Careers Nova Scotia

High Opportunity Career Options in Nova Scotia 2014-2015

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As labour market and employment requirements are subject to change, it is recommended that the reader verify the information in this guide before making any career decisions.

Please visit careers.novascotia.ca for the most current and detailed information.

To order additional copies of this publication please contact careersns@gov.ns.ca.

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HIGH OPPORTUNITY CAREER OPTIONS IN NOVA SCOTIA



This guide provides a snapshot of 54 high opportunity career options in Nova Scotia. Only those careers with the best employment prospects are included in the guide. Each career description includes an explanation of the job, the education, the required training and experience, estimated openings and growth, and the average salary.

Who Determines Which Careers are High Opportunity Careers in Nova Scotia?

A team of Economists and Labour Market Information Analysts at Service Canada and the Department of Labour and Advanced Education determines which occupations are in high demand. The team determines employment prospects through regional-level qualitative and quantitative analysis utilizing a variety of data.

Where Can I Get More Career Information?

The Careers Nova Scotia website has more detailed information on every career included here, plus many more. At careers.novascotia.ca you will find:

- · Career planning information (more extensive information available online)
- Job search tool
- Self-assessment and career quizzes
- Education and training information
- · Job profile search capabilities
- · Labour market information specific to your region
- · Tips and resources to help you find a job
- Workplace resources for employers and employees

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CAREER EXPLORATION AND PLANNING

Not Sure What Occupation is Right for You?

This handbook is intended for use with the Careers Nova Scotia website, careers.novascotia.ca. Together these resources can help you make informed decisions, provide you with a list of options, and enable you to find work that is a good fit for you. You might start by completing one or more of the self-assessment quizzes found on the Careers Nova Scotia website. This will give you a list of occupations that you might like to investigate.

What is Career Planning?

Career planning is a process. Begin by identifying your skills, interests, and other personal factors. Next, explore opportunities. Then use what you have learned to choose an occupation that is a good match. Career planning is a lifelong process of preparing to make not one, but many, decisions. Making informed decisions, setting short- and long-term goals, and taking the steps to achieve these goals will give you a road map for a successful career.

Career Exploration and Planning Includes the Following Steps:

Step 1: Know yourself
Step 2: Know what is out there
Step 3: Make an informed decision – Assess your idea
Step 4: Create an action plan – How to get there

STEP 1: KNOW YOURSELF

The first step in career exploration is to discover who you are. You can do that by identifying your values, interests, and skills. This information will give you a foundation for making career and life decisions. You need to know what you want in your work and your life, as well as what you have to offer a prospective employer.

Key Questions to Ask Yourself

- What is important to me?
- What do I do well?
- What skills have I developed?
- What type of environment would I like to work in?



STEP 2: KNOW WHAT IS OUT THERE

You need to know what occupations and opportunities are out there and what employment trends might affect your career planning.

Occupational Research and Labour Market Information – Why is it Important?

Once you have a list of occupations that interest you, you will need to find out more about them:

- What is the work actually like?
- What are the working conditions, hours, and wages for this job?
- What are the opportunities for getting a job in my area?
- Is the work seasonal, casual, or full-time?
- What skills and experience are required for this job?

Recognize Opportunities – Know What Skills Are In Demand

Nova Scotia's labour market is much bigger than you may think. There is plenty of opportunity, but you have to know where to look and how to prepare yourself. If you are looking for work, knowing more about Nova Scotia's labour market will help you answer questions such as: Where are the jobs? What skills do I need to get hired?

If you are interested in starting your own business, labour market information can tell you which business sectors are growing and which skills are in demand.

Occupation	Questions to Ask Yourself
The nature of the work (duties and responsibilities)	Would I like doing this?How does it fit with my interests, values, and abilities?
Skills and experience	What skills and experience do I have?How can I develop these skills or get experience?
Employment requirements	• Am I willing and able to get the education or training I need?
Other considerations (Work hours, physical demands, etc.)	• How do the working conditions fit with my personal and family needs and values?
Employment outlooks	 What is the employment outlook (good, fair, or limited)? What are the factors affecting the employment outlook? What are the employment opportunities in this occupation? Are there opportunities to advance?
Potential employers	 Are there potential employers in the province where I want to work? Are these employers I would be interested in working for?
Average earnings	• How do these fit with my personal and family needs?

Occupational Research Chart

STEP 3: ASSESSING YOUR IDEA

Make an Informed Decision

Now what? Once you have information about your interests, values, and skills, and have considered how they fit with the labour market research you have done, you are in a good position to make an informed decision about which career is a good match for you. When making a career decision, it is important to look at your interests and values, abilities, and opportunities.

Interests and Values

- Is there a fit between my career/business idea and my values?
- Will I be motivated and enjoy this occupation?

Ability

• Do I have the skills, abilities, and experience required for this occupation?

Opportunity

• Is there opportunity for employment where I want to work (or a market for my business idea)?

STEP 4: CREATE AN ACTION PLAN

Now that you have identified your career objectives, you will have to create a plan of action — a road map to get you where you want to go.

Using what you know about your skills and abilities, and the experience required to find a job in the occupation you have chosen, you can set short- and long-term goals to help you achieve your overall career goal. These goals should include any education, training, and experience you need, as well as your job-search strategy.

It is important to realize that career planning includes more than "work." Community involvement, volunteering, training and education, and personal experiences are also valuable components of your career path. As we live through transitions and changes in our lives, we will have to revisit, reassess, and revise our career goals.

Action Planning

- · What do I need to do to realize my career path?
- What action steps do I need to take?

Goal Setting

Once you have decided on the career path you want to pursue, you need to set some clear and achievable goals to make it a reality. Consider setting goals for the day, the week, the month, three months (short-term goals); one to two years (medium-term goals); and three to five years

(long term goals).

LABOUR MARKET INFORMATION

How Does It Fit into Career Planning?

The labour market is made up of employers and the workforce (people who either have a job or are looking for one). You can use labour market information (LMI) to:

- Understand the big picture what the job-related trends are and where jobs are likely to be found.
- Learn more about specific occupations (for example, how much do nurses make, and how many are expected to be hired in the next few years?).
- Identify the skills and training you need to get hired.
- Help you plan for success.

Where are the Opportunities?

Myths	Facts
You cannot get a good job without a university degree.	College diploma programs and trade certification are other choices that can lead to satisfying and well-paid employment.
You have to leave Nova Scotia to get a well-paid job.	Approximately 8,100 jobs will be added to Nova Scotia's workforce over the next five years due to industry growth. In addition, 56,000 positions will need to be replaced as a result of attrition due to retirement and deaths. This means approximately 64,100 people will be required to meet the demand of employers over the next five years in Nova Scotia.
The only real opportunities are for those with technology training or professional degrees.	Salespersons, recruitment officers, advertising consultants, social workers, health-care workers, and mechanics are examples of occupations expected to be in high demand in the next few years.

Are You Trying to Make a Career Choice?

If you are, you have to consider two important things: what you need from a job and what employers need in an employee. This can be a challenge.

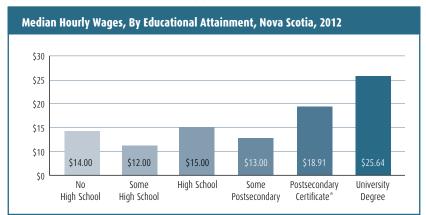
You have to know what skills an employer is looking for, and you have to figure out how to develop those skills. The challenge is that Nova Scotia's labour market continues to change: some jobs are in decline, others are changing drastically, and some are expected to be in high demand over the next few years. That is why many people find themselves struggling to find success in today's labour market.

In the past two years 37% of Nova Scotian adults have started a new career, changed careers, or seriously considered making a career change. A large portion (80%) of the individuals that changed or started a new career used at least one information resource to support their planning and decision-making, while more than half used multiple sources. Family and friends were the most commonly used resource, followed by tools on the Internet and assistance from someone at work or school. (Source: N.S. Dept. of Labour & Advanced Education, Labour Market Activity & Intentions Survey, March 2013).

Who is Working?

As you might expect, a good education is a real advantage in the job market. The number of jobs filled in Nova Scotia by post-secondary graduates increased by 21% over 2002 to 2012, so that currently two-thirds of those in the workforce have some form of post-secondary credential.

A high school diploma is becoming the basic requirement to be part of the labour force. Most working-age Nova Scotians without a high school diploma are not even in the labour force, and those who are are more likely to be unemployed.



The more education you have, the more likely you are to have a job.

Source: Statistics Canada, Labour Force Survey, Custom Data

* Includes trades, college and below bachelor university diplomas and certificates

Employment Rates Vary Across the Province

Almost half of the jobs in Nova Scotia are based in the Halifax region. Unemployment rates are quite high in Cape Breton, low in the Halifax region, and between these two extremes in other parts of the province.

As you research careers on the Careers Nova Scotia website, consult the "Where Employed" section under Labour Market Information. You will find that some jobs match the population distribution across the province and others are concentrated in Halifax or other areas.

Who is Hiring?

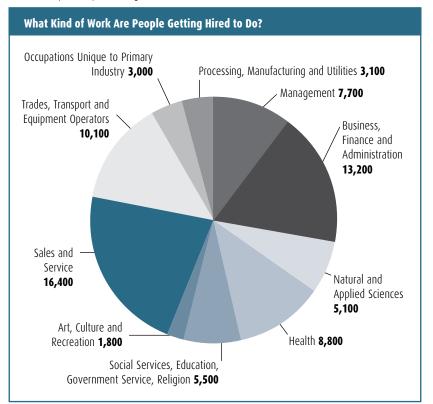
Today, about 80% of all employment opportunities for Nova Scotians are in the service sector. The service sector provides services to individuals or other businesses. Stores, restaurants, hotels, hospitals, trucking companies, schools, banks, computer firms, insurance companies, gyms, and government offices are all examples of employers who are in the business of providing services.

The remaining 20% of employed Nova Scotians work in goods-producing industries such as manufacturing, pulp and paper, construction, and the traditional primary industry sectors of farming, fishing, logging, and mining. The majority of opportunities in the skilled trades in the coming years will arise through retirements.

What Do These Trends Mean for You?

There are plenty of opportunities for any Nova Scotian who understands these basic trends and plans accordingly:

- Education is essential for success in today's workforce.
- Good inter-personal skills are essential in a service economy. These skills can be learned through life and work experience.
- The ability to adapt to change is another essential skill.



Source: COPS, Service Canada and N.S. Dept. of Labour and Advanced Education; estimated openings due to growth and attrition, 2011-2016

BUSINESS, FINANCE, AND ADMINISTRATION OCCUPATIONS

Accountants and Financial Auditors

Hourly Wage	Estimated	Estimated openings	Typical Education
Median: \$28.50	employment	due to growth	Requirement:
Minimum: \$16.50	in 2011:	and retirements,	Undergraduate Degree
Maximum: \$49.00	4,079	2011-2016:	(any discipline) +
		828	Student Professional
			Program

Nature of Work:

Accountants plan, organize, and administer accounting systems for individuals and establishments. For example, they look closely at accounting records and prepare financial statements, reports, and income tax returns. They use this information to provide advisory services to employers and clients.

Specialized classes of accountants include cost accountants, who specialize in helping businesses improve their profit margin, and environmental accountants, who establish the costs of compliance with environmental regulations and the financial impact of ecological accidents.

