachira learned that Progress Energy was hiring for many positions that had become available due to a number of employees who had retired. His wife's cousin, who was a lineman with Progress Energy, encouraged him to apply. However, a year went by before Wachira finally received a job offer from the company.

"The state had been hit by several hurricanes, and I think that prompted the company to hire more people," said Wachira. "I was brought on and immediately put into their apprenticeship program."

According to Wachira, the program takes four years to reach journeyman level. Wachira began his initial training near the Sharon Harris Nuclear Power Plant in New Hill. He currently is at the second-class lineman level. "Everything is on-the-job-training, and special precautions are taken to assure that trainees are taken inviting atmosphere. "Our teachers instruct the children in their ABCs and 123s, but they also teach them about kindness and friendship. We want the children to leave our care with a strong mind, body and spirit," she said. "Our teachers are more than just babysitters. They are truly early childhood professionals."

In preparation for her career, Giles earned an associate's degree in Early Childhood Education from Rowan Cabarrus Community College. She then completed the North Carolina Early Childhood Credential and North Carolina Early Childhood Administrative Credential Level II and was trained in SIDS, Basic School Age Care, CPR and First Aid.

Although the salary for an administrative position in Early Childhood Education depends on the child care center and its budget, Giles cites Ruckus House as compensating its employees very well. "Our company is growing, and I am so blessed to be a part of an organization that is full of such integrity," she said.

Ruckus House is integrated into Giles' long-range career goals. She expects to become a director of a center within the next few years and possibly secure a position at the corporate level as the company grows. However, Giles does not measure success in her profession in the form of money or promotions.

"Success comes in the form of big bear hugs in the morning, the first time a child accomplishes a goal he has been working on, or when a child you had two years ago

care of and are taught all they need to know," said Wachira.

The notion that being a lineman is dangerous is no longer valid, according to Wachira. Safety has improved tremendously and is in the forefront of every job that is undertaken. "Every Monday morning there is a safety meeting and every day before going to our first job, we have a safety briefing," said Wachira. "Our equipment is tested and our rubber gloves are inspected daily for possible leaks and replaced when necessary. All of these safety measures have resulted in Progress Energy's attainment of one of the highest safety records among power companies in the country."

Although Wachira attests that no two days are alike, a "typical day" can best be described in this way: He arrives to work at 7 a.m. and receives his work orders for the day. After checking out the materials that he'll need, he loads his truck and heads out to his first job site. His orders may include building power lines in a new neighborhood or fixing street lights.

Wachira's work sometimes takes him away from Raleigh and even outside of North Carolina. Last September, he was one of 822 Progress Energy employees from the Carolinas and Florida asked to assist Texas utility companies in restoring power following an assault from Hurricane Ike. "There was so much devastation – no power anywhere. They didn't have the necessary equipment to work with a higher voltage," he said. "I ended up staying for 16 days." runs to you down a long hallway and says, 'Guess what I did!'" she said.

"Children often have more interesting things to say than most adults. Listen closely to what they tell you. You never know; you may just learn something from one of them."



The expertise of Wachira and 159 other Progress Energy personnel from the Carolinas was gratefully received in Tulsa, Oklahoma in December 2007 when two inches of ice halted electric service. "There is something gratifying about seeing signs posted by customers that read 'Thank you Progress Energy.' The work may be exhausting at times, but it feels good to be able to help people," said Wachira.



# CAREER BRIEFS / PROFILES

### **Profile: Veterinarian Technician**

When children are asked what they want to be when they grow up, many invariably say a veterinarian. But as these students grow older, some realize the road to becoming a vet is more arduous than imagined. In addition to getting a bachelor's degree, a vet student must earn a doctor of Veterinary Medicine degree from an accredited four-year college of veterinary medicine. They then must pass a national board exam, in addition to their state exam, to obtain a license to practice.

From the time he can remember, Mike Lowe has always had an interest in animals and considered becoming a veterinarian, but he didn't relish going to school for nearly a decade. That's when he decided to become a veterinary technician, or vet tech.

In contrast, vet techs complete either a two-year associate degree from an American Veterinary Medical Association (AVMA)-accredited community college program in veterinary technology or a four-year bachelor's degree. Vet techs take courses in clinical and laboratory settings using live animals.

A vet tech's relationship to a vet is similar to a nurse's relationship to a doctor. Vet techs are trained and licensed to assist vets in various ways including taking x-rays, blood tests, giving anesthesia and performing dental cleanings. Vet techs may also obtain and record patient case histories, perform lab procedures, and prepare

### **Profile: Master Carpenter**

Prominent roles for women in the theatre traditionally have been comprised of acting, directing and designing, but not so much in technical production. Today, women are increasingly joining the ranks of electricians, prop masters and carpenters working behind the scenes at local, regional and national theatres.

Kate Wicker, a 2008 graduate of UNC-Chapel Hill, can be counted among these women. A master carpenter at Arizona's Phoenix Theatre, Wicker got her first taste of theatre in middle school in Raleigh while taking acting and tech classes. She continued with acting classes in high school and was also treasurer of the Drama Club and served as stage manager for several productions. By this time, Wicker knew that theatre would play an important role in her life, but it was her further involvement in college that ultimately led her to choosing theatre as a career.

In preparation, Wicker gained the necessary in-depth knowledge of theatre and construction techniques by working as a shop assistant at the university's Playmakers Repertory Theatre and summers at theatres across the country. She also took a number of classes in UNC's graduate Technical Production program, which she credits with helping her to obtain references and greater knowledge than if she had taken only undergraduate courses. animals, instruments and equipment for surgery. Lowe is a surgical vet tech at N.C. State's School of Veterinary Medicine in Raleigh, where he prepares animals for surgery and sometimes assists in surgical procedures. He received his associate degree in veterinary technology from Farmingdale State University of New York in 1986 and then worked at Amityville Animal Hospital. He and his wife, Diane, who is also a vet tech, moved to Raleigh in 1990.

Before joining the Vet School in 1992, Lowe worked for a couple of private vets, which he enjoyed, but working at the Vet School has allowed him to work among many different disciplines. "As a surgical vet tech, I work with neurology, oncology, dermatology and other departments with both large and small animals, so my days are varied as well as interesting," said Lowe.

Lowe works the 4 p.m. to midnight shift Monday through Friday and two weekends a month, when he is on call from midnight to 7 a.m. When reporting to work, Lowe first finds out the cases on which he'll be working. He prepares the surgical room and instruments and also preps the animals for surgery. During surgery, Lowe assists the surgeon, works in post-operative care, and may have contact with the animals' owners concerning the condition of their pets.

Although Lowe prefers working with small animals, he has had to assist with surgeries on larger ones. "One year when the circus was in town, the 'World's Largest Horse'

Armed with years of experience and bachelor's degrees in English and Dramatic Arts, Wicker accepted a position in July as master carpenter at the Phoenix Theatre, where she oversees the construction and maintenance of scenery for six full-scale musicals and two children's shows each year. She also manages a scenic intern.

On most days, Wicker arrives to work at 9 a.m. ready to begin building anything from platforms, background set pieces to even oversized glasses of milk for a children's stage production of "Give a Mouse a Cookie." After a noon break for lunch, Wicker resumes work until 5 p.m. Wicker said she chose carpentry because she enjoys physical work, but there are other aspects of the job that are appealing. "The main reason I enjoy what I do so much is the people. You meet a lot of really interesting and varied people through theatre. I can be creative, hang out with friends and listen to music," she said.

Wicker said the disadvantages of her job is that the pay isn't great — starting between \$20,000 and \$30,000 a year — and that she definitely gets dirty and covered in sawdust and paint. Both things should improve, however, as her career progresses.

"I'm expecting to attend Yale Drama School in the fall for Technical Production in order to become a Technical Director (a position that manages all scenic drafting, planning and construction) or a Production Manager (manages all production aspects of a show including hiring)," she said. needed surgery and I helped with that. On another occasion, I traveled to the North Carolina Zoo in Asheboro to help operate on an antelope," he said.

Lowe feels fortunate to have a job doing what he loves, and he encourages animal lovers to look into becoming a vet tech if they aren't quite up to pursuing the long path to becoming a veterinarian.

