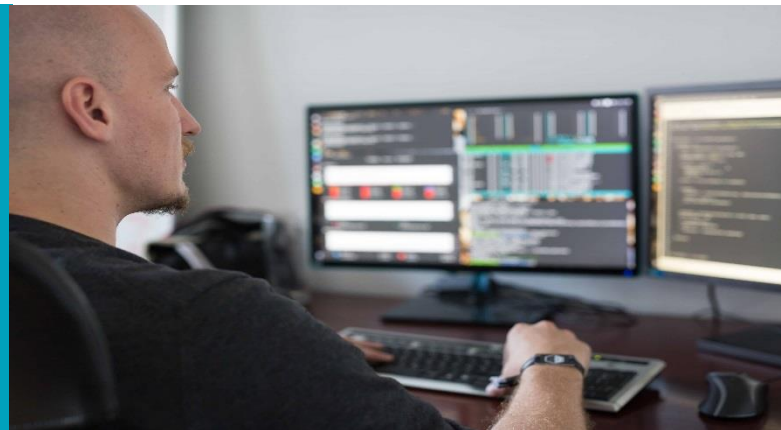


# SOFTWARE ENGINEERS AND DESIGNERS (NOC: 2173)



A **bachelor's degree**, usually in computer science, computer systems engineering, software engineering or mathematics or Completion of a college program in computer science is usually required.



Work Prospects  
(2018 - 2020): **Good**

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, or they may be self-employed.

Computer engineers  
(NOC: 2147)

Web designers and  
developers  
(NOC: 2175)

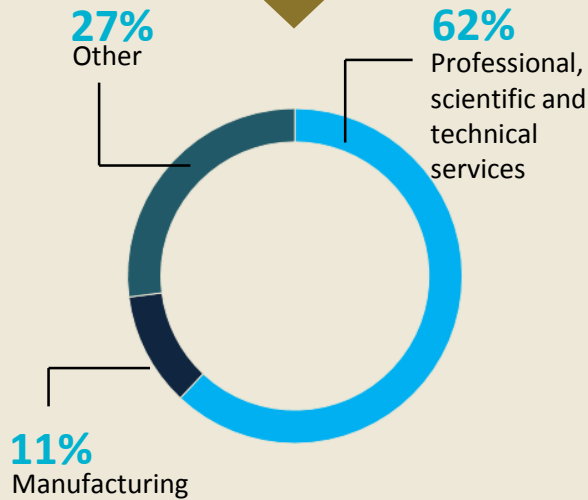
**Related Occupations**

Electrical and electronics  
engineers  
(NOC: 2133)

Information systems  
testing technicians  
(NOC: 2283)



## Employment by Industry



## Examples of duties performed

- Collect and document users' requirements and develop logical and physical specifications
- Research, evaluate and synthesize technical information to design, develop and test computer-based systems including mobile applications
- Develop data, process and network models to optimize architecture and to evaluate the performance and reliability of designs
- Plan, design and co-ordinate the development, installation, integration and operation of computer-based systems including mobile applications
- Assess, test, troubleshoot, document, upgrade and develop maintenance procedures for operating systems, communications environments and applications software



## Sample Job Titles

Software Architect

Telecommunications Software  
Engineer

Software Design Engineer

# 37

**Job Openings  
2017-2026**

# \$39.38

**Median  
Wage  
(per hour)**



*Funded by the Government of Canada and the Province of New Brunswick through the Canada-New Brunswick Labour Market Agreements.*