Financial auditors are responsible for examining financial records of individuals and companies to ensure accuracy and agreement with accounting procedures. They also prepare detailed reports on audit results and make recommendations to improve management practices.

Corporate controllers in accounting are responsible for internal auditing in a business, while forensic accountants discover illegal financial actions in business and industry, e.g. electronic security violations.

Skills:

To work in this field, you should have excellent organizational, analytical, and communication skills. Good judgment, integrity, and persistence are important. You must have an aptitude for mathematics and be capable of detailed and precise work. Business skills are essential. Knowledge of business and financial software is required.

Chartered Accountants, Certified General Accountants, and Certified Management Accountants all require a university degree, completion of a professional training program, on the job training, and be licensed by their provincial professional body. To act as a bankruptcy trustee requires a license as a trustee in bankruptcy.

Accountants and Financial Auditors Continued

Regulation Requirements:

Certified General Accountant

Right to Title: This occupation is regulated in Nova Scotia. Certification attests that the holder has met provincial requirements for the occupation. The job title is protected (you may not use this job title without certification). Certification may be required by employers; however, a certificate is not required to work in this occupation.

Certified Management Accountant

Right to Title: This occupation is regulated in Nova Scotia. Certification attests that the holder has met provincial requirements for the occupation. The job title is protected (you may not use this job title without certification). Certification may be required by employers; however, a certificate is not required to work in this occupation.

Chartered Accountant

Right to Title: This occupation is regulated in Nova Scotia. Certification attests that the holder has met provincial requirements for the occupation. The job title is protected (you may not use this job title without certification). Certification may be required by employers; however, a certificate is not required to work in this occupation.

Public Accountant

Financial Planners and Other Financial Officers

LABOUR MARKET

Estimated employment in 2011: **1,581** Estimated openings due to growth and retirements, 2011-2016: **295** Typical Education Requirement: **Undergraduate Degree** (Business, Commerce, or related field)

Nature of Work:

Hourly Wage

Median: \$28.00

Minimum: \$18.00

Maximum: \$51.25

Financial planners develop personal financial plans for their clients. They address such issues as cash management, insurance, investments, and retirement planning. Financial examiners and inspectors review financial institutions to ensure compliance with regulations. Financial investigators investigate possible unethical conduct by persons or companies that trade in securities or provide related financial services. Underwriters underwrite new issues of stocks and bonds, and negotiate with corporations and governments to determine the nature and terms of the new securities. Trust officers administer estate, personal, charitable, and other types of trusts. Mortgage brokers obtain financial information from clients, and apply for and negotiate mortgage loans. They can be employed by banks, trust companies, investment firms and governments, or they can be self-employed.

Skills:

To work in this field, you should have excellent organizational, analytical, and communication skills. Good judgement, integrity, and persistence are important. You must have an aptitude for mathematics and be capable of detailed and precise work. Business skills are essential.

A bachelor's degree in business administration, commerce, economics, or a related field is usually required to work in these occupations. Various training programs and courses are offered by financial institutes and organizations, such as the Canadian Securities Institute, Institute of Canadian Bankers, Institute of Chartered Financial Analysts, Investment Funds Institute, Canadian Institute of Financial Planning, and Trust Companies Institute of Canada. Some employers may require you to complete one of these training programs. Financial planners who sell regulated financial products and investments, such as annuities, RRSPs, and life insurance are required to be licensed by the appropriate governing body. Financial examiners and inspectors may require a recognized accounting designation.

Regulation Requirements:

Mortgage Broker

HEALTH OCCUPATIONS

Audiologists and Speech-Language Pathologists

LABOUR MARKET

Hourly Wage Median: \$38.50 Minimum: \$29.00 Maximum: \$44.75 Estimated employment in 2011: **241** Estimated openings due to growth and retirements, 2011-2016: **40** Typical Education Requirement: Undergraduate Degree (any discipline) + Graduate Degree (audiology or speech-language pathology)

Nature of Work:

Audiologists and speech-language pathologists diagnose, evaluate, and treat human communication disorders including hearing, speech, language, and voice disorders. Audiologists diagnose hearing difficulties, select and fit hearing aids, design and implement hearing rehabilitation strategies, and provide information on noise exposure and hearing conservation. Speech-language pathologists diagnose, plan, and apply treatment in communication and swallowing disorders. They also aim to reduce accents and teach adaptation for students with language disabilities. Audiologists and speech-language pathologists are employed in hospitals, community and public health centres, extended care facilities, day clinics, rehabilitation centres, educational institutions, or in private practice.

Skills:

To work in this field, you should have an interest in health and in caring for the special needs of people. Ingenuity, initiative, and imagination are needed to adapt activities to individual needs. You should be patient, self-disciplined, and resourceful. The ability to inspire confidence and to motivate clients is important. A strong sense of responsibility, good judgement, and communication skills are also necessary.

Audiologists require a master's degree in audiology. Speech-language pathologists require a master's degree in speech-language pathology. To apply for a hearing aid practitioner license one must complete a six-month apprenticeship, an international examination, and a live fitting examination or complete a master's degree in audiology and obtain a Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA) Certification in Audiology.

Regulation Requirements:

Audiologist/Speech-Language Pathologist

Special Requirements: Standards exist for this profession in Nova Scotia. Certification or membership in a professional association may be required by employers. However, a certificate is not required to work in this occupation.

Hearing Aid Practitioner

Continuing Care Assistants and Health Support Workers

LABOUR MARKET

Estimated employment in 2011: **8,048** Estimated openings due to growth and retirements, 2011-2016: **1,614** Typical Education Requirement: College Diploma + Completion of Nova Scotia CCA Exam

Nature of Work:

Hourly Wage

Median: \$16.50

Minimum: \$13.00

Maximum: \$19.00

A Continuing Care Assistant (CCA) is an individual who assists clients by providing personal care and support services while promoting healthy and independent living, whether in the client's home or in a long-term care facility. Most assistance is given on a one-to-one basis, which helps make this career extremely rewarding for people who enjoy helping others. CCAs often work in longterm care. Here they provide services to clients who can no longer live safely in their own home because they may need medication management, 24-hour supervision, assisted meal service, personal car, or professional nursing. They can also work in home care, helping clients by providing the services they need to live in their own homes for as long as possible. In both settings, CCAs can offer personal, respite, and palliative care, as well as meal assistance and household management.

Nurse's aides, orderlies, and patient service associates assist nurses, hospital staff, and physicians in the basic care of patients. They answer call signals, supply and empty bed pans, bathe and dress patients, serve meal trays, and assist with feeding. They may supervise patients' exercise routines and provide leisure activities. They take patients' blood pressure, temperature, and pulse, and perform other procedures, as directed by nursing and hospital staff. They also transport patients and provide other support duties as required. They are employed in hospitals, nursing homes, and other health care facilities.

Skills:

To work in this field, you should have good interpersonal skills and a desire to help others. Patience and the ability to handle stressful situations may be needed. You should be an effective communicator and a good problem-solver. You must be efficient and accurate, yet sensitive to the needs of clients. Shift work and lifting are often required.

To practice as a continuing care assistant (CCA) in Nova Scotia, an individual must be a graduate of an approved CCA program and have successfully completed the Nova Scotia CCA provincial exam. For other occupations in this group some secondary school and on-the-job training or a nursing aid or health care aid college or private institutional program, or a college nursing orderly program and supervised practical training are required. Some health care facilities may also require completion of specialized courses such as CPR (cardiopulmonary resuscitation), first aid and food handling/ sterile processing.

Regulation Requirements:

Continuing Care Assistant

Special Requirements: Standards exist for this profession in Nova Scotia. Certification or membership in a professional association may be required by employers. However, a certificate is not required to work in this occupation.

Dentists

LABOUR MARKET

Nature of Work:

Dentists examine, assess, diagnose, prevent, and treat disorders of the teeth and tissues of the mouth. For example, they fill cavities, examine x-rays, place protective plastic sealants on children's teeth, straighten teeth, and repair fractured teeth. They perform dental hygiene procedures and counsel patients on their oral health. Dentists also diagnose and correct abnormalities in the growth, development, and positioning of teeth and other dental-facial structures; replace missing teeth; and correct irregularities of the mouth and jaw to improve speech, eating and appearance. They work in private practice or may be employed in hospitals, clinics, public health facilities or universities.

Dentists Specialists have specialized in such areas as oral and maxillofacial surgery, orthodontics, pediatric dentistry, periodontics, endodontics, prosthodontics, oral pathology, oral radiology, or public health dentistry.

Skills:

To work in this field, you should be able to work carefully with your hands and have an aptitude for precise and accurate work. You should be able to work with mirror images. A reassuring manner is needed to help patients feel relaxed. You must be comfortable working with instruments and apparatus. Basic skills in operating a business are important. Artistic ability may also be helpful. You must be willing to continually update your knowledge and skills.

To work as a dentist you must complete a university degree from a recognized dental program and be licensed by a provincial regulatory body. Licensing for specializations is required.

Regulation Requirements:

Dental Specialist

Right to Title and Practice: This occupation is regulated in Nova Scotia. Certification attests that the holder has met provincial requirements for the occupation. A certificate is required to work in this occupation.

Dentist

Family Physicians

Hourly Wage	Estimated	Estimated openings	Typical Education
Median: \$28.00	employment	due to growth	Requirement:
Minimum: \$16.50	in 2011:	and retirements,	Medical School +
Maximum: \$36.00	1,699	2011-2016:	Family Medicine
	1,077	357	Residency Training

Nature of Work:

Family physicians, or general practitioners (GPs), are responsible for managing their patients' primary care. They provide primary contact and continuing and comprehensive care to patients of all ages. This includes examining patients; ordering laboratory tests, x-rays and other diagnostic procedures; prescribing and administering medications and treatments; and performing routine surgical procedures. They give their patients and their patients' families health-related advice, such as information on nutrition, exercise, accident prevention, and healthy lifestyle choices. They usually work in private practice, including group or team practices, hospitals, and clinics. Residents in training to be general practitioners and family physicians are included in this unit group.

Most physicians are self-employed and administer their services through private practices. Most physicians are paid by fee-for-service, where earnings depend upon the fees paid by the government for various services and the number of patients served. Some physicians are paid through alternative funding plans. Family physicians tend to work long and irregular hours, especially those physicians who operate their own practices or work in small groups.

Skills:

Compassion, sensitivity, and a desire to help people are important. Physicians must take final responsibility for their decisions and the effects they have on patients' lives. Therefore, emotional stability, ethics, maturity, and good judgement are essential. Excellent interpersonal and communication skills are important. You should be able to inspire confidence and put people at ease. You must be willing to continually update your knowledge and skills. Good health and stamina may be needed, as physicians often work long hours.

In order to work in this occupation you need to graduate from an approved medical school and have two to three years of family medicine residency training. You need to complete the qualifying examinations of the Medical Council of Canada and be licensed by the provincial licensing authority.

Regulation Requirements:

Physician

Licensed Practical Nurses

LABOUR MARKET

Estimated employment in 2011: 3,444

Estimated openings due to growth and retirements. 2011-2016: 803

Typical Education Requirement: **College Diploma**

Nature of Work:

Hourly Wage

Median: \$23.00

Minimum: \$15.25

Maximum: \$26.00

A licensed practical nurse (LPN) provides physical and supportive care to patients of all ages within a controlled nursing situation. LPNs use their knowledge to recognize deviations from the norm and determine when to report changes in patient condition. LPNs may work independently or under the supervision of a physician or registered nurse, depending on the level of care and observation needed. They are employed in hospitals, nursing homes, extended care facilities, rehabilitation centres, doctors' offices, clinics, companies, private homes, and community health centres. Shiftwork is typical in such an occupation. Operating room technicians are included in this unit group.

