Bachelor of Design Industry Guide

Introduction

The Bachelor of Design in Architecture, Landscape Architecture and Urbanism (BDES) program is one of the most diverse programs in Canada for designing the built environment, and the skills gained can also transfer to many design related areas outside of that. Understanding the breadth of industries related to your field, as well as the skills and career paths within them, can help you identify opportunities and make informed decisions about your future. This guide provides an overview of related industries, essential skills, common positions at various career levels, and technical expertise to help you navigate the professional landscape.

Key Areas of Study:

- User-Centered Design, Interaction Design, Bylaw and Permitting, Product Design, Visual Communication, Digital Media, Information Architecture, Sustainable Design, Design Thinking, Graphic Design, Human-Computer Interaction, Ergonomics, UX/UI, Branding and Identity, Industrial Design, Packaging Design, and Design for Social Innovation.

Industries

BDES graduates have diverse career opportunities in multiple fields where design plays a critical role. The more traditional industries that students in the BDES program consider are related to the built environment; which include: architecture, landscape architecture, urban planning, construction management, real estate development, sustainable design & environmental consulting, heritage conservation, , and interior design.

Alternative Design industries include: consumer products, digital and interactive media, user experience and user interface (UX/UI), entertainment and media, retail and commercial design, product design, fashion design, packaging design, virtual reality (VR) experiences, gaming design, and social innovation design.

This document provides an overview of industries where BDES graduates may find opportunities. The field of design is continuously evolving, offering new avenues for professionals in both established and emerging sectors.

Industries

ARCHITECTURE

Architecture involves creating structures and spaces that are functional, aesthetically pleasing, and sustainable. It merges creativity with technical proficiency, shaping the environment in both urban and rural settings. Architects work on projects ranging from individual buildings to large-scale city planning.

ESSENTIAL SKILLS:

- Creative and analytical thinking
- Communication and collaboration
- Attention to detail
- Technical proficiency in design software

POSITIONS:

- Junior Level: Architectural Intern, Junior Designer
- Mid-Level: Architectural Designer, Project Architect
- Senior Level: Senior Architect/Principal, Design Director

CONSTRUCTION & PROJECT MANAGEMENT

Construction and Project Management is focused on delivering design projects within time and budget constraints. Professionals in this field are responsible for planning, coordinating, and managing construction projects from inception to completion. This includes handling logistics, managing teams, and ensuring compliance with safety and legal standards.

ESSENTIAL SKILLS:

- Time management
- Problem-solving
- Communication and leadership
- Budget and schedule management

POSITIONS:

- Junior Level: CAD/BIM Technician
- Mid-Level: Project Architect
- Senior Level: Project Manager

LANDSCAPE ARCHITECTURE

Landscape Architecture is about creating outdoor spaces that balance natural and built environments. Landscape architects design parks, recreational spaces, and urban greenways, incorporating sustainability and environmental considerations into their designs. Their work often includes stormwater management, planting plans, and site design.

ESSENTIAL SKILLS:

- Integration of natural and built environments
- Sustainability principles
- Technical proficiency in drawing & construction knowledge

POSITIONS:

- Junior Level: Landscape Intern
- Mid-Level: Landscape Designer
- Senior Level: Senior Landscape Architect, Project Manager

HERITAGE CONSERVATION

Heritage Conservation involves the preservation and adaptive reuse of historic structures. Professionals in this field assess and restore buildings to maintain their historical value while ensuring they are functional for modern use. They also navigate legal regulations and collaborate with government agencies and local communities.

ESSENTIAL SKILLS:

- Historical research and documentation
- Adaptive reuse strategies
- Communication with stakeholders

POSITIONS:

- Junior Level: Conservation Intern
- Mid-Level: Heritage Planner
- Senior Level: Senior Conservation Architect

INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT

Industrial Design and Product Development focus on the creation of physical products that are functional, ergonomic, and aesthetically appealing. This includes designing everyday items like furniture, electronics, and lighting systems. Designers in this field collaborate closely with engineers and manufacturers to bring concepts to life.

ESSENTIAL SKILLS:

- Product prototyping
- CAD and 3D modeling
- Collaboration with manufacturing teams

Positions:

- Junior Level: Industrial Design Intern
- Mid-Level: Product Designer
- Senior Level: Lead Industrial Designer

Industries

INTERIOR DESIGN & SPACE PLANNING

Interior design emphasizes creating spaces that enhance functionality and aesthetics. Designers are tasked with planning and designing the interior layout and decor of residential, commercial, and public spaces. This involves understanding user needs, spatial arrangement, lighting, furniture, and material selection.

ESSENTIAL SKILLS:

- Creative and aesthetic sense
- Technical proficiency in rendering and layout software
- Communication and client engagement

POSITIONS:

- Junior Level: Junior Designer
- Mid-Level: Architectural Designer, Interior Space Planner
- Senior Level: Design Director

REAL ESTATE DEVELOPMENT

Real estate and property development involves acquiring, planning, designing, and marketing land or buildings for various purposes (residential, commercial, industrial). For graduates with a Bachelor of Design , this field offers opportunities to integrate creative vision with practical constraints, ensuring that site layouts, building aesthetics, and user experiences align with market demands, regulations, and financial objectives.