"I would encourage anyone interested in this field to work for a veterinarian to experience firsthand what a vet tech does," Lowe said. "Not only does a person learn about the job, but he or she can get a better feel about whether this is the right career path to take."



After she earns her master's degree, Wicker wants to continue working in theatre rather than branching into film. "I think there's a magic in theatrical production that you lose a little in film. I'd also eventually like to teach technical classes at a college level."

Wicker advises anyone interested in pursuing a career in theatre to get as much experience through school and the community as possible and to be prepared to work hard. "A career in theatre requires a huge time commitment as well as hard work, but I find my work extremely rewarding. There is rarely a day when I don't enjoy what I am doing, which I think is key in finding your career path," she said.



# EDUCATION, TRAINING & FINANCIAL AID

# **Education & Training Options After High School**

#### On the job

Going to work for a company or business that will train you as you work helps you learn while you earn. Ask about programs for ongoing employee training.

#### Private business or trade school

Short-term training (one month to one year) is available for some occupations ranging from cosmetology to truck driving, usually with no special entrance requirements. Cost and length of programs vary. Purchase of special tools may increase costs.

#### **Community college**

Considering possible technical programs? The N.C. Community College System offers a variety of vocational and technical programs (one semester to two years) that lead to certificates, diplomas or associate degrees. They also offer two-year transfer programs and specialized training for industry. They have open admissions, with remedial and pre-tech courses available. Entrance requirements depend on the program. For more information, visit the community college system Web site at http://www.nccommunitycolleges.edu.

#### Apprenticeship

This is a three to four year training program that combines on-the-job training with related technical and educational instruction for skilled occupations, supervised by a master in the craft, trade, or occupational area.

Apprenticeable occupations are registered with the Division of Apprenticeship, North Carolina Department of Labor. For more information, visit http://www.nclabor.com/appren/appindex.htm.

#### Four-year college

Many public and private colleges and universities are available in North Carolina. Your local library, school counseling office and career center are good sources of college information. Entrance requirements are based primarily on high school grades and college test scores. You can write directly to the colleges you are considering or visit College Foundation of North Carolina at http://www.cfnc.org.

#### Military

Work for Uncle Sam and get training, pay, room and board and benefits. Ask your military recruiter about the type of training available, qualifications for training, length of commitment required and pay and benefits. High school graduation is required.

Army: (800) USA-ARMY or http://www.army.mil Navy: (800) USA-NAVY or http://www.navy.mil Air Force: (800) 423-USAF or http://www.af.mil Marines: (800) MARINES or http://www.usmc.mil Coast Guard: (800) 424-8883 or http://www.uscg.mil Army National Guard: (800) GO-GUARD or

http://www.arng.army.mil

## What if You Don't Have a Diploma?

A high school diploma is required for most jobs. If you don't have a diploma, the world of work can be difficult. With fewer careers to choose from and limited opportunities for career advancement, you may face an ongoing struggle for economic survival. Studies show that the more education you have, the more career choices you have. But what if you don't have a diploma?

One option is to look for an occupation that will provide on-the-job training. Browse through the Career Briefs section of this publication to see the types of jobs that are available.

You may also choose to get the education you need. The N.C. Community College System offers Basic Skills programs that provide educational opportunities for adults 16 years or older who are out of school. The programs address the needs of adults who do not have a high school diploma or who lack the basic education skills to function effectively in society. Programs include:

Adult Basic Education (ABE): Designed for adults who need to improve their reading, writing, speaking, problem-solving or computation necessary to function effectively in society, on a job or in the family.

Adult High School (AHS): Consists of core courses required by the Department of Public Instruction and the local public school system. Electives are also

offered. Meeting all graduation requirements means you can receive an Adult High School Diploma.

Compensatory Education (CED): Designed to compensate adults with intellectual disabilities who have not had an education or who have received an inadequate one.

English as a Second Language (ESL): Designed for adults who are limited English proficient and whose primary language is not English.

General Educational Development (GED): Instruction to prepare you for a battery of five tests which, when passed, certifies you have high school equivalency academic skills. The GED Diploma is issued when a student has an average of 450 on each test and a total score of 2250.

Special Populations: Basic Skills training for specially designated groups such as the homeless, Workfirst clients, learning disabled individuals, institutionalized adults and others.

#### For further information, go to

http://www.nccommunitycolleges.edu/Basic\_Skills/ index.html. This site will also allow you to locate Basic Skills programs near your community.

## Make the Most Of **Educational Opportunities**

Regardless of where you are in life, you can enhance your future through education and training. Lifelong learning is the key to making the most of your personal life as well as your career. In North Carolina, access to educational resources has never been greater. Here are ways to learn more to earn more.

- If you're already working, take advantage of employer-sponsored training and workshops. They are usually free, and they can include coursework leading to certification or licensure.
- If your employer offers a tuition reimbursement program, use it! You may have to pay the money up front, but you'll get your money back if you pass. Employers may also require that the area of study relate to your current occupation or career path.
- If you're unemployed, you may be eligible for job training assistance. Contact your local JobLink Career Center, or visit http://www.ncesc.com/individual/ *Default.asp?init=true* and view selections under Re-Employment Services & Benefits.
- Enroll in online courses through community colleges or through public or private colleges and universities. Some academic degree programs can be completed exclusively via distance education. For example, the University of North Carolina system has consolidated online course offerings from its 16 constituent universities in one convenient location. For more information and course listings, visit http://online. northcarolina.edu.
- Some coursework requires that you attend an actual classroom. In addition to traditional day and evening classes, some colleges and universities now offer classes on weekends, including Sundays.

As part of the Learn and Earn initiative, a number of high schools participate in the N.C. Virtual High School, whereby students can take courses online. For participating schools, visit *http://www.ncpublicschools*. org/learnandearnonline.

## The Career Readiness **Certificate: Another Way To Prove Your Skills**

Getting a North Carolina Career Readiness Certificate (CRC) helps you show prospective employers that you have the basic skills they require. No matter how much education you've had, the CRC further shows that you can handle these kinds of tasks: finding information, reading instructions and directions, and working with numbers. You'll find detailed information about this program at http://www.crcnc.org/info/JobSeekers.aspx. To talk with someone in your area about the CRC, go to http://www.crcnc.org/info/Contact.aspx and select the community college closest to you.

Source: North Carolina Community College System

# EDUCATION, TRAINING & FINANCIAL AID

## **Finding Financial Aid**

Many sources of financial aid are available to help you meet your school expenses—federal and state programs, college and university programs, local and other programs. North Carolina's comprehensive financial information resource is the College Foundation. High quality information about ways to pay for college can be found at *http://www.cfnc.org/site/paying/info\_\_\_\_\_paying\_start.jsp*, including more detailed information about the following types of financial aid and examples of each:

Scholarships or Grants: Money that does not have to be repaid or earned; it is sometimes referred to as "free money." Scholarships and grants are available based on the student's financial need (need-based) or based on the student's academic achievements or special talents (merit-based).

<u>Federal</u>: Federal Pel

Federal Pell Grant Federal Supplemental Grant (FSEOG) Academic Competitiveness Grant

#### State:

EARN Scholarship Education Lottery Scholarship UNC System Need-Based Grant NC Community College System Grant and Loan NC Legislative Tuition Grant State Contractual Scholarship NC Student Incentive Grant

**Loans:** Funds that must be repaid either in cash, usually with interest, or through service. Loans made with a service option usually require that the student repay the loan after graduation by working a specified number of years in a specific field. Loans that must be repaid with cash usually begin repayment after the student is out of college.

### Federal:

Federal Perkins Loan Federal Stafford Loan Federal Graduate/Professional PLUS Loan Federal Direct Student Loan Program Federal Parent Loans (PLUS) Unsubsidized Loans (Stafford or Direct)

#### State:

Nurse Scholars Program Nurse Education Scholarship Loan NC Teaching Fellows Scholarship Prospective Teacher Scholarship Loan Health, Science and Mathematics Student Loan Principal Fellows Program

**Work:** Funds that a student earns through a job on or off the college campus. Students have the opportunity to work and earn money to assist with the expenses associated with college. Federal Work Study is an example of an on-campus work opportunity. Cooperative education is a program that links students with off-campus employment in their academic major, allowing them to earn income while attending schools.