Licensed practical nurses typically provide nursing services within a defined scope of practice, based on a patient's assessment and care planning procedures. They perform nursing interventions, such as taking vital signs, applying sterile dressing, ensuring infection control, monitoring nutritional intake, and conducting specimen collection. LPNs administer medication and observe and document therapeutic effects, provide pre-operative and post-operative personal and comfort care, monitor established respiratory therapy and intravenous therapy, monitor a patient's progress, evaluate the effectiveness of nursing interventions, consult with appropriate members of the healthcare team, and provide safety and health education to individuals and their families.

Operating room technicians prepare patients for surgery by washing, shaving, and sterilizing the patients' operative areas; assist in surgery by laying out instruments, setting up equipment, assisting surgical teams with gowns and gloves, and passing instruments to surgeons; and clean and sterilize operating room and instruments.

Skills:

Individuals entering this profession should enjoy caring for people of all ages. Good communication skills and interpersonal skills are also very important. Physical demands include moving and lifting others, and spending long periods of time on one's feet. LPNs must be able to cope with stress and occasional emergency situations.

Completion of a vocational, college, or other approved program for licensed practical nurses is required to work in this occupation. Registration with a regulatory body is required in all provinces and territories. Operating room technicians require either additional academic training in operating room techniques or on-the-job training.

Regulation Requirements:

Licenced Practical Nurse

Massage Therapists and Non-Medical Health Technicians

LABOUR MARKET

Hourly Wage Median: \$25.00 Minimum: \$10.50 Maximum: \$44.50 Estimated employment in 2011: **651** Estimated openings due to growth and retirements, 2011-2016: **148** Typical Education Requirement: **College Diploma**

Nature of Work:

This group includes workers that perform various technical therapy and assessment functions. Some may assist professionals such as audiologists, speech-language pathologists, ophthalmologists, and physiotherapists. They are employed in hospitals, clinics, extended care facilities, rehabilitation centres, educational institutions, and in the private practices of the professions they assist. Massage therapists may also be self-employed.

Massage therapists assess clients by conducting range of motion and muscle testing and propose treatment plans; treat soft tissues and joints of the body through soft tissue manipulation, hydrotherapy, remedial exercise programs, and client self-help programs; provide courses of treatment for medical conditions and injuries, or wellness maintenance; maintain records of treatment given; and work with other health care professionals when appropriate.

Audio prosthetists examine clients to determine appropriate type of hearing aid; may test a patient's hearing; take ear impressions for use in the manufacture of the devices; fit and adjust hearing aids; and perform follow-up examinations and readjustments.

Audiometric assistants administer, under the supervision of audiologists, tests such as speech reception and speech discrimination to determine the hearing thresholds of patients; and record these test results.

Communication assistants carry out remedial programs, under the supervision of speech-language pathologists, to rehabilitate patients with communicative disorders.

Ophthalmic medical assistants operate ophthalmic testing and measuring instruments to aid ophthalmologists to assess patients vision, record test results, assist ophthalmologists in office surgery, and administer eye drops, ointments, and medications as directed by ophthalmologists.

Physical rehabilitation technicians carry out, under physiotherapists' direction, treatment programs such as massage, thermotherapy, traction and hydrotherapy to rehabilitate injured patients.

Massage Therapists and Non-Medical Health Technicians Continued

Skills:

You must be able to communicate effectively with people, and demonstrate a strong sense of responsibility, good judgement, patience, and self-discipline. Therapists must be creative and unique in their approach to each client. The ability to inspire confidence and to motivate clients is important. Massage therapists also require physical stamina.

Massage therapists usually require the completion of an 18- to 24-month or 18- to 36-month program in massage therapy from an accredited school and supervised practical training.

Audio prosthetists require completion of a two- or three-year college program in audio prosthetics, including a period of supervised training. Audiometric and communication assistants require completion of a 12- to 18-month college program in communicative disorders or some post-secondary education and on-the-job training. To apply for a hearing aid practitioner license completion of a six-month apprenticeship, an international examination, and a live fitting examination or completion of a master's degree in audiology and a Canadian Association of Speech-Language Pathologists and Audiologists (CASLPA) Certification in Audiology is required.

Ophthalmic medical assistants require completion of a nine-month college program or a 24- to 20-month hospital-based training program in ophthalmic techniques and procedures or a minimum of one year of supervised practical training under an ophthalmologist and completion of an approved ophthalmic assistant home study program.

Physical rehabilitation technicians require completion of a three-year college program in physical rehabilitation therapy and supervised practical training.

Regulation Requirements:

Massage Therapist

Special Requirements: Standards exist for this profession in Nova Scotia. Certification or membership in a professional association may be required by employers. However, a certificate is not required to work in this occupation.

Hearing Aid Practitioner

Medical Laboratory Technologists

LABOUR MARKET

Hourly Wage Median: \$30.00 Minimum: \$15.00 Maximum: \$38.50 Estimated employment in 2011: **940** Estimated openings due to growth and retirements, 2011-2016: **189**

Typical Education Requirement: Undergraduate Degree (science or medical laboratory sciences) or College Diploma (medical laboratory technology)

Nature of Work:

Medical laboratory technologists conduct medical laboratory tests, experiments, and analyses to assist in the diagnosis, treatment, and prevention of disease. It has been estimated that 85 percent of medical diagnostic decisions are made on the basis of laboratory results. Medical laboratory technologists may specialize in areas such as clinical chemistry, clinical microbiology, hematology, histotechnology, immunohematology, and cytotechnology. They are employed in medical laboratories in hospitals, private clinics, research institutions, and universities. Pathologists' assistants assist at autopsies and examinations of surgical specimens or perform autopsies under a pathologist's supervision. They are usually employed in hospitals. Medical laboratory technologists who are also supervisors are included in this unit group.

Skills:

This work demands accuracy and close attention to detail. You must have good manual dexterity and be comfortable working with instruments and technology, including information technology. Good communication skills and the ability to work with various health professionals are important. Although teamwork is essential, an MLT must be self-sufficient and able to work independently, be capable of critical thinking, and exercise good judgement. You must be flexible, open to change, and willing to keep pace with rapid developments in the field.

Medical laboratory technologists require a bachelor of science or medical laboratory sciences degree or a two or three-year college program in medical laboratory technology and a period of supervised practical training. Registration with the provincial licensing body is required to work in Nova Scotia.

Pathologists' assistants require a Bachelor of Science degree or training and experience as a registered nurse, licensed practical nurse, or medical laboratory technologist and specialized on-the-job training. Certification by the Canadian Society for Medical Laboratory Science may be required by some employers.

Regulation Requirements:

Medical Laboratory Technologist

Medical Radiation Technologists

LABOUR MARKET

Estimated employment in 2011: **593** Estimated openings due to growth and retirements, 2011-2016: **113** Typical Education Requirement: College Diploma in relevant discipline

Nature of Work:

Hourly Wage

Median: \$30.00

Minimum: \$15.00

This occupational group includes technologists who operate radiographic and radiation therapy equipment to administer radiation treatment and produce images of body structures for the diagnosis and treatment of injury and disease. They are employed in hospitals, cancer treatment centres, clinics, and radiological laboratories. Medical radiation technologists who are supervisors or instructors are included in this occupational group.

Radiological technologists take x-rays or perform CAT scans, mammograms, angiography, or fluoroscopy. They may specialize in one of these procedures. They may specialize in areas such as computerized tomography, angiography, mammography, magnetic resonance imaging, interventional radiology, dosimetry, stereotaxy, or brachytherapy.

Nuclear medicine technologists perform diagnostic imaging using technology such as PET scans, usually involving the injection of radioactive drugs. They evaluate coronary disease, study how organs function, determine the location of tumours, monitor the progression of cancer and the results of treatments, and diagnose hormonal disorders.

Radiation therapists are key members of cancer treatment teams. They use focused beams of radiation to destroy tumours. Individuals in these occupations explain procedures, answer questions and put patients at ease, and monitor patients.

Magnetic resonance technologists use magnetic resonance imaging (MRI) technology to study the cardiovascular system, detect tumours, study body chemistry and functions, and image soft tissues such as muscles, tendons, or arteries.

Depending on the size and type of institution, people in these occupations may be required to work evenings, weekends, or holidays.

Medical Radiation Technologists Continued

Skills:

This work demands skill, accuracy, and close attention to detail. You should be efficient yet sensitive to patients' needs. Integrity and a strong sense of responsibility are important, as your results may affect a diagnosis or treatment. You must also be comfortable working with technology and able to keep up with new advances in the field.

Completion of a two to three-year college, hospital, or other approved program in diagnostic radiography (for radiological technologists), nuclear medicine technology (for nuclear medicine technologists), or radiation therapy (for radiation therapists) — or a bachelor of health sciences in radiography, nuclear medicine, or radiation therapy and a period of supervised practical training — is required to work in these occupations. Licensing with the provincial regulatory body is required.

Regulation Requirements:

Medical Radiation Technologist

Medical Sonographers

	Hourly Wage
R.	Median: \$28.00
ž	Minimum: \$14.50
DO N	Maximum: \$38.50
3	

Estimated employment in 2011: 126

Estimated openings due to growth and retirements. 2011-2016: 23

Typical Education Requirement: College Diploma in related discipline.

Nature of Work:

Medical sonographers operate ultrasound equipment to produce and record images of various parts of the body to aid physicians in monitoring pregnancies and in diagnosing cardiac, ophthalmic, vascular, and other medical disorders. They are employed in clinics and hospitals. Medical sonographers may specialize in abdominal, cardiac, cerebral, obstetrical and gynaecological, ophthalmic, intraluminal, or peripheral vascular sonography. They may also specialize in adult or pediatric echocardiography or neurosonology. Medical sonographers who are supervisors or instructors are included in this unit group.

Skills:

You should be interested in medicine and health. You must be able to deal with people in a mature, tactful, and professional way. You should also be comfortable working with instruments, apparatus, and technology. A background in science would be helpful.

Completion of a training program in a related field, such as diagnostic radiography, nuclear medicine, or nursing, and completion of a one-year college or hospital-based program in diagnostic medical sonography and supervised practical training are required to work in this occupation. Certification examinations by the American Registry of Diagnostic Medical Sonographers are usually required by employers. Employers may require registration with the Canadian Society of Diagnostic Medical Sonographers.

Regulation Reguirements:

Medical Sonoarapher

Special Requirements: Standards exist for this profession in Nova Scotia. Certification or membership in a professional association may be required by employers. However, a certificate is not required to work in this occupation.

Occupational Therapists

Hourly Wage	Estimated	Estimated openings	Typical Education
Median: \$34.00	employment	due to growth	Requirement:
Minimum: \$27.25 Maximum: \$39.00	in 2011: 412	and retirements, 2011-2016: 76	Undergraduate Degree + Graduate Degree (Occupational Therapy)

Nature of Work:

Occupational therapists develop individual and group programs with people affected by illness, injury, developmental disorders, emotional or psychological problems, and ageing to maintain, restore, or increase their ability to care for themselves and to engage in work, school, or leisure. They also develop and implement health promotion programs with individuals, community groups, and employers. Occupational therapists may specialize in working with specific populations such as children or adults, or persons with distinct problems such as dementia, traumatic brain injury, and chronic pain, or provide special interventions such as return-to-work programs. They are employed in health care facilities, in schools, and by private and social services agencies, or they may be self-employed.

