

Business Technology Management is a new undergraduate university program that Canadian Coalition for Tomorrow's ICT Skills (CCICT) corporate and academic members have designed to improve the quality and quantity of business professionals capable of implementing information and communications technologies (ICTs) to achieve productivity, innovation, entrepreneurship, and competitive advantage. It is a digital economy version of MIS and similar programs offered by some university business faculties. Typical roles for business technology managers include business analyst, project manager, change management, consultant, entrepreneur, and IT manager.

CCICT launched a consultation process to design the BTM, including employers and university educators from across Canada, in February 2009. A working group designed a set of learning outcomes for the program, drawing heavily on relevant international standards.

Each accredited university program is encouraged to carve its own path in terms of curriculum, administrative arrangements, and areas of specialization, all while delivering the minimum set of learning outcomes. Meaningful, relevant practical experience is a requirement for individual graduate designation as a Certified Business Technology Manager (CBTM). We are partnering with the Canadian Information Processing Society for the accreditation of university programs and the certification of entry-level BTMs with a minimum of one year's relevant work experience.

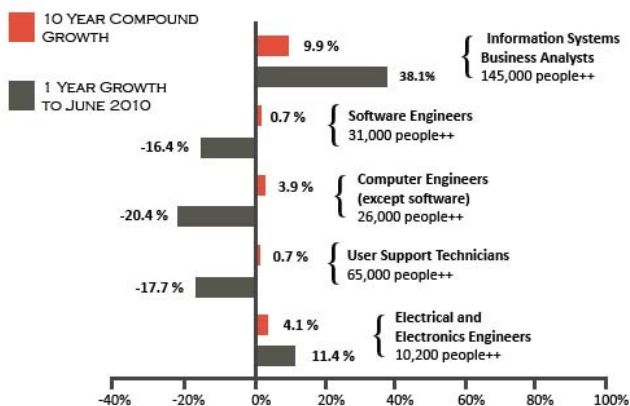
Why the BTM

Canada's labour market has a large and growing demand for business professionals with ICT-related knowledge and skills.

The chart shows that employment growth of "information systems business analysts" was close to 10% annually over the past decade, and 38% during the 12 months to June 2010. This category comprises 3/4 of the 200,000 BTM-type jobs in Canada at the beginning of 2009.

National surveys by the ICT sector council, as well as extensive anecdotal data, indicate that in every region of Canada, employers can't find enough people with the business technology skill set. Many job incumbents lack key capabilities. Meanwhile, most post-secondary programs that teach these skills have endured chronic under-enrollments for 10 years or more.

Effect of Recession on 5 key IT occupations
2000 to 2010



Source: Statistics Canada, (Labour Force Survey) Custom Tables

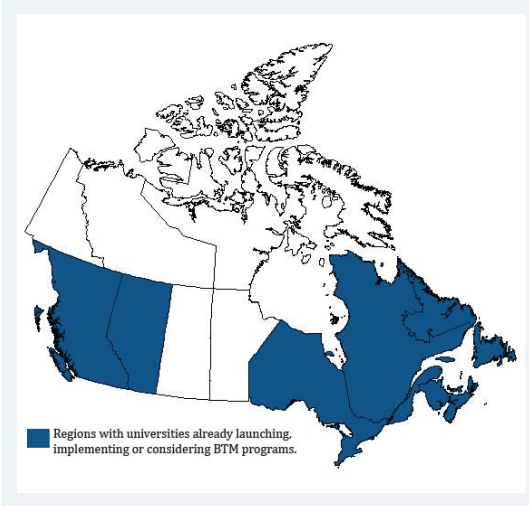
++ Approximate number of professionals in named sector as of 2008.

The typical cohort in a business MIS program has, at best, 40-80 students. Many programs have a hard time attracting the best and brightest students. A CCICT-commissioned study by the Conference Board of Canada found that high school students and their influencers generally don't even know about the business technology professional career track. It's no wonder that enrolments are low and that the best and brightest too often go elsewhere.

Many studies, notably from the Institute for Competitiveness and Prosperity, indicate that Canada's productivity gap is due in large measure to under-investments in ICTs and insufficient management skills. Other studies have shown that insufficient technology management skills are linked to failures to invest in technology, or to do so wisely. This is a problem, not just for employers and educators, but also for Canada.

Who is implementing the BTM?

During this launch phase, the CCICT has approached – or been approached by – about 15 universities across Canada. Nearly all are in the process of gaining approval to launch a version of the BTM. Some have launched it already, or have firm plans to do so.