## Online Financial Aid Resources

College Foundation of North Carolina (*www.cfnc.org*) General information about all the major state and federal grant, scholarship and loan programs and many private programs.

Federal Financial Aid for Students (http://studentaid.ed.gov/PORTALSWebApp/ students/english/index.jsp) Comprehensive national financial aid resource.

Source: College Foundation of North Carolina

## **Choosing a College**

Choosing a school or college can be confusing without a game plan. This outline may help you get started.

**1. Define your goals.** How much and what kind of training will you need after high school for the career in which you are interested? If you choose a postsecondary school, list considerations important to you — specific programs of study, location, costs, facilities, student life, etc.

**2. Survey the possibilities.** Visit your school career center, public library, JobLink Center, or search the Internet to gather information on schools and programs of interest. Look for schools or programs that meet your needs.

**3. Compare.** Compare schools or programs and weigh the differences. Gather all the information needed to narrow your choice: e.g., special curriculum, admission requirements, comprehensive costs and financial aid.

**4. Visit the school, preferably when classes are in session.** This is a great way to get a feel for the school. It also gives you an opportunity to discuss your questions directly with admissions and financial aid officers.

## **Free Online Learning**

Finally, a resource that sounds too good to be true – but isn't. Whether you want to learn to use Microsoft office software, manage your money better, plan your next career, or be a better employee, the Goodwill Community Foundation's LearnFree website provides free lessons. To find out more, go to: *http://www.gcflearnfree.org*.

## Two New Federal Financial Aid Options

### Loan Forgiveness for Public Service Employees

This new loan forgiveness program is for public service employees. Under this program, the amount forgiven is the remaining outstanding balance of principal and accrued interest on an eligible Direct Loan for a borrower who is not in default and who makes 120 monthly payments on the loan after October 1, 2007. The borrower must be employed full-time in a public service job during the same period in which the qualifying payments are made and at the time that the cancellation is granted. A detailed fact sheet about this program can be found at *http://studentaid.ed.gov/students/attachments/ siteresources/LoanForgivenessMarch18.pdf* 

### **Teach Grant Program**

Congress created the Teacher Education Assistance for College and Higher Education (TEACH) Grant Program that provides grants of up to \$4,000 per year to students who intend to teach in a public or private elementary or secondary school that serves students from low-income families. To learn more about the TEACH Grant Program, go to *http://studentaid.ed.gov/students/ attachments/siteresources/4807Teach\_FactSheet\_v3.pdf* 

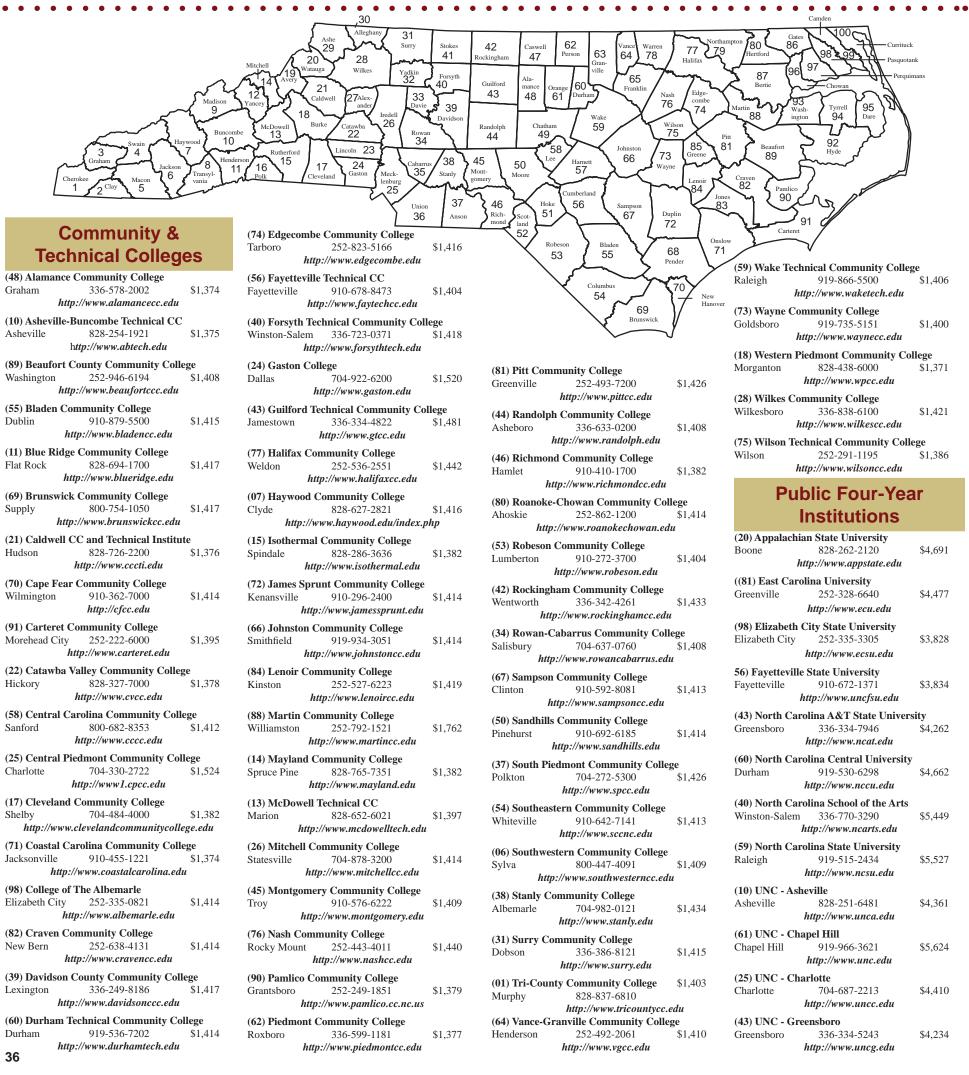
## GI Bill Education Programs For Eligible Veterans

Are you a veteran who is eligible for GI Bill education benefits? A variety of programs may help you continue your education after your enlistment is over. Follow this link to find out program details and eligibility information: *http://www.gibill.va.gov/GI\_Bill\_Info/ programs.htm#LAC*. Since these options can change, go back to this link from time to time to review the information. Vets who need further information may call the toll-free number 1-888-GI-BILL-1 (1-888-442-4551) to speak with a Veterans Benefits Counselor.

Current education programs include:

IHL (Institutions of Higher Learning) NCD (Non-College Degree Programs) On-the-Job & Apprenticeship Training Flight Training Independent Training, Distance Learning & Internet Training Correspondence Training National Testing Program Licensing & Certification Entrepreneurship Training Work-Study Program Co-op Training Accelerated Payment Tuition Assistance Top-Up Tutorial Assistance Program

# EDUCATION AND TRAINING



(53) UNC - Per	mbroke						
Pembroke	910-521-6262	\$3,736					
	http://www.uncp.edu						
(70) UNC - Wi	lmington						
Wilmington	910-962-3243	\$4,967					
-	http://www.uncw.edu						
(06) Western C	Carolina University						
Cullowhee	828-227-7317	\$5,140					
	http://www.wcu.edu						
(40) Winston-S	Salem State University						
Winston-Salem	336-750-2070	\$3,970					
ht	tp://www.wssu.edu/wssu						
Private Four-Year							
Frivale Four-fear							
	Institutions						
(75) Barton Co	ollege						