Skills:

To work in occupational therapy, you must have a genuine and sensitive interest in people and their ability to achieve. You must be able to communicate effectively with people and demonstrate a strong sense of responsibility, good judgement, patience, and self-discipline. Occupational therapists must be creative and unique in their approach to each client.

To work as an occupational therapist you require a university degree in occupational therapy, including supervised fieldwork, and must be registered with the provincial licensing body.

Regulation Requirements:

Occupational Therapist

Physiotherapists

Hourly Wage Median: \$34.50 Minimum: \$31.50 Maximum: \$40.00	Estimated employment in 2011: 829	Estimated openings due to growth and retirements, 2011-2016: 149	Typical Education Requirement: Undergraduate Degree + Graduate Degree (Physiotherapy)
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Nature of Work:

Physiotherapists assess patients and plan and carry out individually designed treatment programs to maintain, improve, or restore physical functioning, alleviate pain, and prevent physical dysfunction in patients. They may focus their practice in particular clinical areas such as neurology, oncology, rheumatology, orthopedics, obstetrics, pediatrics, geriatrics, in the treatment of patients with cardiovascular and cardiopulmonary disorders, burns, or sports injuries, or in the field of ergonomics. Physiotherapists are employed in hospitals, clinics, industry, sports organizations, rehabilitation centres, and extended care facilities, or they may work in private practice.

Skills:

To work in this field, you should have an interest in health and in caring for the special needs of people. Ingenuity, initiative, and imagination are needed to adapt activities to individual needs. You should be patient, self-disciplined, and resourceful. The ability to inspire confidence and to motivate clients is important. A strong sense of responsibility, good judgement, and communication skills are also necessary. Physical stamina may be necessary.

A university degree in physiotherapy and a period of supervised practical training are required to work in this occupation. Registration with the provincial licensing body is required.

Regulation Requirements:

Physiotherapist

Right to Title and Practice: This occupation is regulated in Nova Scotia. Certification attests that the holder has met provincial requirements for the occupation. A certificate is required to work in this occupation.

24

Registered Nurses

Hourly Wage	Estimated	Estimated openings	Typical Education
Median: \$34.25	employment	due to growth	Requirement:
Minimum: \$18.50	in 2011:	and retirements,	Undergraduate Degree
Maximum: \$38.00	11,246	2011-2016: 2,934	(Nursing)

Nature of Work:

Nurses provide professional services to patients to maintain and restore health, and assist in the management of illness or injury. The provision of nursing services involves a variety of roles for nurses, including direct care provider, health teacher, consultant, administrator, and researcher. They are employed in a variety of settings, including hospitals, nursing homes, extended care facilities, rehabilitation centres, doctors' offices, clinics, community agencies, companies, and private homes. They may also be self-employed.

Registered nurses may specialize in areas such as surgery, obstetrics care, psychiatric care, critical care, pediatrics, geriatrics, community health, occupational health, emergency care, rehabilitation, or oncology. Nurse practitioners are independent care providers with a broader scope of practice relative to registered nurses. Nurse practitioners work in collaborative relationships with doctors to apply advanced nursing knowledge, such as diagnosing and treating illnesses and injuries, implementing programs to promote health and prevent illness/injury, ordering x-rays, ordering and interpreting laboratory tests, and prescribing medications.

Nurses also work in teaching, research, and management. Nurses in managerial positions coordinate the activities of other registered nurses and nursing support personnel to guarantee safe and effective patient care. Occupational health nurses develop and implement employee health education programs and provide registered nursing care in private businesses and industry. Community health nurses provide health education and registered nursing care in public health units and through home visits, manage complex home care cases, participate in community needs assessment and program development, conduct disease screening, and deliver immunization programs. Psychiatric nurses provide nursing care, supportive counselling, and life skills programming to patients in psychiatric hospitals, mental health clinics, long-term care facilities, and community-based settings. Nursing consultants provide consultative services to institutes, associations, and health care organizations regarding issues and concerns relevant to the nursing profession and nursing practice. Nursing researchers engaged in research activities related to nursing are self-employed or are employed by hospitals, public and private organizations, and governments. Clinical nurses provide leadership, advice, and counsel on the provision of research-based care for specific patient groups within the care of particular health care organizations.

Registered Nurses Continued

Skills:

To practice nursing, you should have a desire to respond to the emotional, physical, and social needs of people. You should also have skills and aptitudes in the following areas: interpersonal relationships, communication, emotional stability, critical thinking, good judgement, and creativity. Good health and physical stamina may also be required.

Completion of a university, college, or other approved registered nursing program is required to work as a registered nurse. Additional academic training or experience is required to specialize in a specific area of nursing. A master's or doctoral degree in nursing is usually required for clinical nurse specialists, clinical nurses, nursing consultants, and nursing researchers. To work as a nurse practitioner a master's degree in nursing, or a nursing program or other advanced nurse practitioner diploma program is required. Registered psychiatric nurses must complete a university or college registered psychiatric nursing program.

Regulation Requirements:

Nurse Practitioner

Right to Title and Practice: This occupation is regulated in Nova Scotia. Certification attests that the holder has met provincial requirements for the occupation. A certificate is required to work in this occupation.

Registered Nurse

Respiratory Therapists and Clinical Perfusionists

LABOUR MARKET

Estimated employment in 2011: 250

Estimated openings due to growth and retirements, 2011-2016: 42

Typical Education Requirement: **College Diploma** (Respiratory Therapy) + Clinical Training

Nature of Work:

Hourly Wage

Median: \$30.75

Minimum: \$16.00

Maximum: \$40.00

Respiratory therapists assist physicians in the diagnosis, treatment, and care of patients with respiratory and cardiopulmonary disorders. They are employed in hospitals, medical clinics, health units, extended care facilities, public health centres, and respiratory home care companies. Respiratory therapists may specialize in areas such as anaesthesia, critical care, pediatrics. cardiopulmonary diagnostics, and respiratory home care.

Clinical perfusionists provide technical support to patients undergoing cardiac surgery and patients requiring cardio-respiratory support. Cardiopulmonary technologists assist physicians in the technical aspects of diagnosis and treatment of cardiovascular and pulmonary disease. Clinical perfusionists and cardiopulmonary technologists are primarily employed in hospitals. Supervisors and instructors of respiratory therapists, clinical perfusionists, and cardiopulmonary technologists are included in this unit aroup.

Skills:

To work in these fields, you should be interested in medicine and health. Manual dexterity and good coordination are necessary. You must be able to deal with people in a mature, tactful, and professional way. You should also be comfortable working with instruments, apparatus, and technology. A background in science would be helpful.

Respiratory therapists require the completion of a two- to three-year college, hospital, or university degree program in respiratory therapy, including clinical training. Clinical perfusionists require the completion of a respiratory therapy or registered nursing program, with a minimum of one year of work experience as a respiratory therapist or registered nurse, and completion of a college or university program in clinical perfusion, including clinical training. Cardiopulmonary technologists require a minimum of a diploma in an allied health discipline such as respiratory therapy, nursing diploma or degree, or a degree in a related science and training through a post-diploma program or supervised on-the-job clinical training.

Regulation Requirements:

Respiratory Therapist

Specialist Physicians

LABOUR MARKET

Estimated employment in 2011: **1,400**

Estimated openings due to growth and retirements, 2011-2016: **296** Typical Education Requirement: Medical School + Extended Medical Residency

Nature of Work:

Specialists have an in-depth knowledge and highly specialized skills in a specific medical field. There are many specialities, which can be broadly grouped into clinical medicine, laboratory medicine, and surgery. This group includes residents training to become specialist physicians.

Examples of specialists in clinical medicine include anaesthetists, who administer anaesthetics and control pain during surgery; gynecologists, who study and treat disorders of the female reproductive system; internists, who specialize in disorders of organs such as the heart, lungs, kidneys, and stomach; pediatricians, who care for infants and children; psychiatrists, who specialize in disorders of the mind; and oncologists, who treat cancer. These individuals diagnose and treat the diseases, physiological and psychological disorders, and injuries of patients. This may include examining patients; ordering laboratory tests, x-rays and other diagnostic procedures; prescribing and administering medications and treatments; performing surgical procedures; acting as a consultant to other physicians; conducting medical research; teaching; and performing related tasks. Specialists in clinical medicine usually work in private practice or in a hospital.

Specialists in laboratory medicine study the nature, cause, development, and effect of diseases in humans. They supervise laboratory activities and may act as consultants to other physicians. Pathologists and medical biochemists fall into this category. These specialists usually work in hospitals.

Specialists in surgery, of course, supervise and perform surgery. They must assess their patients to determine the appropriate procedures and also act as consultants to other physicians. This group includes general surgeons and specialized surgeons such as cardiac surgeons and orthopedic surgeons. Specialists in surgery usually work in hospitals.

Specialist Physicians Continued

Skills:

Compassion, sensitivity, and a desire to help people are important. Physicians must take final responsibility for their decisions and the effects they have on patients' lives. Therefore, emotional stability, ethics, maturity, and good judgement are essential. Excellent interpersonal and communication skills are important. You should be able to inspire confidence and put people at ease. You must be willing to continually update your knowledge and skills. Good health and stamina may be needed, as physicians often work long hours.

Graduation from an approved medical school and specific specialty training are required for specialist physicians. You must be licensed by the provincial licensing authority in order to work as a specialist physician. Specialists in clinical medicine require four to five years of specialty residency training and an additional two years of subspecialty training may also be required. Specialists in laboratory medicine are required to have four to five years of specialty residency training. Specialists in surgery are required to have five to six years of specialty residency training and may require an additional two years of subspecialty training.

Regulation Requirements:

Physician

MANAGEMENT OCCUPATIONS

Managers in Retail Trade, Tourism, and Other Service Industries

Hourly Wage	Estimated	Estimated openings	Typical Education
Median: \$21.75	employment	due to growth	Requirement:
Minimum: \$12.25 Maximum: \$39.50	in 2011: 17,008	and retirements, 2011-2016: 3,091	Management

Nature of Work:

LABOUR MARKET

These managers plan and direct the activities and operations of a wide variety of service-based organizations. They may plan the operations of large retail stores or shopping malls, select stock and supervise customer service in smaller stores, set staff work schedules for a restaurant or bar, or negotiate with clients for the use of facilities for conventions and banquets.

Retail trade managers are employed by retail sales establishments, or they may own and operate their own store. Restaurant and food service managers are employed in food and beverage service establishments, or they may be self-employed. Other managers in this group are employed by hotels, motels, resorts, student residences and other accommodation establishments, or they may be self-employed. Transportation managers are employed by transportation, freight forwarding and shipping companies, and by transportation departments of companies in retail and manufacturing sectors and utilities.

Skills:

To work in these occupations, you need good organizational and managerial skills. An ability to work under pressure is important. You must be decisive. You need to work well with others. Effective communication skills, both written and oral, are also important.

For retail trade and other service managers completion of secondary school is required. A university degree or college diploma may be required along with several years of experience at increasing levels of responsibility. For most other managers in this group a university degree or college diploma related to the relevant industry is required along with several years of supervisory experience.

