Diverse careers Paths With Your BSc.
Introduction

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Agenda

SECTION 1: SCIENCE AND RESEARCH
CAREER OPTIONS: RESEARCH SCIENTIST, DATA ANALYST, LAB TECHNICIAN

SECTION 2: TECHNOLOGY AND ENGINEERING
CAREER OPTIONS: SOFTWARE DEVELOPER, SYSTEMS ANALYST, CIVIL ENGINEER

SECTION 3: HEALTHCARE AND MEDICINE
CAREER OPTIONS: NURSE, PHYSICIAN ASSISTANT, HEALTH EDUCATOR

SECTION 4: ENVIRONMENTAL SUSTAINABILITY
CAREER OPTIONS: ENVIRONMENTAL CONSULTANT, CONSERVATION SCIENTIST, RENEWABLE ENERGY SPECIALIST
SCIENCE AND RESEARCH

KEY INDUSTRIES:
PHARMACEUTICALS,
BIOTECHNOLOGY,
ENVIRONMENTAL
SCIENCE
Research Scientist - a professional who performs experiments, interprets data, and shares their discoveries to further knowledge in their area of expertise.

Key Responsibilities:
- Design and conduct experiments to explore scientific hypotheses.
- Publish research findings in scientific journals and present at conferences.
- Develop and refine research methodologies and techniques.
- Collaborate with other scientists and researchers on interdisciplinary projects.
- Analyze and interpret experimental data to draw conclusions.

Salary:
- The average salary range earned by a research scientist in Canada is $57,000.00-$89,000.00 (depending on experience and specialization).
DATA ANALYST

Data analyst - an expert who gathers, processes and analyzes large sets of data to uncover valuable information and guide decision-making in businesses or research endeavors.

Key Responsibilities:

• Analyze data using statistical methods and data visualization tools.
• Identify trends, patterns, and insights to inform decision-making.
• Create reports and presentations to communicate findings to stakeholders.
• Develop and maintain databases and data management systems.
• Collect and clean large datasets from various sources.

Salary:

• The average salary range earned by a data analyst in Canada is $52,000.00-$76,000.00
LAB TECHNICIAN

Lab Technician - A lab technician is a professional helps scientists and researchers in labs by preparing and conducting experiments, analyzing data, and taking care of equipment and supplies.

Key Responsibilities:
• Prepare and set up laboratory equipment and instruments for experiments.
• Record and analyze experimental data accurately and meticulously.
• Maintain laboratory cleanliness, safety, and compliance with protocols.
• Assist in the ordering and inventory of laboratory supplies and materials.
• Perform experiments and tests under the supervision of scientists or researchers.

Salary:
• The average salary earned by a lab technician in Canada is $48,272 per year (depending on experience and specialization).
TECHNOLOGY AND ENGINEERING

KEY INDUSTRIES: IT, CONSTRUCTION, AUTOMOTIVE
SOFTWARE DEVELOPER

Software Developer: a skilled individual who creates, tests, and maintains software applications and systems, often working with teams to develop solutions that satisfy user needs or business objectives.

Key Responsibilities:

• Debug and troubleshoot software issues and implement fixes.
• Maintain and update existing software products to improve functionality.
• Stay updated on emerging technologies and best practices in software development.
• Design, code, and test software applications and systems.
• Collaborate with stakeholders to gather requirements and specifications.

Salary:

• The average salary earned by a software developer in Canada is $80,536 per year (depending on experience and specialization).
SYSTEMS ANALYST

Key Responsibilities:
- Analyze business processes and workflows to identify areas for improvement.
- Gather and document requirements from stakeholders for IT projects.
- Test and implement software systems and applications.
- Provide technical support and training to end-users.
- Create and build technical solutions to meet the requirements of a business.

Salary:
- The average salary earned by a systems analyst in Canada is $74,860 per year.
CIVIL ENGINEER

Key Responsibilities:
• Plan, design, and oversee construction projects such as roads, bridges, and buildings.
• Manage project timelines, budgets, and resources.
• Prepare engineering drawings, specifications, and cost estimates.
• Ensure compliance with regulatory standards and safety protocols.