800-345-4973 Wilson \$20,648 http://www.barton.edu (24) Belmont Abbey College Belmont 888-222-0110 \$21,506 http://www.belmontabbeycollege.edu (43) Bennett College Greensboro 800-413-5323 \$14,890 http://www.bennett.edu (08) Brevard College 800-527-9090 \$20,900 Brevard http://www.brevard.edu (35) Cabarrus College of Health Sciences 704-403-1555 \$10,550 Concord http://www.cabarruscollege.edu (57) Campbell University 800-334-4111 \$21,440 Buies Creek http://www.campbell.edu (34) Catawba College Salisbury 800-CATAWBA \$23,740 http://www.catawba.edu (80) Chowan University 800-4-CHOWAN Murfreesboro \$25,500 http://www.chowan.edu (25) Davidson College 800-768-0380 Davidson \$35,124 http://www2.davidson.edu/index.asp (60) Duke University 919-684-3214 Durham \$39,075 http://www.duke.edu (48) Elon University 800-334-8448 \$25,489 Elon College http://www.elon.edu/home (17) Gardner-Webb University Boiling Springs 800-253-6472 \$21,170 http://www.gardner-webb.edu (43) Greensboro College 800-346-8226 Greensboro \$23,350 http://www.greensborocollege.edu (43) Guilford College 800-992-7759 \$27,120 Greensboro http://www.guilford.edu (43) High Point University 800-345-6993 \$24,500 High Point http://www.highpoint.edu ((25) Johnson & Wales University 866-598-2427 \$23.214 Charlotte http://www.jwu.edu/charlotte/cont.htm 25) Johnson C. Smith University Charlotte 800-782-7303 \$15,754 http://www.jcsu.edu (19) Lees-McRae College 828-898-5241 Banner Elk \$21,625 http://www.lmc.edu (22) Lenoir-Rhyne College 800-277-5721 Hickory \$24,200 http://www.lrc.edu

(34) Livingstone College 800-835-3435 \$12,615 Salisbury http://www.livingstone.edu

	Dib	le Colleges &	
	65) Louisburg .ouisburg hta	College 800-775-0208 tp://www.louisburg.edu	\$13,91
		vate Two-Yea nstitutions	r
	36) Wingate U Vingate <i>h</i>	niversity 800-755-5550 <i>ttp://www.wingate.edu</i>	\$20,01
A	-	800-934-3536 //www.warren-wilson.edu	\$25,650
	<b>40) Wake Fore</b> Vinston-Salem	st University 336-758-5201 http://www.wfu.edu	\$38,20
	9) Shaw Unive Raleigh		\$11,69
	<b>40) Salem Coll</b> Vinston-Salem	ege 800-32-SALEM http://www.salem.edu	\$21,03
	Raleigh	s <b>tine's College</b> 919-516-4012 http://www.st-aug.edu	\$15,69
	52) Saint Andr Laurinburg	rews College 800-763-0198 http://www.sapc.edu	\$21,19
	25) Queens Un Charlotte	iversity 800-849-0202 http://www.queens.edu	\$22,73
Ň		800-338-2060 tp://www.pfeiffer.edu	\$18,57
	59) Peace Colle Raleigh	ege 919-508-2214 http://www.peace.edu	\$24,13
	Rocky Mount	blina Wesleyan College 800-488-6292 http://www.ncwc.edu	\$20,79
	<b>73) Mount Oli</b> v Mount Olive	ve College 800-653-0854 http://www.moc.edu	\$14,44
	<b>10) Montreat (</b> Montreat <i>ht</i>	College 800-622-6968 tp://www.montreat.edu	\$20,67
	56) Methodist Fayetteville htt	University 800-488-7110 tp://www.methodist.edu	\$23,00
	59) Meredith ( Caleigh ht	C <b>ollege</b> 800-MEREDITH itp://www.meredith.edu	\$24,49

# **Seminaries**

(40) Carolina Ch	nristian College	
Winston-Salem	336-744-0900	\$4,100
htt	p://www.carolina.edu	
(57) Heritage Bi	ble College	
Dunn	800-297-6351	\$8,550
http://w	ww.heritagebiblecolle	ge.org
(43) John Wesley	y College	
High Point	336-889-2262	\$10,730
http	://www.johnwesley.ed	lu
(40) Piedmont B	aptist College	
Winston-Salem	800-937-5097	\$11,170
	http://www.pbc.edu	
(98) Mid Atlanti	c Christian Universit	ty
Elizabeth City	252-334-2000	\$9,700
http:/	//www.roanokebible.e	du
(59) Southeaster	n Baptist Theologica	l Seminary
Wake Forest	919-761-2100	\$6,860
h	nttp://www.sebts.edu	

### **Private Business & Trade** Schools, Hospitals

(43) Access Healthcare Institute Greenshoro 336-540-7651

(25) Amer. Acad. of Healthcare, LLC 704-525-3500 Charlotte www.americanacademyofhealthcare.org (91) Amer. Acad. of Magnetic Resonance Imaging

Morehead City 252-726-7705 http://www.aamri.com/director.html

(\*) American Institute of Applied Science, Inc. 919-554-2500 Youngsville www.aiasinc.com

(25) Art Institute of Charlotte 800-872-4417 Charlotte www.artinstitutes.edu

(25) Brookstone College of Business Charlotte 704-547-8600 www.brookstone.edu

(43) Brookstone College of Business 800-992-5515 Greensboro www.brookstone.edu

(40) Caduceus Nightingale Academy 336-765-9925 Winston Salem

(25) Caregivers Institute, Inc. 704-373-7165 Charlotte http://caregiversinstitute.org

(59) Care One Health Training Institute, Inc. 919-733-7165 Raleigh www.careonenursing.com

(25) Carolina School of Broadcasting 704-395-9272 Charlotte www.csbradiotv.com

(70) College of Wilmington Wilmington 910-763-4418

(25) Dental Staff Institute Matthews 704-582-2605 www.dentalstaffinstitute.com

(25) Divine Health Academy 704-582-2605 Charlotte www.divinehealthacademy.com

(59) Eastern College 919-787-8779 Raleigh

ECPI College of Technology 704-399-1010 (25) Charlotte 704-971-5050 (35) Concord (43) Greensboro 336-665-1400 919-571-0057 (59) Raleigh (56) Spring Lake 910-436-8044 www.ecpi.edu

(60) Gericare Education and Training Center, Inc. Durham 919-479-3000 (59) Healthcare Resource School

Raleigh 919-872-1178 www.healthcareresource.com

(56) Inovatech College of Business & Technology Fayetteville 800-764-0434 www.inovatech.edu

(25) King's College Charlotte 800-768-2255 www.kingscollegecharlotte.edu

(26) Lake Norman Dental Assisting School Mooresville 704-663-5430

www.ncdentalassistingschool.com/index.html (59) The Medical Arts School

http://mmccary.net/

919-872-6386 Raleigh www.medicalartsschool.com

(70) Miller-Motte College 888-800-3158 Wilmington http://mmcwilmington.net/ (59) Miller-Motte College Cary

919-532-7171

(25) More Than Conquerors College Charlotte 704-602-6010 www.vccenter.net

(59) MyComputerCareer.com 919-371-4820 Raleigh www.mycomputercareer.com

(25) Myers Park School of Dental Assisting Inc. Charlotte 704-376-1696 www.myersparkschoolofdentalassisting.com

(26) Nascar Technical Institute 877-201-2597 Mooresville www.uti.edu

The National Personal Training Institute 215-914-1610 (59) Morrisville (25) Huntersville 800-960-6294 http://www.nationalpersonaltraininginstitute.com

(59) NC Dental U 919-532-4444 Wake Forest http://www.ncdentalu.com

New Horizons Computer Learning Center 866-452-0840 (25) Charlotte http://www.nhcharlotte.com (43) Greensboro 336-299-5022 www.newhorizonsgso.com 919-336-1000 (59) Morrisville

www.nhrtp.com

North Carolina Dental Assistant Training School (25) Charlotte 1-866-962-3287 919-477-0337 (60) Durham www.ncdats.com

(25) Nurse Aide Institute of Excellence 704-509-4714 Charlotte http://nurseaideinstitute.com/default.aspx

(60) Optimal Health Services, Inc. 919-596-6811 Durham www.optimalhealthservices.net

(43) Piedmont Dental Assistants, Inc. Pleasant Garden 336-676-1333 www.piedmontdentalassistants.com

(43) Priority Nursing Academy 1-866-522-8969 Greensboro www.prioritynursingacademy.com

(50) Sandhills Dental Career Center, Inc. 910-585-1902 Aberdeen www.sandhillsdentalcareercenter.com

School of Communication Arts of NC, Inc. 1-800-288-7442 (59) Raleigh (40) Winston Salem 1-800-288-7442 www.higherdigital.com

(25) Serenity Nurse Aide Academy Charlotte 704-567-8000 http://serenitynurseaide.com

(10) South College-Asheville 828-252-2486 Asheville www.southcollegenc.com

Sunrise School of Dental Assisting 1-877-871-6002 (59) Raleigh (56) Fayetteville 1-877-871-6002 www.sunriseschoolofdentalassisting.com

Techskills

(25) Charlotte 1-800-639-7545 (59) Raleigh 1-800-639-7545 (43) High Point 1-800-639-7545 www.techskills.com

Thomas Health Care Institute, Inc. (59) Raleigh 919-790-9084 877-790-9088 (43) Greensboro http://thcinstitute.com

(43) TRS Institute Greensboro 1-877-235-8176

### www.trsinstitute.com

### Legend

() = County Number (\*) = Correspondence School

\$ = Estimated tuition & fees for 2009-10

Private business & trade schools listed here are licensed by the N.C. State Board of Community Colleges. Their tuition & fees are not included because they vary depending on the program.