Regulation Requirements:

This occupation is not regulated.

NATURAL AND APPLIED SCIENCES AND RELATED OCCUPATIONS

Civil Engineers

Hourly Wage Median: \$33.00	Estimated employment	Estimated openings due to growth	Typical Education Requirement:
Minimum: \$20.00	in 2011:	and retirements,	Undergraduate Degree
Maximum: \$44.50	1,174	2011-2016:	(Civil Engineering)
		201	

Nature of Work:

LABOUR MARKET

Civil engineers plan, design, and supervise the construction and maintenance of many kinds of projects: buildings, bridges, roads, railways, dams, tunnels, ports, and docks; water supply and sewage systems; and transportation.

Specializations include foundation analysis, building and structural inspection, surveying, and municipal planning. Civil engineers consult with clients and other members of engineering teams and conduct research to determine project requirements; develop construction specifications and procedures; evaluate and recommend appropriate building and construction materials; and conduct technical analysis of survey and field data and prepare reports. Some work in offices most of the time, while others work in laboratories, industrial plants, or construction sites where they inspect, supervise, and solve on-site problems.

Skills:

To work in this field, you should be interested in planning and designing buildings, bridges, dams, roadways, and other infrastructure. Problem-solving and decision-making skills are essential. You should be persistent, curious, and able to think in an analytical and logical manner. The ability to communicate and cooperate with others is important, as engineers often work in teams. Computer skills are also needed. The occupation typically requires good near and far vision.

A bachelor's degree in civil engineering or in a related engineering discipline is required. A master's degree or doctorate in a related engineering discipline may be required. You must be licensed with a provincial association of professional engineers in order to practice as a Professional Engineer (P.Eng.).

Regulation Requirements:

Professional Engineer

Computer Engineers

LABOUR MARKET

Fstimated employment in 2011: 266

Estimated openings due to growth and retirements. 2011-2016 62

Typical Education Requirement: **Undergraduate Degree** (Electrical and Computer Engineering)

Nature of Work:

Hourly Wage

Median: \$34.25

Minimum: \$19.25

Maximum: \$47.75

Computer engineers research, plan, design, develop, and test computers, telecommunications hardware and related equipment, and information and communication system networks. They are employed by computer and telecommunication hardware manufacturers; by engineering, manufacturing, and telecommunications firms: in information technology consulting firms: by governmental, educational, and research institutions; and by information technology units throughout the private and public sectors.

Some typical duties of computer and telecommunications hardware engineers include: designing, developing, and integrating the development of computer and telecommunications hardware; supervising the installation, modification, and testing of computers; and supervising technicians and technologists.

Network system and data communication engineers perform some or all of the following duties: researching, designing, and developing information and communication system architecture; researching, evaluating, and integrating network system and data communication hardware and software: assessing, documenting, and optimizing the capacity and performance of networks; and supervising teams of professionals in the development and integration of system architecture, hardware, and software.

Skills:

You should enjoy problem-solving, be able to think analytically and logically, and be interested in technology and the development of computer systems and equipment. Strong math skills and effective communication skills are both very important. Creativity would also be helpful. Computer engineers may specialize in a number of areas, including analog and digital signal processing, fibre optics, integrated circuits, lasers, microprocessors, microwaves, and radio astronomy.

A bachelor's degree in electrical and computer engineering or in a related engineering discipline is required. A master's degree or doctorate in a related engineering discipline may be required. You must be licensed with a provincial association of professional engineers in order to practice as a Professional Engineer (P.Eng.).

Regulation Requirements:

Professional Engineer

Computer Programmers and Interactive Media Developers

LABOUR MARKET

Estimated employment in 2011: **2,167** Estimated openings due to growth and retirements, 2011-2016: **420** Typical Education Requirement: Undergraduate Degree or College Diploma (Computer Science)

Nature of Work:

Hourly Wage

Median: \$28.00

Minimum: \$16.75

Maximum: \$42.00

Computer programmers write, modify, integrate, and test computer code for microcomputer and mainframe software applications, data processing applications, operating systems-level software, and communications software. Interactive media developers write, modify, integrate and test computer code for Internet applications, computer-based training software, computer games, film, video, and other interactive media. They are employed in computer software development firms, information technology consulting firms, and information technology units throughout the private and public sectors.

Skills:

Both computer programmers and interactive media developers should be innovative, methodical, and possess good communication skills. They should also be quick to learn and be prepared to work to keep on top of new developments. Computer languages evolve rapidly and programmers must be continually learning to keep their skills up-to-date. Numerical ability is required to understand programming languages and to write, modify, integrate, and test software code. Accuracy and proofreading skills are required to detect, locate, and avoid errors in code. Creativity and design skills may be an asset for interactive media designers.

A bachelor's degree in computer science or in another discipline with a significant programming component, or completion of a college program in computer science is required to work in this occupation. Specialization in programming for engineering and scientific applications requires specific post-secondary study or experience.

Regulation Requirements:

This occupation is not regulated.

Database Analysts and Data Administrators

LABOUR MARKET

Fstimated employment in 2011: 291

Estimated openings due to growth and retirements, 2011-2016 48

Typical Education Requirement: **Undergraduate Degree** (Computer Science or Mathematics)

Nature of Work:

Hourly Wage

Median: \$28.75

Minimum: \$20.00

Maximum: \$42.50

Database analysts design, develop and administer data management solutions using database management software. Data administrators develop and implement data administration policy, standards and models. They are employed in information technology consulting firms and in information technology units throughout the private and public sectors.

Skills:

To work in one of these occupations, you should enjoy helping your clients develop and implement solutions to meet their needs. You must be detail-oriented, methodical and precise. Accuracy and good proofreading skills are required to detect, locate, and avoid errors in code. You will require the mathematical skills to develop data models and prepare financial plans and reports. Communication skills are required to work effectively with other professionals and clients. Data administrators require good research skills and may be required to lead and coordinate teams. As software and data management techniques are constantly being updated, you should be prepared to update your knowledge and skills on a regular basis.

A bachelor's degree, typically in computer science or mathematics, or completion of a college program in computer science, is usually required to work in these occupations. Computer programming experience is usually required.

Regulation Requirements:

This occupation is not regulated.

Electrical and Electronics Engineers

LABOUR MARKET

Estimated employment in 2011: **772**

Estimated openings due to growth and retirements, 2011-2016: **175** Typical Education Requirement: **Undergraduate Degree** (Electrical Engineering)

Nature of Work:

Hourly Wage

Median: \$37.50

Minimum: \$16.75

Maximum: \$45.00

Electrical and electronics engineers design, plan, research, evaluate, and test electrical and electronic equipment and systems. They may specialize in a number of areas including electrical design for residential, commercial, or industrial installations; electrical power generation and transmission; and instrumentation and control systems.

They are employed by electrical utilities, communications companies, manufacturers of electrical and electronic equipment, consulting firms, and by a wide range of manufacturing, processing, and transportation industries and government.

Skills:

To work in this field you should be interested in the design and operation of electrical systems and equipment. The ability to communicate and cooperate with others is important, as engineers often work in teams. You should enjoy problem-solving and be able to think analytically and logically. Computer skills would also be helpful.

A bachelor's degree in electrical or electronics engineering or a related engineering discipline is required to work in this occupation. A master's or doctoral degree may also be required. Licensing by a provincial professional engineering association is required to practice as a Professional Engineer (P.Eng.).

Regulation Requirements:

Professional Engineer

Right to Title and Practice: This occupation is regulated in Nova Scotia. Certification attests that the holder has met provincial requirements for the occupation. A certificate is required to work in this occupation.

Information Systems Analysts and Consultants

LABOUR MARKET

Estimated employment in 2011: **2,468** Estimated openings due to growth and retirements, 2011-2016: **491** Typical Education Requirement: **Undergraduate Degree** (Computer Science or related discipline)

Nature of Work:

Hourly Wage

Median: \$32.25

Minimum: \$23.00

Maximum: \$40.75

Information systems analysts and consultants conduct research, develop and implement information systems development plans, policies, and procedures, and provide advice on a wide range of information systems issues. They are employed in information technology consulting firms and in information technology units throughout the private and public sectors, or they may be self-employed.

Skills:

To work in these occupations, you should enjoy helping your clients develop solutions to meet their needs, and have good analytical and problem-solving skills. You must have good numerical ability and an understanding of mathematics, as well as being methodical and precise. Accuracy and good proofreading skills are required to detect, locate, and avoid errors in code. Oral and written communication skills are required in working with and advising clients. As these fields are constantly changing, you should always be prepared to update your knowledge and skills on a regular basis.

A bachelor's degree in computer science, computer systems engineering, software engineering, business administration, or a related discipline or completion of a college program in computer science is usually required. Experience as a computer programmer is usually required. Certification or training provided by software vendors may be required by some employers.

Regulation Requirements:

Mechanical Engineers

LABOUR MARKET

Estimated Median: \$31.75 employment Minimum: \$21.25 in 2011: Maximum: \$51.25 634

Estimated openings due to growth and retirements, 2011-2016: 135

Typical Education Requirement: **Undergraduate Degree** (Mechanical Engineering)

Nature of Work:

Hourly Wage

Mechanical engineers research, design, and develop machinery and systems for heating, ventilating and air conditioning, power generation, transportation, processing, and manufacturing. They also perform duties related to the evaluation, installation, operation, and maintenance of mechanical systems. Mechanical engineers are employed by consulting firms, by power-generating utilities. and in a wide range of manufacturing, processing, and transportation industries. They may also be self-employed.

Skills:

To work in this field, you should have an interest in the design and operation of machines and mechanical processes. Persistence, good judgement, and the ability to think analytically and logically are important. You must be able to communicate and work well with others, as engineers often work in teams. Leadership and problem-solving skills are also expected. Computer experience would be helpful.

A bachelor's degree in mechanical engineering, or in a related engineering discipline, is required to work in this occupation. A master's degree or doctorate in a related engineering discipline may also be required. In order to practice as a Professional Engineer (P.Eng.), you must be licensed by the provincial association of professional engineers.

Regulation Requirements:

Professional Engineer

Right to Title and Practice: This occupation is regulated in Nova Scotia. Certification attests that the holder has met provincial requirements for the occupation. A certificate is required to work in this occupation.

Software Engineers

LABOUR MARKET

Estimated employment in 2011: **507**

Estimated openings due to growth and retirements, 2011-2016: **102** Typical Education Requirement: **Undergraduate Degree** (Computer Science or related discipline)

Nature of Work:

Hourly Wage

Median: \$28.00

Minimum: \$17.25

Maximum: \$53.00

Software engineers and designers research, design, evaluate, integrate, and maintain software applications, technical environments, operating systems, embedded software, information warehouses, and telecommunications software. They are employed in information technology consulting firms, information technology research and development firms, and information technology units throughout the private and public sectors. They may also be self-employed.

Skills:

Software engineers require an understanding of computer languages and IT terminology. You must be analytical, have a solid grasp of mathematics, and be both innovative and methodical. Accuracy and proofreading skills are required to detect, locate, and avoid errors in code. Good communication skills are required to understand user requirements and to lead and coordinate teams of information professionals. Rapid changes in computer technology mean that people in this field should be prepared to keep abreast of new developments in computer hardware, software, and networking technologies.