ESSENTIAL SKILLS:

- Design Thinking & Aesthetics
- Market Research & Analysis
- Financial Acumen – Budgeting, cost estimation
- Regulatory Awareness
- Project Management & Communication

POSITIONS:

- Junior Level: Real Estate Design Associate
- Mid-Level: Property Development Manager, Project Designer
- Senior Level: Director of Development, Real Estate Design Director

SUSTAINABLE BUILDING DESIGN & ENVIRONMENTAL CONSULTING

Sustainable Design focuses on creating buildings and products that minimize environmental impact. This field integrates eco-friendly materials, renewable energy, and energy-efficient systems to create environmentally responsible designs. Environmental consultants help companies and organizations achieve sustainability goals through green building practices and certifications like LEED.

ESSENTIAL SKILLS:

- Knowledge of green building certifications (e.g., LEED)
- Environmental modeling and energy efficiency analysis
- Communication & reporting

POSITIONS:

- Junior Level: Sustainability Analyst
- Mid-Level: Sustainability Consultant
- Senior Level: Environmental Design Specialist

URBAN PLANNING

Urban planning and development focuses on designing and regulating land use to create functional, sustainable, and appealing urban environments. For BDES graduates this field provides opportunities to apply creative, user-centered perspectives to large-scale projects, balancing civic needs, environmental concerns, and policy constraints.

ESSENTIAL SKILLS:

- Spatial Design & Analysis
- Policy & Regulation Awareness
- Community Engagement
- Sustainability & Resilience
- Project Management & Collaboration

POSITIONS:

- Junior Level: Assistant Urban Planner, Design Associate
- Mid-Level: Urban Planner, Development Coordinator
- Senior Level: Planning Director, Urban Development Manager

ALTERNATIVE INDUSTRIES INCLUDE:

- Digital and interactive media
- Entertainment and media
- Fashion design
- Game design
- Packaging design
- Product design
- Social innovation design
- User experience and user interface (UX/UI)
- Virtual reality (VR) experiences

Technical Skills

CORE SKILLS

VISUAL COMMUNICATION:
Proficiency in conveying messages through typography, color, imagery, and layout, essential for effective graphic and digital design.

USER-CENTERED DESIGN:
Expertise in designing with the end-user in mind, incorporating user research, personas, and usability testing to ensure accessible and intuitive interfaces.

DESIGN THINKING AND PROBLEM SOLVING:
Ability to approach complex design challenges with iterative ideation, prototyping, and testing, enabling innovative and practical design solutions.

DIGITAL TOOLS AND SOFTWARE PROFICIENCY:
Competence in industry-standard design software (e.g., Adobe Creative Suite, Sketch, Figma) for creating high-fidelity visual assets and interactive prototypes.

INTERACTION AND EXPERIENCE DESIGN:
Understanding of human-computer interaction principles and information architecture to create engaging, user-friendly experiences across digital platforms.

BRANDING AND IDENTITY DESIGN:
Skills in developing cohesive brand strategies and visual identities that communicate values and enhance market positioning.

MATERIAL AND PRODUCTION KNOWLEDGE:
Familiarity with the properties of various media (print, digital, physical materials) and production processes, facilitating the translation of designs into tangible outputs.

SUSTAINABILITY IN DESIGN:
Awareness of sustainable design practices, ensuring environmentally responsible choices in material selection, production processes, and lifecycle impacts.

COMMUNICATION AND COLLABORATION:
Proficiency in articulating design concepts and collaborating with cross-functional teams, critical for aligning creative vision with project goals and technical requirements.

SOFTWARES AND TOOLS

DESIGN SOFTWARE:

- Modeling:
  - Revit: Building Information Modeling (BIM) for architectural and structural design.
  - AutoCAD: Technical drawing and drafting for product and interior design.
  - SolidWorks: 3D modeling for product design and visualization.
  - Rhino/Grasshopper: Advanced freeform modeling and parametric design.
- Adobe Creative Suite:
  - Photoshop: Image editing and digital painting.
  - Illustrator: Vector graphics and illustration.
  - InDesign: Layout design and desktop publishing.
- UI/UX Tools:
  - Figma: Collaborative interface design and prototyping.
  - Adobe XD: UI/UX design and interactive prototyping.
  - InVision: Interactive prototyping and user feedback.

PROTOTYPING & DIGITAL FABRICATION:

- 3D Printers: Rapid prototyping and model creation.
- Laser Cutters & CNC Machines: Precision cutting and custom part fabrication.
- Interactive Prototyping Tools: Platforms for creating functional design mockups.

How to get Involved

- Design Teams
- UBC Clubs
- Personal Projects
- UBC Work Learn Program

Other Resources

- Bachelor of Design