An effective résumé is the most important marketing tool you can have. It has one purpose and one purpose only: to persuade the reader to contact you for an interview. Résumé writing involves documenting your accomplishments and skills to showcase what you can offer an employer. Follow these steps to create a résumé that gets results!

1. Define your career or job objective. Begin your job search and your résumé by establishing your career objective. Once you identify your goals, you can successfully communicate it to your network of contacts and potential employers. Your self-assessment will help you focus on a specific area of career interest. Job objectives can be defined by type of position, such as sales, administrative support or client services; by type of industry, such as real estate, manufacturing or health care; or according to skills you specifically want

# Résumé Formats

to use, such as communications, research or analysis. Objectives can also be a combination of these. Tailor your objective to a specific job by including keywords and phrases from the job description of interest.

2. List all your past work experiences (full time. part time, paid and unpaid) that relate to your chosen career field, starting with your current job. Start each work experience with an action verb.

3. List your education and training experiences, including special courses and skills that show related qualifications and preparation. If you recently graduated, list your education before your work

**Mark Jones** http://www.careeronestop.org. 455 Main Street Winston-Salem, North Carolina (336) 000-0000 mjones@gmail.com **Objective:** Entry level Accounting position qualifications for the job. Education: Forsyth Technical Community College, Winston Salem, North Carolina Associate Applied Science, Accounting, June, 2008 G.P.A. 3.2 **Christine M. Smith** Work Experience: 401 Valley Road Belk Department Store 6/2006 - 7/2008 Raleigh, North Carolina 27611 Sales Associate csmith@e-mail.com · Answered customers' questions and assisted with merchandise selection. • Handled cash and credit transactions with accuracy. • Took inventory and identified items to be re-ordered. market nonprofit organizations. • Stocked shelves and organized merchandise to increase visibility and sales. **DESIGN EXPERIENCE** • Awarded sales person of the month, November, 2007. Lowes Food Store 5/2004 - 6/2006 designs for photo shoots at Stallings Design. **Customer Services and Head Cashier** · Balanced 15 cash registers daily and made bank deposits. thesis project. · Scheduled employees' work stations and moved employees to positions as needed to assure quick service at check-out stations. Answered customers' questions and provided information on procedures or and Design policies. PHOTOGRAPHY **Community Service:** Habitat for Humanity, Volunteer, 2003 - 2005 2006). Building Together Ministries, Volunteer Tutor, 2002 - 2003 Developed portfolio of color landscape prints from across the U.S. Exhibited photos in two Triangle locations. MARKETING firm - Triangle Real Estate Associates.

Increased own business by 75% in one year – Jones and Associates.

#### Work Experience

Smith and Associates, Owner/Designer 2007 - present Triangle Real Estate Associates, Administrative Assistant, Marketing Dept. 2004 - 2007 Stallings Print and Design, Graphic Design Intern 2006 - 2007

#### Education

Forsyth Community College, Winston Salem, North Carolina Associate in Applied Science, May, 2005 Graphic Arts and Image Technology

Adapted from Job Seeking Skills Handbook, ESC of N.C.

The Functional Format focuses on transferable skills-what you can do rather than when or where you learned to do it. It groups similar accomplishments under skill headings and ignores chronological order. It is a good format for career changers and those with a limited work history.



experiences; otherwise, education appears after work experiences.

4. Organize this information using a standard format such as one of the examples here. Choose the format that best highlights your strengths. Consider alternate presentations — paper, searchable and electronic versions. Be brief (no more than two pages), clear, neat and use action verbs.

5. Proofread and revise your draft until it is the best it can be. A résumé can be written in a variety of formats.

For more tips on preparing your résumé, including samples and templates, visit CareerOneStop at

The Chronological Format is the most common and best accepted format. Your most recent work or educational experiences appear first, showing your

Objective: Postion as a graphic designer using my skills in design and photography to

- Created consumer packaging using PMS and four-color processing; prepared
- · Communicated corporate identity through design of logo and collateral for senior
- · Created mechanicals; proofed blue lines and color keys at Jones and Associates. · Used a wide range of typography to appeal to specific audiences at Stallings Print
- Photographed fashion and food compositions in studio settings (free lance project,
- Won award in black and white photo contest in regional and state competition.
- · Researched real estate development prospects for commercial real estate
- Created new marketing plans and business development for Stalling Print and Design resulting in expanded markets and increased revenue for 2007.

## **Résumé Basics**

Since the purpose of a résumé is to showcase your talents and experience so that you can get an interview, tailor each résumé to a specific job for which you are applying. Emphasize those parts of your work history, educational background and personal experience that especially qualify you (and only you) for that particular position.

- Limit it to one page, if possible. Maximum: two pages.
- Appearance, grammar and spelling count.
- Each résumé should be customized for a specific job.
- Use a good quality standard 8-1/2 x 11-inch bond paper.
- Use a laser printer.
- White, cream or off-white paper are good choices of color.
- Be conservative. Do not use bright-colored paper or fancy fonts.
- Lead with your strengths.
- Be consistent in style.
- Use active words and measurable criteria.
- Proofread, proofread and proofread. Then get someone else to do it.

Adapted from Sandhills Community College Career Services web site. Randal Foster, LPC, author.

## Getting Your Foot in the Door: Strong Cover Letters Can Land an Interview

A cover letter has only one purpose: to "sell" an employer on the idea of reading your résumé and giving you an interview. Employers often reject generic cover letters — and the résumés that come with them.

A good cover letter should reflect your knowledge of the company you are applying to, and it should specifically address the skills and experience the employer is seeking. This means you'll need to research the company before responding to a job opening.

Additionally your cover letter should:

**Explain why you are sending a résumé**. A cover letter always accompanies a résumé even when it is sent by e-mail. Be specific and tell the reader for what you are applying.

Address the cover letter to someone. If a name is given, address the cover letter to that person or find out who will be receiving the letter. If you cannot locate that information, address the cover letter to: Dear Hiring Professional, Dear Manager, Dear Director or Dear Human Resources Representative. Avoid addressing it to Sir/Madam or To Whom It May Concern.

**Tell specifically how you learned about the position or the organization.** A web site, someone who works at the organization or through a JobLink or career center. It is appropriate and advantageous to mention the name of someone who suggested that you apply.

**Convince the reader to look at your résumé.** The cover letter will be seen first; therefore, it must be very well written and targeted to that employer.

**Call attention to elements of your background.** Education, leadership, experience that are relevant to a position you are seeking. Be as specific as possible, using examples.

**Reflect your attitude**. Express your personality, motivation, enthusiasm and communication skills. Your letter should sound exciting to the reader and reflect your excitement.

**Provide or refer to any information specifically requested.** Use information in a job advertisement.

**Talk about them.** Look up their mission statement, vision or goals on their web site and mention it in the cover letter. Make a statement on how you'll be able to help them achieve their goals.

Contributed by Barbara Efird, MEd., NCC, LPC

## **Electronic Résumés**

More and more businesses are using computers to scan résumés, whether they are submitted on paper or electronically. Job hunters need to know that computers read résumés differently than people do. If you are sending a résumé that may be scanned by a computer, here are a few tips:

- Put your name as the first readable item on the page and then list your contact information. Include your e-mail address if you have one.
- Substitute a "Keyword Summary" for your career objective.
- Use nouns as your keywords.
- Do not include personal information, such as a social security number, that could expose you to identity theft.
- Use a non-serif font (e.g., Helvetica or Arial) and 10-14 point size, not decorative type.
- Use white (preferred) or light-colored paper, printed on one side.
- Avoid italics, underlining, shading, graphics and horizontal and vertical lines.