A bachelor's degree, typically in computer science, computer systems engineering, software engineering, or mathematics, or completion of a college program in computer science, is usually required to work in this occupation. A master's or doctoral degree in a related discipline may also be required. Licensing by a provincial association of professional engineers is required to practice as a Professional Engineer (P.Eng.). Experience as a computer programmer is usually required.

Regulation Requirements:

Professional Engineer

Right to Title and Practice: This occupation is regulated in Nova Scotia. Certification attests that the holder has met provincial requirements for the occupation. A certificate is required to work in this occupation.

OCCUPATIONS IN SOCIAL SCIENCE, EDUCATION, GOVERNMENT SERVICE, AND RELIGION

Early Childhood Educators and Assistants

LABOUR MARKET

Estimated employment in 2011: **3,925** Estimated openings due to growth and retirements, 2011-2016: 622 Typical Education Requirement: Undergraduate Degree or College Diploma (Early Childhood Education)

Nature of Work:

Hourly Wage

Median: \$13.50

Minimum: \$10.40

Maximum: \$19.00

Early childhood educators plan and organize activities for preschool and school-age children. Early childhood educational assistants provide care and guidance to preschool children under the supervision of early childhood educators. Early childhood educators and assistants lead children in activities to stimulate and develop their intellectual, physical, and emotional growth. They are employed in child-care centres, kindergartens, nursery schools, agencies for exceptional children, and other environments where early childhood education services are provided. They may also be self-employed.

Skills:

For these occupations, you should enjoy working with children. Good health and physical stamina are needed. You must be patient, imaginative, and resourceful. The ability to communicate ideas in a clear, concise, and pleasant manner is also necessary.

Early childhood educators require a bachelor's degree or college diploma in early childhood education. Early childhood educator assistants must complete secondary school and have experience in child care, such as babysitting. Completion of an early childhood education assistant certificate program may be required.

Regulation Requirements:

Psychologists

Hourly Wage

Median: \$35.00

Minimum: \$21.75

Maximum: \$49.00

LABOUR MARKET

Estimated employment in 2011: **572**

Estimated openings due to growth and retirements, 2011-2016: **113** Typical Education Requirement: **Graduate Degree**

(Psychology)

Nature of Work:

Psychologists examine the behaviour of children and adults, assess and diagnose psychological and emotional disorders, and provide consultation and therapy. They counsel individuals, groups, and organizations to improve physical and mental health and to achieve better personal, social, and work-related development and adjustment. They teach and apply psychological theory and principles regarding behaviour and mental processes, such as learning, memory, perception, and human development. They may also design, conduct, and communicate the results of psychological research or evaluation projects. Psychologists work in private practice or in institutions such as clinics, correctional facilities, hospitals, mental health facilities, rehabilitation centres, community service organizations, businesses, schools, universities, and government and private research agencies.

Psychologists may specialize in applied psychology or experimental research. Sub-specialties include behavioural psychology, child psychology, cognitive psychology, developmental psychology, educational and school psychology, industrial psychology, neuropsychology, social psychology, and sports psychology.

Clinical psychologists interview patients, give diagnostic tests, provide individual, family, and group psychotherapy, and design and implement programs to modify behaviour. Counselling psychologists provide treatment to improve physical and mental health. School psychologists work with students, teachers, parents, and administrators to resolve students' learning and behaviour problems. Experimental psychologists investigate aspects of human and animal activity to understand and explain behaviour. Industrial/organizational psychologists focus on personnel selection, job satisfaction, and workplace performance.

Skills:

To work in this field, you should be mature, patient, and interested in helping others. You must have excellent oral and written communication skills. Excellent listening and critical thinking skills, an understanding of human behaviour, and awareness of diversities are also important.

A master's degree in psychology is required to work as a psychologist in Nova Scotia, but other provinces may require a doctoral degree in psychology. A period of supervised practical experience is required in most jurisdictions and registration with a regulatory body is required in all provinces.

Regulation Requirements:

Psychologist

Right to Title and Practice: This occupation is regulated in Nova Scotia. Certification attests that the holder has met provincial requirements for the occupation. A certificate is required to work in this occupation.

SALES AND SERVICE OCCUPATIONS

Chefs

LABOUR MARKET

Hourly Wage Median: \$14.00 Minimum: \$11.50 Maximum: \$19.75 Estimated employment in 2011: **877** Estimated openings due to growth and retirements, 2011-2016: **148** Typical Education Requirement: College/ Apprenticeship

Nature of Work:

Chefs plan and direct food preparation and prepare a wide variety of foods in restaurants or hospitals. They may prepare complete meals, individual dishes, or special meals. They plan menus, determine size of food portions, estimate food requirements and costs of ingredients and labour, and monitor and order supplies. They are responsible for maintaining food quality standards. Chefs may recruit, hire, and supervise apprentice chefs, cooks, and kitchen staff, as well as arranging for the purchase or repair of equipment. Chefs may specialize in a regional cuisine or in preparing a particular type of food, such as pastry. They are employed in restaurants, hotels, hospitals and other health care institutions, central food commissaries, clubs and similar establishments, and on ships.

Skills:

This work requires initiative, imagination, and creativity. Knowledge of basic nutrition and cooking methods is needed. You should understand and apply the rules of hygiene, sanitation, and occupational safety. Organization, time management, and the ability to perform under pressure are important. You must have good physical health, physical stamina, and manual dexterity. You will be required to establish good working relationships with a variety of co-workers and customers and display a professional attitude.

Completion of secondary school is usually required. Cook's trade certification, which is available in all provinces and territories, or equivalent credentials, training, and experience are required. Executive chefs usually require management training and several years of experience in commercial food preparation, including experience in a supervisory capacity, and experience as a sous-chef, specialist chef, or chef. Sous-chefs, specialist chefs, and chefs usually require several years of experience in commercial food preparation. Interprovincial trade certification (Red Seal) for cooks is also available to qualified chefs. Chef de cuisine certification, administered by the Canadian Culinary Institute of the Canadian Federation of Chefs and Cooks (CFCC), is available to qualified chefs.

Regulation Requirements:

Cooks

Median: \$11.50 employment due to growth Requirement: Minimum: \$10.40 in 2011: and retirements, College/ Maximum: \$17.00 5,891 2011-2016: Apprenticeshi 933 933 933 933	on P
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Nature of Work:

Cooks prepare and cook a wide variety of foods. They may prepare complete meals, individual dishes, or special meals as instructed by a dietitian or chef. They are responsible for maintaining food quality standards and supervising kitchen helpers. Cooks are employed in restaurants, hotels, hospitals and other health care institutions, central food commissaries, educational institutions, and other establishments. Cooks are also employed aboard ships and at construction and logging campsites.

Skills:

This work requires initiative, imagination, and creativity. Knowledge of basic nutrition and cooking methods is needed. You should understand and be able to apply the rules of hygiene, sanitation, and occupational safety. Organization, time management, and the ability to perform under pressure are important. You must have good physical health, physical stamina, and manual dexterity. You will be required to establish good working relationships with a variety of co-workers and customers and display a professional attitude.

Completion of secondary school, as well as a three-year apprenticeship program for cooks, a college or other program in cooking, or several years of commercial cooking experience is required to work in this occupation. Interprovincial trade certification (Red Seal) is also available to qualified cooks.

Regulation Requirements:

Cook

Certificate of Qualification (Voluntary): This occupation is a designated trade in Nova Scotia. Certification may be required by employers; however, a certificate is not required to work in this occupation.

Ship's Cook

This occupation is not regulated by a provincial body in Nova Scotia. However, this occupation may be regulated by a federal regulatory body.

LABOUR MARKET

Food and Beverage Service Occupations

LABOUR MARKET

Estimated employment in 2011: **6,592** Estimated openings due to growth and retirements, 2011-2016: **619** Typical Education Requirement: **High School**

Nature of Work:

Hourly Wage

Median: \$12.00

Food and beverage servers take patrons' food and beverage orders and serve orders to patrons. Hosts/hostesses greet patrons and escort them to tables, as well as supervising and coordinating the activities of food and beverage servers. Bartenders mix and serve alcoholic and non-alcoholic beverages. They are employed in restaurants, hotel dining rooms, bars, taverns, private clubs, cocktail lounges, banquet halls, and similar establishments.

Skills:

To work in these occupations, you should be friendly, well-spoken, well-groomed, and enthusiastic about the service. Good organizational and mathematical skills are necessary. You must be pleasant to both your customers and co-workers, even when working under pressure. The ability to remember details and orders is essential. You must also be able to move gracefully and quickly. Food and beverage service workers are on their feet most of the time and often have to carry heavy trays of food, dishes, and glassware, requiring physical fitness and stamina. For some positions, knowledge of a second language is an asset.

Completion of secondary school may be required to work in these occupations and on-the-job training is usually provided. Maîtres d'hôtel require experience as a formal or captain waiter/ waitress or other food service experience. Completion of a college or other program in bartending, or completion of courses in mixing drinks is usually required to work as a bartender. Formal waiters/waitresses may require completion of a one or two-year apprenticeship program or college courses. Wine stewards may require courses in wine selection and service.

Regulation Requirements:

Hotel Front Desk Clerks

ABOUR MARKET

Fstimated employment in 2011: 827

Estimated openings due to growth and retirements, 2011-2016: 141

Typical Education Requirement: High School

Nature of Work:

Hourly Wage

Median: \$11.50

Minimum: \$10.40

Maximum: \$15.00

Hotel front desk clerks make room reservations, provide information and services to quests, and receive payment for services. They are employed by hotels, motels, and resorts.

Skills:

For this type of work, you should be poised, organized, tactful, and patient. Interpersonal skills and the ability to deal comfortably with strangers are important. You should be resourceful and able to handle the unexpected. Good communication skills are also necessary. Knowledge of both official languages, and possibly an additional language, may be required.

Completion of secondary school or equivalent is usually required to work in this occupation. Completion of a two-year apprenticeship program, or a college program in front desk operations or hotel management, may be required.

Regulation Reguirements:

Retail Salespersons and Sales Clerks

Estimated employment in 2011: 17,736

Estimated openings due to growth and retirements, 2011-2016: 2.622

Typical Education Requirement: High School

Nature of Work:

Hourly Wage

Median: \$11.00

Minimum: \$10.40

Maximum: \$18.00

Retail salespersons and sales clerks sell, rent, or lease a range of technical and non-technical goods and services directly to consumers. They are employed by stores and other retail businesses, as well as wholesale businesses that sell on a retail basis to the public.

Many positions are filled by part-time employees, who are required to work in the evenings and on weekends. Hours of work will depend on the needs of the employer. Earnings vary throughout the year due to the fact that sales clerks are often employed part-time and have their hours increased or decreased according to sales levels. Also, wages are often supplemented with sales commissions. People in these occupations must be on their feet for long periods of time.

Skills:

For this work, you should have good interpersonal and communication skills. Patience, tact, and enthusiasm are important. You must always be alert to the customers' needs and be as helpful and efficient as possible. Basic math skills and product knowledge are also needed. Knowledge of another language, especially French, is an asset.

Completion of secondary school may be required to work in this occupation. A university degree or college diploma may be required by some employers. Specific subject matter courses or training may be required. Demonstrated sales ability and product knowledge are usually required for retail salespersons who sell complex or valuable merchandise, such as automobiles, antiques, or computers.