Salary:
• The average salary range earned by a civil engineer in Canada is $112,125 per year.
HEALTHCARE AND MEDICINE

KEY INDUSTRIES: HOSPITALS, PUBLIC HEALTH, PHARMACEUTICAL COMPANIES
NURSE

Roles may vary based on their specialization. Nurses in the US and Canada might have different benefits and salary structures based on the healthcare facility and state/provincial regulations. Salaries may vary depending on experience, location, and specialization.
NURSE

Registered Nurses (RNs): Provide direct patient care, coordinate care plans, and educate patients and families.

Key Responsibilities:

• Assessing and monitoring patients' health
• Administering medications and treatments
• Collaborating with healthcare teams
• Educating patients about health conditions and self-care
• Providing emotional support to patients and families

Salary:

• In Canada, the average annual salary for a Registered Nurse ranges from $69K - $93K
• In the US, the average annual salary for RNs is around $83K - $128K
NURSE

Nurse Practitioners (NPs): Advanced practice registered nurses who have additional training and education, allowing them to provide a higher level of care.

Key Responsibilities:
• Diagnosing and treating common illnesses and injuries
• Prescribing medications
• Ordering and interpreting diagnostic tests
• Providing patient education and counseling
• Collaborating with other healthcare professionals

Salary
• In Canada, Nurse Practitioners can earn an average annual salary ranging from $92K - $120K.
• In the US, Nurse Practitioners typically earn an average annual salary of $113K - $172K.
Clinical Nurse Specialists (CNSs): Experts in a specific area of healthcare, providing advanced care, education, and consultation.

Key Roles:
• Providing expert clinical practice in their specialty area
• Consulting with healthcare teams
• Educating staff and patients
• Conducting research and quality improvement initiatives
• Developing and implementing evidence-based practice guidelines

Salary
• In Canada, Clinical Nurse Specialists can earn an average annual salary ranging from $87K - $109K.
• In the US, Clinical Nurse Specialists typically earn an average annual salary of $82K - $132K.
Physician Assistant - Healthcare professionals who work under the supervision of physicians, providing various medical services.

Key Responsibilities:
• Conducting physical exams
• Diagnosing and treating illnesses
• Ordering and interpreting diagnostic tests
• Assisting in surgeries
• Counseling patients on preventive healthcare

Salary:
• In Canada, Physician Assistants can earn an average annual salary ranging from $97K - $99K.
• In the US, Physician Assistants typically earn an average annual salary of $105K - $156K.
HEALTH EDUCATOR

Health Educator - a professional who promotes health and wellness by providing information and resources to individuals and communities.

Key Responsibilities:
- Educating
- Developing Programs
- Advocating
- Collaborating
- Empowering

Salary:
- In Canada, Health Educators can earn an average annual salary ranging from $48K - $81K.
- In the US, Health Educators typically earn an average annual salary of $58K - $104K.
ENVIRONMENTAL SUSTAINABILITY

KEY INDUSTRIES: ENERGY COMPANIES, GOVERNMENT AGENCIES
ENVIRONMENTAL CONSULTANT

Environmental Consultant - a professional who provides expert advice and guidance to clients on environmental issues.

Key Responsibilities:
- Assessment
- Compliance
- Strategic Planning
- Remediation
- Sustainability Consulting
- Project Management

Salary:
- In Canada, Environmental Consultants can earn an average annual salary ranging from $58K - $77K.
- In the US, Environmental Consultants typically earn an average annual salary of $84K - $150K.
CONSERVATION SCIENTIST

Conservation Scientist - a professional focused on the study and management of natural resources to promote their sustainability and conservation.

Key Responsibilities:
- Research
- Data Collection and Analysis
- Habitat Management
- Education and Advocacy
- Restoration Activities
- Collaboration

Salary:
- In Canada, Conservation Scientists can earn an average annual salary ranging from $53K - $75K.
- In the US, Conservation Scientist typically earn an average annual salary of $59K - $109K.
RENEWABLE ENERGY SPECIALIST

Renewable Energy Specialist - a highly skilled professional dedicated to advancing sustainable energy practices.

Key Responsibilities:

• Project Development
• Technology Selection
• Energy Efficiency
• Monitoring and Maintenance:

Salary

• In Canada, Renewable Energy Specialists can earn an average annual salary ranging from to $51K - $74K.
• In the US, Renewable Energy Specialists typically earn an average annual salary of $81K - $142K.
Questions?
STUDENT OMBUDS SERVICES

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