- Several universities in the Maritimes are actively considering the BTM.
- Laval is planning a BTM certificate or Honours program for 2012.
- Concordia is planning a named BTM program, with intakes in fall 2011.
- UQAM is close to a decision.
- University of Ontario Institute of Technology is targeting 2012 intakes.
- Ryerson now has a named BTM program (formerly ITM) with over 1400 students. It granted the first BTM degrees in 2010.
- York is moving towards a BTM offering beginning in fall 2011.
- University of Waterloo and Wilfrid Laurier are adding BTM designation to a joint honours program in computer science and business.
- Wilfrid Laurier will also launch a named BTM program at its Brantford campus in fall 2011.
- SFU is moving towards a certificate/honours BTM beginning in fall 2011.
- Several other (including “top-tier”) universities in Quebec, Ontario and Alberta are working toward BTM decisions.

Promoting the BTM

To engage young people and their influencers in next generation technology careers, the CCICT is launching the \$2 million Digital Jobs of Tomorrow campaign (dJOT) in partnership with Human Resources and Skills Development Canada; the governments of Quebec, Ontario, and other provinces; CCICT corporate members; and leading industry organizations.

dJOT

*(Digital Jobs of Tomorrow)
comes to life in 2011.*

It includes the following components:

- **A highly interactive, “Web 2.0” style national Digital Career Network**

The Career Network will be an engaging go-to venue for young career choosers in high school and post-secondary, providing information, news, mentoring and community capabilities.

- **A Digital Careers Week (Fall 2011)**

The Week will directly engage young people, parents, educators and media and the public at large. It will change perceptions about the nature and attractiveness of 21st century IT career paths, as well as the educational pathways to these careers.

The BTM, and the universities that offer it, will be featured extensively in the dJOT campaign. dJOT provides a unique opportunity to transform career chooser perceptions about business technology careers.

Supporting the BTM

To facilitate the success of the BTM, the CCICT is implementing several programs in addition to the Digital Jobs of Tomorrow campaign described elsewhere in this document:

- **Program Industry Advisory Committees, mandated to provide guest lectures, local networking events, and the like**
- **An exclusive database of student coop / internship / job candidates that will be distributed to CCICT members across Canada**
- **National networking events, case competitions and the like**

Accreditation & Certification

CCICT and its partners seek to increasingly professionalize the field of business technology management. To advance this objective we encourage all BTM graduates to enter the job market with at least one year of relevant work experience.

Recognizing that not all schools have the capability to stream students through coops or internships, we are separating the accreditation of programs from the certification of professionals. For both, the CCICT is partnering with the Canadian Information Processing Society. CIPS is a recognized accreditation body that has experience with university MIS programs (among others).

To facilitate the transition to BTM, we plan to take a “light” approach to program accreditation over the next 2-3 years. The model will include a self-assessment questionnaire and a 1-day visit, which we will pilot during the 2011-12 academic year. We will structure the process to facilitate re-use of existing materials (e.g. AACSB). Accreditation will be governed by a joint CCICT-CIPS BTM Accreditation Council. It will include several academics from schools that offer the BTM.

BTM graduates will be eligible for the Certified BTM designation on completion of the equivalent of one years’ relevant practical experience. This can be obtained in a variety of ways. We are in the process of refining the details on the experience requirements. The certification will be offered by CCICT and/or CIPS, and our goal is to eventually evolve the designating entity into a form of professional organization.

About the CCICT



**CANADIAN COALITION
FOR TOMORROW'S ICT SKILLS**

The Canadian Coalition for Tomorrow's ICT Skills (CCICT) is an industry-led group of employers, universities and industry organizations, founded by Bell Canada in 2007. Our aim is to ensure that Canadian organizations can hire the information and communications technology (ICT) professionals they need to meet the changing and diverse needs of the 21st century workforce.

The CCICT seeks to achieve practical solutions to an alarming decline in ICT-related post-secondary enrolments (30-40%), historically low female participation (25%), and significant shifts in demand – against the backdrop of a growing need for every industry to embrace the tools and methods of the knowledge economy. Career choosers and their advisors (like parents and teachers) often don't know about the exciting ways that ICT-related careers are changing. With over 100 members from across Canada, the CCICT's mission is to bring Canada's 21st century technology-related careers to the forefront.

How to take action on the BTM

The learning outcomes, accreditation requirements, and other information are fully documented in an information package available from the CCICT. To obtain this information, contact CCICT Executive Director, dticoll@ccict.ca or call (416) 572-4370. Our Web site is <http://ccict.ca>.

CCICT Corporate Members