Regulation Requirements:

Sales and Service Supervisors

ABOUR MARKET

Estimated employment in 2011: 6,874

Estimated openings due to growth and retirements. 2011-2016 1,199

Typical Education Requirement: High School

Nature of Work:

Hourly Wage

Median: \$14.00

Minimum: \$10.75

Maximum: \$25.00

Sales and service supervisors supervise, direct, and coordinate the activities of workers in a variety of sale and service occupations. They prepare schedules, assign duties, and establish and implement operational procedures. Supervisors maintain records and prepare progress and budget reports. They may be required to hire and train new staff, and select and purchase equipment.

Individuals in this occupation are employed by a wide variety of employers including: stores and other retail businesses, wholesale businesses that sell on a retail basis to the public, rental service establishments, businesses involved in door-to-door soliciting, telemarketing, hospitals and other health care establishments, cafeterias, catering companies, hotels, motels, schools, dry cleaning and laundry establishments, and various specialized cleaning companies.

Skills:

Supervisory, organizational, leadership, and effective communications skills are essential. You must be observant, responsible, and able to enforce rules and regulations. As supervisor, you will be required to resolve problems and address the concerns of unhappy customers. Services, product lines, and sales methods may change frequently. You must be prepared to keep informed and adapt to change.

Completion of secondary school is usually required for these occupations and experience in the occupation being supervised is required. Completion of college courses related to the area supervised may be required.

Regulation Reguirements:

Sales Representatives, Wholesale Trade

LABOUR MARKET

Estimated employment in 2011: 4,562

Estimated openings due to growth and retirements, 2011-2016: 792

Typical Education Requirement: High School

Nature of Work:

Hourly Wage

Median: \$19.25

Minimum: \$11.50

Maximum: \$35.25

Sales representatives in non-technical wholesale trade sell goods and services to retail, wholesale, commercial, industrial, and professional clients. They are employed by establishments that produce or provide goods and services such as petroleum companies, food, beverage and tobacco producers, clothing manufacturers, motor vehicles and parts manufacturers, hotels, business services firms, and transportation companies.

Skills:

This work requires excellent interpersonal and communication skills. You must be aware of customers' needs and give careful attention to detail. Strong marketing skills, as well as computer proficiency, are important for this occupation.

Completion of secondary school is required to work in this occupation and a university degree or completion of a college program may be required. Experience in sales or in an occupation related to the product or service is usually required.

Regulation Reguirements:

Store Clerks, Kitchen Helpers, and Related Sales and Service Occupations

LABOUR MARKET

Fstimated employment in 2011: Maximum: \$18.00 46,807

Estimated openings due to growth and retirements. 2011-2016 5,994

Typical Education Requirement: Less than High School

Nature of Work:

Hourly Wage

Median: \$11.00

Minimum: \$10.40

This group includes many entry-level sales and service occupations that require working with the public and do not require a high level of strength.

Cashiers, grocery clerks, and service station attendants must serve customers, receive and record payment, and answer inquiries. Telemarketers sell goods or services. Counter attendants prepare, heat, and finish cooking simple food items and serve customers at food counters. Kitchen and food service helpers perform various other activities to assist workers who prepare or serve food and beverages.

Security guards protect property against theft and vandalism, control access to establishments, maintain order, and enforce regulations at public events and within establishments.

Light duty cleaners clean the lobbies, hallways, offices, and rooms of hotels, motels, resorts, hospitals, schools, office and other buildings, and private residences. Specialized cleaners clean and refurbish building exteriors, carpets, chimneys, industrial equipment, ventilation systems, windows, and other surfaces, using specialized equipment and techniques. Janitors, caretakers, and building superintendents clean and maintain the interior and exterior of commercial, institutional, and residential buildings and their surrounding grounds. Building superintendents employed in large establishments are responsible for the operation of the establishment and may also supervise other workers.

Attendants in amusement, recreation, and sports facilities assist patrons, collect tickets and fees, and supervise the use of recreational and sports equipment. This group also includes workers who carry hotel guests' luggage and escort guests to their rooms, carry travellers' luggage at airports, in railway stations and aboard ships, and clean and maintain public areas and passengers' rooms aboard ships and trains.

Dry cleaning and laundry machine operators operate machines to dry-clean or launder garments and other articles. Other workers iron, press, or otherwise finish garments and household articles.

Store Clerks, Kitchen Helpers, and Related Sales and Service Occupations Continued

Skills:

To work in these occupations, you should have good health, physical stamina, and manual dexterity. You must also be able to work on your own and carry out instructions given by a supervisor. Sales and service workers are expected to work evenings, weekends, and holidays.

Some secondary school education is usually required to work in these occupations. On-the-job training is usually provided.

Regulation Requirements:

Visiting Homemakers and Housekeepers

LABOUR MARKET

Estimated employment in 2011: **2,898** Estimated openings due to growth and retirements, 2011-2016: **710** Typical Education Requirement: **High School**

Nature of Work:

Hourly Wage

Median: \$16.00

Minimum: \$10.50

Maximum: \$17.50

Visiting homemakers help people get through their daily routine at home. They often work for those who are incapacitated, recovering from an injury or illness, or experiencing a family disruption. Home healthcare workers provide personal support in areas such as bathing, personal hygiene, dressing, and moving around. Under the supervision of a healthcare professional, they may perform health-related duties such as changing dressings, administering medications, and collecting specimens. They also prepare meals and do routine housekeeping. They are employed by government, non-profit, and home care agencies. They may also be self-employed.

Companions help clients who are elderly or recovering from an illness by providing personal care in the client's home. They also provide companionship for clients who would otherwise be alone.

Housekeepers perform housekeeping and other home management duties in private households, long-term care facilities, and other residential establishments.

Foster parents care for foster children in their homes. This is usually on an emergency or temporary basis. Under the direction of social workers, they administer therapeutic programs for foster children.

Skills:

To work in this field, you should have good interpersonal skills and a desire to help others. Patience and the ability to handle stressful situations may be needed. You must be efficient, yet sensitive to the needs of clients.

Some secondary school is usually required. Visiting homemakers may require college or other courses in home support. First aid certification may be required.

Regulation Requirements:

TRADES, TRANSPORT AND EQUIPMENT OPERATORS, AND RELATED

Crane Operators

Maximum: \$35.00 368 2011-2016: Apprenticesl 92	Hourly Wage Median: \$28.50 Minimum: \$21.00 Maximum: \$35.00	employment in 2011: 368	Estimated openings due to growth and retirements, 2011-2016:	Typical Educatio Requirement: College/ Apprenticeship
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Nature of Work:

LABOUR MARKET

Crane operators operate cranes or draglines to lift, move, position, or place machinery, equipment, and other large objects. Crane operators work at construction or industrial sites, ports, railway yards, and other locations. The work may require operating mobile and tower cranes, cranes equipped with dredging attachments, gantry cranes, locomotive cranes, bridge or overhead cranes, offshore oil rig cranes, and cranes mounted on boats. These cranes dredge waterways, drive pillars into the ground to provide support for buildings and other structures, and move, lift, load, or unload machinery. Crane operators may also perform routine maintenance work, such as cleaning and lubricating cranes.

Mobile crane operators use mobile cranes to lift, move, and place heavy objects. They repair, maintain, and move cranes. Hydraulic mobile crane operators also repair, maintain, and move cranes; booms mounted on trucks; wheeled frames or crawlers; and traveling/fixed/climbing hoisting equipment with a vertical mast or tower and jib. Tower crane operators operate any mechanical device or structure that incorporates a power-driven drum with a cable or rope and a vertical mast or tower and stationary or luffing boom.

Skills:

To work in these occupations, you should have good health, physical stamina, and strength. Agility, coordination, and mechanical aptitude would be helpful. You must also be able to work at heights, work with precision and attention to detail, take direction, and carry out instructions given by supervisors.

Completion of secondary school is usually required to work in this occupation. Completion of a one- to three-year apprenticeship program or high school, college, or industry courses in crane operating are usually required. Interprovincial trade certification (Red Seal) is also available to mobile crane operators.

Crane Operators Continued

Regulation Requirements:

Mobile Crane Operator

Certificate of Qualification (Mandatory): This occupation is a regulated designated trade in Nova Scotia. Certification is required to work in this occupation.

Mobile Crane Operator (Hydraulic)

Certificate of Qualification (Mandatory): This occupation is a regulated designated trade in Nova Scotia. Certification is required to work in this occupation.

Tower Crane Operator

Certificate of Qualification (Mandatory): This occupation is a regulated designated trade in Nova Scotia. Certification is required to work in this occupation.

Delivery Drivers

Hourly Wage

Median: \$13.00

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Estimated employment Minimum: \$10.50 in 2011: Maximum: \$26.25 1,655

Estimated openings due to growth and retirements, 2011-2016: 307

Typical Education Requirement: High School

Nature of Work:

Delivery and courier service drivers drive automobiles, vans, and light trucks to pick up and deliver various products. They may deliver milk, prescriptions, newspapers, take-out food, dry cleaning, and catering. Courier service drivers pick up envelopes and/or packages for quick delivery to a specific address. They are employed by dairies, drug stores, newspaper distributors, take-out food establishments, dry cleaners, mobile caterers, courier and messenger service companies, and many other establishments. They may also be self-employed.

Skills:

You should enjoy driving and be able to function under minimal supervision. You must be alert, responsible, and self-motivated. An awareness of safety is important. You must also get along well with people, as drivers often deal directly with customers. For some jobs, you should be willing to drive long distances and for extended periods of time.

Completion of secondary school may be required and on-the-job training is provided. A driver's license appropriate to the class of vehicle being driven is required.

Regulation Reguirements:

Heavy Duty Equipment Mechanics

LABOUR MARKET

Estimated employment in 2011: **949** Estimated openings due to growth and retirements, 2011-2016: **175** Typical Education Requirement: **Apprenticeship**

Nature of Work:

Hourly Wage

Median: \$21.00

Minimum: \$14.00

Maximum: \$31.75

Heavy-duty equipment mechanics repair, troubleshoot, adjust, overhaul, and maintain mobile heavy-duty equipment used in construction, transportation, forestry, mining, oil and gas, material handling, landscaping, land clearing, farming, and similar activities. They are employed by companies which own and operate heavy equipment, and by heavy equipment dealers, rental and service establishments, railway transport companies, and urban transit systems.

Agricultural equipment technicians repair and service machines typically used in the farming industry. Heavy duty equipment technicians repair and maintain heavy-duty equipment such as bulldozers, cranes, and graders. Heavy-duty and farm equipment mechanics may specialize in specific types of machinery such as combines or tracked vehicles, or in engine overhaul, power shift transmissions, fuel infection, hydraulics, or electronics.

Skills:

To work in this occupation, you should have an interest in electronics and mechanical operations. A strong background in mathematics and the sciences is important. You must be able to cooperate with others and perform routine tasks. Agility, physical strength, and hand-eye coordination are needed. You must also have good vision and hearing, as well as an inclination to work with tools.

Completion of secondary school is usually required along with completion of a three to five-year apprenticeship program or completion of over four years of work experience in the trade and some high school college, or industry courses in heavy equipment repair. Red Seal endorsement (allowing for interprovincial mobility) is available to qualified heavy equipment mechanics and farm equipment mechanics.

Regulation Requirements:

Heavy Duty Equipment Technician

Certificate of Qualification (Voluntary): This occupation is a designated trade in Nova Scotia. Certification may be required by employers; however, a certificate is not required to work in this occupation.

Agricultural Equipment Technician

Certificate of Qualification (Voluntary): This occupation is a designated trade in Nova Scotia. Certification may be required by employers; however, a certificate is not required to work in this occupation.