Date: January 10, 2009 From: Mary Smith (msmith@college.edu) Subject: Account Executive Position To: William Mathews@Autotech.com

#### Dear Mr. Mathews:

Please accept this cover letter and following resume in application for the Account Executive Position you posted on your web site. Autotech directly corresponds with my professional goals of working with an innovative company focused on retaining customer satisfaction while developing new markets.

My experience and education match your job requirements well. I have two years experience in retail sales and additional related work experience in a call center and outside sales. This experience has increased my ability to handle customers' demands quickly. I also have excellent problem solving, communication and multi-taking abilities. As a recent graduate from Westland Community College with an Associates of Applied Science in Business Administration, I excelled in my business and marketing courses. I financed the majority of my tuition with scholarships, grants and part-time employment. While working and attending college, I received the Dean's Achievement Award for excellence in Business Administration. I know my educational background and work ethic will enable me to be a successful member of your team.

Autotech is an amazing new company in our area that has great potential to reach new markets. Your core values of providing excellent customer service and on-time delivery of your products and services distinctly parallel my skills and career goals.

I would appreciate the opportunity to further discuss my qualifications for this position. I can be reached at (111) 555-1122 or by e-mail, msmith@college.edu. I look forward to hearing from you soon. Thank you for your consideration.

Sincerely,

Mary Smith

#### What makes this good:

- 1. Job seeker uses a professional e-mail address with her name.
- 2. It is written directly to someone in the company.
- 3. It states the name of the position immediately and where she saw it advertised.
- 4. She matches her experience and education with their needs.
- 5. She talks about "them" and how she will fit in with their company.
- 6. She asks for an interview.
- 7. She thanks the reader.

Once you've decided on your career field and completed the education and/or training needed for entering, you're ready for the job hunt. Searching for a job that's right for you requires planning and persistence.

# Networking: A Strategy for Searching The Hidden Job Market

Statistics vary, but as many as 80 percent of all job openings are never advertised to the public. However, with persistence, focus and especially networking, these jobs can be found.

Networking is a systematic method of getting someone you know to introduce you to someone you don't know. A true network also involves your willingness to do the same for other people.

Start by telling people you know about the type of job you want to pursue. Next, ask for the names of others who may be able to advise you. (If you feel shy about networking, begin by asking your family and friends for their suggestions. Later you'll feel comfortable approaching others.) Ask your network's contacts for an interview and set up appointments to meet and talk with them. Share your job interests and qualifications and ask if they know of any job openings or other contacts that could help. Do not ask for a job.

Investigate possible employers and make appointments to talk with them. This will involve research (e.g., annual reports, newspaper and magazine articles, Google search) to learn about the company and its products or services so you can prepare for an information interview.

Let as many key people as possible know about your accomplishments, employment needs and goals. Just be persistent, keep expanding your list and follow these networking steps:

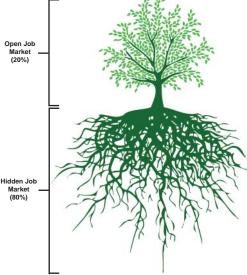
- 1. Meet X number of people (per day, week or month).
- 2. Arrange informal meetings with an agenda.
- 3. Market yourself describe your skills, experience and accomplishments.
- 4. Ask for advice, information and contacts do NOT ask for a job.
- 5. Leave with at least two additional names and contact them pronto!

As you go through this process, remember to listen to what the other people in your network have to say. In the future, you may be able to help some of them as they search for a new career!

## Use a Combination of Strategies to Find Your Job

Using a combination of methods is essential for a successful job search. Develop a strategy that works best for the occupation you are seeking, consider consulting with people in your field of interest or with a career counselor in your school or community and use these strategies to land the job that's right for you:

- Develop your network of contacts; the more people who know you are looking for work, the better your chances of finding work.
- Use the Internet to view job search sites, as well as to view job postings on individual corporate Web sites, but don't limit yourself to Internet searches only.
- Contact prospective employers directly. After researching the business, call and ask to speak with the hiring manager or other appropriate contact (such as a specific departmental manager), inquire about possible openings and ask to set up an appointment.
- Register for work with your local JobLink Career Center, Employment Security office or other employment placement agency. Be aware, however, that some private agencies may charge a fee for their service.
- Search job postings in newspapers, professional and trade journals and other publications.
- Read the business section of your local newspaper to learn about companies that are moving into the area, expanding their operations or have received patent approvals or other awards; these companies are likely to be hiring new workers.
- Attend job fairs in your area or at your school.
- Take advantage of state agency resources, particularly if you are a dislocated worker.
- Take a drive through nearby industrial parks, shopping centers and office complexes to note any suitable companies you can contact at a later date.



## **Applying Online**

To minimize the risk of infecting their computer systems with harmful viruses, many companies no longer accept e-mailed résumés. Instead, they now may require that applicants submit their information using the company's own proprietary online application form.

Even if you are allowed to upload your résumé from your computer to the employer's database, you will need to check the information carefully to ensure that it is accurate. These automated programs will often translate your information incorrectly and that could exclude you from being considered for the job. In addition, these forms are almost always scanned by computer before a human being ever sees them, so it's important that they contain appropriate keywords and no mistakes.

When completing an online application form, always:

- Follow instructions carefully.
- Complete all required fields.
- Proof your information carefully. Most online application forms allow you to edit the information if your résumé was not translated correctly.
- Print each page of the form for your records.
- Read disclosures and disclaimers so you know how your information will be used.
- Click the submit button only when you're satisfied that everything is okay.

## **Job Seeking Checklist**

I will do the following to help myself look for a job:

- Define my objective know what kind of work I most enjoy and can perform the best.
- Ask employers, colleagues and other people who know about my skills for letters of introduction and/or recommendations and to serve as references for me.
- \_\_\_\_ Talk with contacts in business and industry, friends and family and others to discuss potential employment contacts (network).
- Prepare or update a résumé.
- \_\_\_\_ Register at my local JobLink Career Center.
- \_\_\_\_ Plan how to get to employment interviews and job sites.
- \_\_\_\_ Develop a telephone script for making initial inquiries.
- Call or send letters and résumés to potential employers.
- Prepare for interviews by finding out as much as possible about prospective employers.
- Practice interviewing with friends, family and other contacts.
- Follow up all employment contacts with thank you letters, phone calls and/or more information about myself.
  - Maintain an active file on employment inquiry contacts.

## Job Search During A Challenging Economy

This time it's all about them — not you. Your correspondence, e-mail inquiries, cover letter and résumé must be about their needs and how you fit.

Good tips to land a job during difficult times:

- 1. Sell your results along with your skills. Does your résumé and cover letter jump out at the reader with enthusiasm about how you will add value to their organization? How will you assist them in achieving their mission and goals? Can you increase sales, decrease costs, expand their markets, create new programs or solve problems? Estimate in numbers, dollars or data results that can be applied to their present need.
- 2. Be direct target your job search and correspondence. These are difficult times for many employers. They are probably overworked and understaffed. Tell them upfront what you can do for them. Do not expect them to read your cover letter and résumé and find something of interest to them. Target their needs, and write your correspondence directly to what they need.
- **3. Be a futurist.** Leave your laundry list of all you have done in the past at home. Research your company and find out where they are headed. What have you accomplished that will be valuable to them?

Contributed by Barbara Efird, MEd., NCC, LPC

## **Filling Out the Application**

Many employers will ask you to complete an application form. Read the directions carefully, print neatly and fill in all the blanks. Be prepared to provide the following information. Having it all together on one paper or index card may be helpful.

- Address and telephone number where you can be contacted
- Names, addresses and telephone numbers of previous employers
- List of school programs and special skills or achievements that help qualify you for the position
- Names, addresses and telephone numbers of at least three references
- Driver's license

#### **Drug and Alcohol Testing**

Some application forms will include questions or statements about alcohol or drug use. You may want to inquire about the company's drug testing policies. You should also be prepared to submit to a drug test. To be hired for most jobs today, you must be able to pass a drug test. In addition, an employer may decide not to hire you if you have ever been arrested for or convicted of drug use or possession.