Industrial Electricians

Hourly Wage Median: \$25.00 Minimum: \$15.00	Estimated employment in 2011:	Estimated openings due to growth and retirements,	Typical Education Requirement: Apprenticeship
Maximum: \$34.00	810	2011-2016:	
		223	

Nature of Work:

Industrial electricians install, maintain, test, troubleshoot, and repair industrial electrical equipment and associated electrical and electronic controls for industrial uses. They are employed by electrical contractors and the maintenance departments of factories, plants, mines, shipyards, and other industrial establishments. Mine electricians install, repair, and maintain electrical equipment and systems used in mining.

Skills:

This work requires a good mechanical and electrical aptitude. You should have a strong background in mathematics and the sciences. Basic calculation and blueprint-reading skills are needed. You must also be able to follow instructions and be comfortable working with tools. Good eyesight, colour vision, and hand-eye coordination are necessary.

Completion of secondary school is usually required to work in this occupation along with completion of a four or five-year industrial electrician apprenticeship program or a combination of over five years of work experience in the trade and some high school, college, or industry courses in industrial electricial equipment. Red Seal endorsement (allowing interprovincial mobility) is available to qualified industrial electricians.

Regulation Requirements:

Industrial Electrician

Certificate of Qualification (Voluntary): This occupation is a designated trade in Nova Scotia. Certification may be required by employers; however, a certificate is not required to work in this occupation.

Labourers in Primary Industry

LABOUR MARKET

Estimated employment in 2011: **2,707**

Estimated openings due to growth and retirements, 2011-2016: **488** Typical Education Requirement: **High School**

Nature of Work:

Hourly Wage

Median: \$13.00

Minimum: \$10.40

Maximum: \$23.00

Labourers in primary industry include many general labouring occupations that do not require a high level of formal training but do require a high level of strength and physical stamina.

These workers sort, load, and pack materials; operate and maintain machinery and equipment; and assist tradespersons.

Skills:

To work in these occupations, you should have good health, physical stamina, and strength. Agility, coordination, and mechanical aptitude would be helpful. You must also be able to take direction and carry out instructions given by a supervisor.

Regulation Requirements:

Longshore Workers and Materials Handlers

LABOUR MARKET

Estimated employment in 2011: 4,695

Estimated openings due to growth and retirements, 2011-2016: 977

Typical Education Requirement: High School

Nature of Work:

Hourly Wage

Average: \$14.00

Minimum: \$10.50

Maximum: \$26.50

Longshore workers transfer cargo throughout dock area and on to and off of ships and other vessels. They are employed by marine cargo handling companies, shipping agencies, and shipping lines. Materials handlers handle, move, load, and unload materials by hand or using a variety of material handling equipment. They are employed by transportation, storage, and moving companies, and by a variety of manufacturing and processing companies and retail and wholesale warehouses.

Skills:

To work in these occupations, you should have good health, physical stamina, and strength. Agility, coordination, and a mechanical aptitude would be helpful. You must be able to take direction and carry out instructions given by a supervisor.

Some secondary school education may be required and on-the-job training is provided.

Regulation Reguirements:

Machinists, Tool and Die Makers, and Tooling Inspectors

LABOUR MARKET

Estimated employment Minimum: \$13.00 in 2011: Maximum: \$33.50 1,018

Estimated openings due to growth and retirements. 2011-2016: 234

Typical Education Requirement: Apprenticeship

Nature of Work:

Hourly Wage

Median: \$23.75

Machinists manufacture and repair industrial components and mechanical devices by using a variety of metal cutting and shaping machines. Machining and tooling inspectors inspect machined parts and tooling in order to maintain guality control standards. They are employed by machinery, equipment, motor vehicle, automotive parts, aircraft and other metal parts manufacturing companies, and by machine shops.

Tool and die makers make, repair, and modify custom-made, prototype or special tools, dies, jigs, fixtures, and gauges using various metals, alloys and plastics which require precise dimensions. They are employed primarily in manufacturing industries such as automobile, aircraft, metal fabrication, electrical machinery and plastics, and in tool and die, mould making, and machine shops.

Metal patternmakers machine, fit, and assemble castings and other parts to make precision models of required shapes, such as metal patterns, core boxes, and match plates. They lay out, shape, and assemble patterns of metal, wood, plastic, and other materials from blueprints, models, or templates. They may also program CNC machine tools.

Metal mould makers machine, fit, and assemble parts to make metal moulds and cores for plastic injection moulding or other production processes, and may also program CNC machine tools.

Skills:

For these occupations, you should have an interest in machines, precision techniques, and processes. Good hand-eye coordination and agility are needed. You should be comfortable working with tools and able to read mechanical drawings. You must have the ability to work systematically, think analytically, and perform basic mathematical calculations. Employees in automated shops must be comfortable using computer equipment.

Completion of secondary school is usually required to work as a machinist, along with the completion of a four-year apprenticeship program or a combination of over four years of work experience in the trade and some college or industry courses in machining. Several years of experience as a machinist, tool and die maker, or machining tool operator may be required for machining and tooling inspectors.

Machinists, Tool and Die Makers, and Tooling Inspectors Continued

To work as a tool and die maker completion of secondary school is usually required, along with completion of a four or five-year tool and die making apprenticeship program or completion of over five years of work experience in the trade and some high school, college, or industry courses in tool and die making. Mould makers usually require the completion of a four-year apprenticeship or college program in mould making. Patternmakers usually require completion of an apprenticeship or college program in patternmaking.

Red Seal endorsement (allowing for interprovincial mobility) is available for qualified machinists and tool and die makers.

Regulation Requirements:

Machinist

Certificate of Qualification (Voluntary): This occupation is a designated trade in Nova Scotia. Certification may be required by employers; however, a certificate is not required to work in this occupation.

Tool and Die Maker

Certificate of Qualification (Voluntary): This occupation is a designated trade in Nova Scotia. Certification may be required by employers; however, a certificate is not required to work in this occupation.

Motor Vehicle Mechanics

LABOUR MARKET

Estimated employment in 2011: **3,899**

Estimated openings due to growth and retirements, 2011-2016: **602** Typical Education Requirement: Apprenticeship

Nature of Work:

Hourly Wage

Median: \$20.00

Minimum: \$12.00

Maximum: \$25.00

Motor vehicle mechanics inspect, diagnose, repair, and service mechanical, electrical, and electronic systems and components of cars, buses, and light and commercial transport trucks. Automotive service technicians service and repair the brakes, suspension, engine, and fuel systems of cars and light trucks. Service station mechanics perform tune-ups, safety inspections, and service and repair the brakes, clutch, and tires of cars and light trucks. A transport trailer technician repairs and services the braking, electrical, hydraulic system, and heating/cooling units of truck-trailers. A truck and transport mechanic repairs and services the various systems and engine components of buses and transport vehicles. Workers in this occupational group may specialize in the following areas: engine and fuel systems, transmission systems, air conditioning, cooling and heating systems, steering, alignment, brakes, drive lines, suspension, electrical and electronic systems, truck-trailer repair, or diagnostic services.

Individuals in these occupations are employed by motor vehicle dealers, garages, truck and trailer dealerships, and fleet maintenance companies, as well as service stations, automotive specialty shops, transportation companies, and retail establishments that have automotive service shops. This unit group also includes mechanical repairers who perform major repairs and replacement of mechanical units on newly assembled motor vehicles. They are employed by motor vehicle manufacturing companies.

Skills:

You should have mechanical aptitude, as well as patience, reliability, coordination, and agility. Lightness of touch and attention to detail are important. Some physical strength may be needed. Strong skills in mathematics and computers will also be helpful.

Automotive service technicians typically must complete secondary school, and must complete either a four-year automotive service technician apprenticeship program or over four years of work experience in the trade. This is a compulsory trade in Nova Scotia.

Completion of secondary school is usually required to work as a mechanical repairer in motor vehicle manufacturing, along with two to three years of on-the-job training.

Motor Vehicle Mechanics Continued

Truck and transport mechanics typically must complete secondary school and must have completed a four-year truck and transport mechanic apprenticeship, or over four years of work experience in the trade. High school, college, or industry courses in truck or heavy-duty equipment mechanics may also be required. Red Seal endorsement (allowing for interprovincial mobility) is available to qualified automotive, truck, and transport mechanics.

Regulation Requirements:

Truck & Transport Mechanic

Certificate of Qualification (Mandatory): This occupation is a regulated designated trade in Nova Scotia. Certification is required to work in this occupation.

Truck Drivers

Median: \$17.00

Minimum: \$12.00

Maximum: \$26.00

Hourly Wage

LABOUR MARKET

Estimated employment in 2011: 7,003

Estimated openings due to growth and retirements, 2011-2016: 1,358

Typical Education Requirement: High School

Nature of Work:

Truck drivers operate heavy trucks to transport goods and materials over urban, provincial, national, and international routes. They are employed by transportation companies, manufacturing and distribution companies, moving companies, and employment service agencies. They may also be self-employed. This group also includes shunters, who move trailers to and from loading docks within trucking yards or lots.

Skills:

To work in these occupations, you should enjoy driving and be able to function under minimal supervision. You must be alert, responsible, and self-motivated. An awareness of safety is important. You must also get along well with people, as drivers often deal directly with customers. For some jobs, you should be willing to drive over extended periods of time and long distances. Long-haul drivers, especially, must have good map-reading skills and remain calm when driving in unfamiliar territory and navigating congested city traffic.

Completion of secondary school is usually required and on-the-job training is provided. The appropriate class license is required for the type of truck being driven.

Regulation Reguirements:

Welders

Hourly Wage

Median: \$22.00

Minimum: \$12.50

Maximum: \$34.00

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Estimated employment in 2011: **2,173**

Estimated openings due to growth and retirements, 2011-2016: **524** Typical Education Requirement: College/ Apprenticeship

Nature of Work:

Welders join, cut, or shape metal using electric arc, oxyacetylene flame, and other processes. Welders may specialize in certain types of welding, such as custom fabrication, ship building and repair, aerospace precision welding, pressure vessel welding, pipeline construction welding, structural construction welding, or machinery and equipment repair welding. They are employed by companies that manufacture structural steel and platework, boilers, heavy machinery, aircraft and ships and other metal products, and by welding contractors and welding shops. They may also be self-employed.

Skills:

For this occupation you should enjoy working with your hands. Good hand-eye coordination, physical strength, and stamina are necessary. You must also be cautious, alert, and able to concentrate over long periods of time. The ability to perform mathematical functions is helpful. In most cases, you must also be able to cooperate and coordinate your work with others.

Completion of secondary school is usually required to work as a welder. Completion of a three-year apprenticeship program or a combination of over three years of work experience in the trade and some college or industry courses in welding are usually required to be eligible for trade certification. Red Seal endorsement (allowing for interprovincial mobility) is available to qualified welders.

Some secondary school education is required to work as a welding, brazing, and soldering machine operator. Several months of on-the-job training is usually required. Experience as a machine operator helper and experience with robotics may be required.

Regulation Requirements:

Welder

Certificate of Qualification (Voluntary): This occupation is a designated trade in Nova Scotia. Certification may be required by employers; however, a certificate is not required to work in this occupation.

High Pressure Welder

Certificate of Qualification (Mandatory): This occupation is a regulated designated trade in Nova Scotia. Certification is required to work in this occupation.



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