## How To Work a Job Fair

You are dressed for success, have plenty of rèsumès in hand and are about to enter a huge hall or gymnasium filled with tables, signs, job seekers and potential employers — it can be frightening at first. Here are some tips on how to make a job fair work for you.

#### **Before the Fair**

- Get a list of employers before the job fair; research the companies you want to see and learn as much as you can about them.
- Prepare a list of employers whom you definitely want to approach.
- Make sure your rèsumè is ready. You may want to bring different versions of your rèsumè to target the various companies that will be present.

#### The Day of the Job Fair

- Dress appropriately.
- Bring plenty of résumés.
- Strategically approach the employers and offer a handshake and introduction.
- Go early, before it gets too busy and crowded and while the recruiters are fresh.
- Don't wander around aimlessly begin with your goal and list of employers whom you want to approach.
- Seek out recruiters at tables that are not crowded at first and watch for an opportune time to have their undivided attention.
- Don't take up too much of their time. Begin with your introduction, engage in a conversation and conclude with a thank you and move on. If you are very interested and feel they are, too, follow up soon after the job fair for further discussion.
- Get business cards from recruiters you spoke with for follow-up. Jot down brief notes on the back of the cards to help with follow-up.
- Listen to their next step instructions: Did they ask you to come by their office or did they ask for further information by e-mail?

### After the Job Fair

- Send thank you notes. E-mail is appropriate and quick. Inform them of your continued interest.
- If the recruiter gave you specific application instructions, be sure to follow through as directed.

Contributed by Barbara Efird, MEd., NCC, LPC

## Job Seeker, Beware

If you feel desperate about finding a job to pay your bills, stop for a moment and take a deep breath. Job scams have been increasing and unfortunately some dishonest people are willing to take advantage of you. How to tell the difference between frauds and legitimate job and business opportunities? Here are a few tips:

- If anything sounds too good to be true, it probably is.
- Do not pay an upfront fee for employment or franchise information without investigating the organization.
- Never respond to online or phone requests for your birth date, social security and bank account numbers. Real employers or business operators will not ask for this information in these ways.
- Be suspicious of any jobs that offer commissions for recruiting others rather than for selling goods or services.
- While some advertised work-at-home jobs are legitimate, make sure to verify that the advertising organization is authentic.

How to find out if a business is legitimate? While no one type of search is foolproof, here are some organizations that may have helpful information:

- Better Business Bureau lists organizations as accredited and posts complaints filed against them. http://www.bbb.org
- NC Secretary of State's office has an online search for corporations. *http://www.secretary.state.nc.us/Corporations*

To report employment fraud, contact any of the following offices:

- NC State Attorney General's office: 1-877-5-NO-SCAM http://www.ncdoj.com/consumerprotection/cp\_about.jsp
- Federal Trade Commission, 1-877-FTC-HELP.
- National Fraud Information Center 1-800-876-7060, www.fraud.org.

For a comprehensive look at employment fraud, go to *http://www.rileyguide.com/scams.html*.

The interview is your opportunity to really sell yourself to an employer. Demonstrate through your poise, articulation, manner and enthusiasm that you are the best candidate for the job. Dress appropriately to make a winning impression.

# **Interview for Success**

To market yourself well in an interview, you must be well-prepared. Getting the job can depend on how well you present yourself during the interview. Below are examples of what to do and what *not* to do before, during and after the interview.

### DO:

- Research the company.
- Rehearse before the interview.
- Dress appropriately for the position for which you're applying.
- Bring extra résumés.
- Bring a notepad and pen for note taking.
- Arrive early.
- Smile and offer a handshake.
- Maintain good eye contact.
- Be prepared to answer and ask questions.
- Emphasize your skills.
- Write a thank you note.

### DON'T:

- Bring anyone with you.
- Slouch—sit up straight, but be relaxed.
- Ramble when unclear about a question—ask for clarification.
- Make negative comments about other employers.
- Start discussing salary and benefits.
- Leave without asking for the job if you want it.

## **Behavioral Questions**

Interviewers may ask for examples of previous behaviors, such as how you handled a specific situation or a work task. Be prepared for these questions. Tell the interviewer a brief story about a work- or school-related situation that demonstrates a specific skill and how you used it effectively.

To practice, think about PAR:

- P = What *problem* or situation have you had to face?
- A = What *action* did you take to resolve the concern?
- R = What was the*result*of the action?

### Sample Behavioral Questions:

- Give me an example of your teamwork abilities.
- How do you handle multiple tasks all due at the same time?
- Describe a major problem you encountered and how you dealt with it.

### **Practice**, **Practice**

The more experience you have with interviewing, the more confident and relaxed you'll be. Ask a career counselor, teacher or Human Resources professional to do a mock interview with you and give you feedback on both your verbal responses and your body language. At the very least, practice responses in front of a mirror.

### Questions to Expect During An Interview

Are you a little nervous about your upcoming interview? Do you want to build your confidence?

While you may not be able to read an interviewer's mind, try writing down and practicing your responses to these frequently asked questions.

- 1. What jobs, including summer and part time, have interested you the most? Why?
- 2. How have your education and/or employment experiences prepared you for this job?
- 3. What are your career goals?
- 4. Where do you see yourself in five years?
- 5. Can you tell me about yourself and your background?
- 6. What do you consider your best qualities or strengths?
- 7. What do you consider your weaknesses?
- 8. What interests you about this job?
- 9. Why do you want to work for this company?
- 10. What did you like and dislike about your last job?
- 11. Which course(s) did you like best in school?
- 12. Last month, how many days of work or school did you miss?
- 13. Why should I hire you for this job?
- 14. How would your last supervisor or teacher describe you?
- 15. How would a friend describe you?
- 16. What motivates you to put forth your greatest effort?

# Use the Interview to Get as Well As Give Information

By researching the company, you'll not only be prepared to *answer* questions, but to *ask* them during the interview. Appropriate questions will give you the information you need to help decide whether the job and/or the company is a good fit for you. Focus your questions on job specifics, but do **not** ask about salary or benefits until you receive a job offer or the interviewer mentions the subject.

Here are some types of questions you can ask during a job interview:

- How would you describe a typical day in this position?
- What are the greatest challenges of this job?
- How many other people work in this department/ unit?
- What other departments/staff would I be working closely with? Is it possible to meet them?
- How long have you worked with the company?
- What do you like most about working with this company? What do you like the least?
- Where would I be working? Is it possible to see the space?
- How do you foresee the company's growth over the next few years?
- Do you anticipate expanding this department/unit?
- Does the job require travel? If so, what percentage or how often?
- Would I be working independently or with teams?
- What performance objectives would I be expected to meet during the first three to six months? After one year?
- What are the usual hours?

## **Dress Your Best for an Interview**

Your appearance is the first impression you make and an interview is your opportunity to put your best foot forward. That means appearing polished and professional. While some workplaces may have a more liberal dress code, you will usually make a better impression if you wear conservative attire. Proper interview attire for men and women is usually a suit. However, exceptions exist, depending on the industry and the level of position for which you are applying. For example, for construction or manufacturing jobs, suitable clean attire — khaki or dark pants with a collared shirt or professional-looking blouse — is acceptable. As a rule, you should dress better for an interview than you would for a normal work day.

Also, the more administrative the position, the better the attire, regardless of industry. Research the company, its products, services and corporate culture to help determine what you should wear. In most cases, keep it dark and neutral (black, navy, dark gray). Wear minimal jewelry and accessories. Cover tatoos. Avoid using colognes or perfumes. Avoid smoking and eating foods such as garlic for several hours prior to the interview. Make sure your hair and nails are neat and clean.

For more interviewing tips, including preparation, questions to expect and questions you should ask, visit the N.C. Employment Security Commission Web site at *http://www.ncesc1.com/individual/careerInfo/interviewTips.asp* or *http://www.ncsoicc.org*.

# **The Telephone Interview**

Many employers use an initial telephone interview as an efficient way to screen candidates before choosing which ones to interview in person. Since this is probably your first opportunity to market yourself with the organization and to be selected to interview in person, keep the following tips in mind:

#### Be prepared:

- Have your résumé, job description and questions to ask the employer in front of you during the interview.
- Be ready to give examples of your accomplishments and previous work experiences.
- Write down the names of the person (or persons) that are interviewing so you can refer to them by name, and also write a follow-up thank-you note.
- Have notes about the company handy so you can refer to them quickly if needed.
- Have your calendar ready.

#### Be present:

- Stand up! Your voice will project better.
- Be enthusiastic and smile it will come through in your voice.
- Conduct your telephone interview in a quiet place. Be sure children and pets are not in the room. Do not answer another phone or the door bell, or have any other distractions during this time.
- Speak directly into the telephone. Land telephones are better than cell phones for clearer connections and less chance of being disconnected.
- Speak slowly and clearly. Remember your voice is all the interviewer has to distinguish you from other candidates.
- Ask for clarification when needed, especially if you are unsure of the question and need time to think or process the question and forthcoming answer.

#### **Practice:**

- Ask a career counselor or human resources professional to practice a telephone interview with you. Ask for feedback on your answers, your voice inflections and any habitual flaws in your speech like "um," "er," and "ah" of which you may not be aware.
- Sell yourself in every response.

25 Main Street Yourtown, NC 27600 January 26, 2009

Ms. Debbie Bucher Marketing Director PPT Electric, Inc. 919 W. Main Street Yourtown, NC 27603

Dear Ms. Bucher:

Thank you for the opportunity to interview with you and the members of your staff today for the position of Marketing Assistant. I was very impressed with the growth of PPT Electric Inc. and the amount of support your organization provides for our community.

After the interview, I felt extremely excited about working for PPT Electric. In addition to my relevant work experience, I am very knowledgeable of the new computer software you are implementing. I'm confident that I could "hit the ground running," and I believe I could help your staff transition to using the new application. I'm sure that I would fit in well with the members of the Marketing Department.

Once again, I appreciate the opportunity to interview. If you need any additional information, please contact me at 555-5088. I look forward to the next steps of the selection process.

Sincerely, Mary Jones



## How to Research A Prospective Employer

You've found a job opening that sounds great, but you know very little about the organization that is advertising the position. To write a customized résumé and cover letter, you must research the company. You need to understand the big picture: How does the position you're interested in fit into the company? How do you find out more? Research. Research. Research.

Most companies have a Web site where you can find information such as annual reports and mission statements. If the organization has a Web site, you should be able to find it by using a search engine like Google. You can also call the company and ask for their Web site address. It is often listed in business journals, the yellow pages and on company brochures. If you do not have access to the Internet, you can use a computer at a public library and a JobLink or college career center.

You can also learn about the organization by asking questions of people who already work there. Remember that your network of contacts may also be able to provide you with names of people within the organization who could talk with you.

When you've learned answers to the following questions, you will be ready to design a cover letter and résumé for the specific job that you're interested in.

- So... what do you need to know?
- What does the company do?
- How did the organization get started?
- What are its products and services?
- What are the company's plans?
- Does it appear to be in good financial shape?
- What are some of the industry trends that affect this organization?
- What are some of the organization's greatest challenges?

## Remember to Say "Thank You"

After your interview, you have another opportunity to sell yourself to the employer. The follow-up thank-you letter can be the icing on the cake that sets you apart from other candidates. In the letter, you can thank the person for the time spent with you, restate your interest and enthusiasm for the job and put your name in front of the decision makers again. Additionally, you can present relevant information that you forgot to mention during the meeting or that occurred to you after learning details about the position.

Acceptable formats include handwritten or typed letters and, in some situations, an e-mail message.

# TRANSITIONS / KEEPING A JOE

## If Life Hands You Kudzu, Make...

Problem or opportunity? Ever had a time when your life was turned upside down? When something you'd hoped for or assumed fell apart?

North Carolinians have no farther to look than their own or their neighbors' back yards, roadsides and fields to see the results of one plan gone wrong. More than 100 years ago, the United States started planting kudzu — a non-native plant — as forage for farm animals and to prevent soil erosion. People were even paid to plant the legume. It has no natural enemies in this country and grows a foot a day in the summer, covering crops, trees, buildings, signs, power poles — the list is endless. In 1972, the U.S. Department of Agriculture declared it a weed. What a destructive pest!

On the other hand, people are now using kudzu to make anything from soap to syrup to baskets. Some farmers substitute kudzu for more expensive livestock feed. Researchers are investigating its medicinal value. Others are advocating its use as a biofuel.

What does kudzu have to do with you? Are you facing the challenge of finding a job or new career path? If the jobs you'd hoped for don't seem to be available, sometimes looking around your community for obvious problems can open your eyes to new opportunities.

First, what are the "weeds" in your community? Do people need transportation to medical appointments? Are your local arts beginning to disappear? Does your community lack affordable childcare? Are your roads full of potholes?

Next, where do your interests, skills and values intersect with these needs? Thinking about a career from this angle might lead you to think about working in organizations that you'd never before considered. Or you may discover your own "niche," a service or product greatly needed that no one else provides.

Problems or opportunities? It depends on your perspective. Your career planning may well benefit from a bit of both.



## Where to Find Help If You've Lost Your Job

Being laid off may require using state services that you've never accessed before. Although brief, the information below provides starting places for seeking assistance.

Am I eligible for unemployment insurance? If you have lost your job through no fault of your own, you may be eligible. Details at: *http://www.ncesc.com/individual/UI/UiClaims2.asp* 

How do I file for unemployment insurance benefits? You have three options:

- Online: https://www.ncesc.com/individual/webInitialClaims/applyBegin.asp?init=true
- By telephone: 1-877-841-9617 (toll free, 24 hours a day, seven days a week)
- In person: Go to your nearest ESC office. Not sure where it is? Go to: http://www.ncesc1.com/locator/ locatormain.asp

How do I start my search for a new job? While this newspaper provides lots of independent job-seeking ideas, your local ESC office and JobLink Career Center staff can help you locate new employment possibilities and prepare to apply for jobs. Nearest JobLink location: *http://www.nccommerce.com/en/WorkforceServices/Find InformationForIndividuals/JobLinkCareerCenters* 

I need training to move into a new career, but how can I pay for training without a job? Look for opportunities within your community and explore these links:

- Financial Aid: www.cfnc.org
- Service Obligation Loans: http://www.cfnc.org/paying/schol/info\_career.jsp
- Workforce Investment Act: http://www.nccommerce.com/en/WorkforceServices/FindInformationFor Individuals/DislocatedWorkerToolkit/EmploymentTraining
- Trade Adjustment Act: http://www.ncesc.com/individual/training/TAA.asp
- Apprenticeships: http://www.nclabor.com/appren/appindex.htm
- Free Online Training: http://www.gcflearnfree.org, http://www.microsoft.com/ElevateAmerica

### How to Keep Your Job

Here are some tips to help you keep the job you have:

- Keep your skills up to date, especially those related to technology. Enroll in employer-sponsored training when available and take courses on your own, if necessary.
- Be visible and accessible to co-workers; don't isolate yourself.
- Meet with your supervisor periodically to set goals and review progress; don't wait for the obligatory annual review.
- Participate in cross-functional teams to learn more about other aspects of the business, which will make you more valuable and to give yourself greater exposure to others who may have a say in any future downsizing.
- Avoid gossip (and those who do it).
- Don't complain; no one likes a whiner.
- Arrive for work on time and make sure your breaks aren't too long.
- Dress appropriately and be well groomed everyday; don't neglect your appearance.
- Limit personal phone calls and make/take them on a cell phone, if you have one; keep your phone on vibrate in the office.
- Recognize the good work of co-workers, even if you are not involved with the project and share credit when you are. Reward others if you can.
- Share information (but not gossip) with colleagues.
- Do what you can to assist others in their work.
- Treat people fairly; don't tolerate bias or prejudice. Learn and practice what to say in response to inappropriate comments.
- Give people the benefit of the doubt when something unpleasant happens at work; don't assume it's personal.
- Be known as a positive person who cares about solving problems cooperatively.

### Planting Your Small Business Ideas in Fertile Ground

The links below provide resources for putting your ideas into action.

- NC Small Business Center Network (*http://www.sbcnnc. gov*): Community-based provider of small business training, counseling and resource information.
- N.C. Center for Non-Profits (*http://www.ncnonprofits. org*): In-depth information for starting and sustaining a non-profit.
- NC REAL (http://www.ncreal.org): Hands-on training for developing entrepreneurial skills and potential businesses.