Health Information Management Program Standard

The approved program standard for Health Information Management program of instruction leading to an Ontario College Diploma delivered by Ontario Colleges of Applied Arts and Technology (MTCU funding code 51643)

Ministry of Training, Colleges and Universities
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I. Introduction

This document is the Program Standard for the Health Information Management program of instruction leading to an Ontario College Diploma delivered by Ontario colleges of applied arts and technology (MTCU funding code 51643).

Development of System-Wide Program Standards

In 1993, the Government of Ontario initiated program standards development with the objectives of bringing a greater degree of consistency to college programming offered across the province, broadening the focus of college programs to ensure graduates have the skills to be flexible and to continue to learn and adapt, and providing public accountability for the quality and relevance of college programs.

The Program Standards and Evaluation Unit of the Ministry of Training, Colleges and Universities have responsibility for the development, review and approval of system-wide standards for programs of instruction at Ontario colleges of applied arts and technology.

Program Standards

Program standards apply to all similar programs of instruction offered by colleges across the province. Each program standard for a postsecondary program includes the following elements:

1. **Vocational standard** (the vocationally specific learning outcomes which apply to the program of instruction in question),
2. **Essential employability skills** (the essential employability skills learning outcomes which apply to all programs of instruction); and
3. **General education requirement** (the requirement for general education in postsecondary programs of instruction).

Collectively, these elements outline the essential skills and knowledge that a student must reliably demonstrate in order to graduate from the program.

Individual colleges of applied arts and technology offering the program of instruction determine the specific program structure, delivery methods and other curriculum matters to be used in assisting students to achieve the outcomes articulated in the standard. Individual colleges also determine whether additional local learning outcomes will be required to reflect specific local needs and/or interests.
The Expression of Program Standards as Vocational Learning Outcomes

Vocational learning outcomes represent culminating demonstrations of learning and achievement. They are not simply a listing of discrete skills, nor broad statements of knowledge and comprehension. In addition, vocational learning outcomes are interrelated and cannot be viewed in isolation of one another. As such, they should be viewed as a comprehensive whole. They describe performances that demonstrate that significant integrated learning by graduates of the program has been achieved and verified.

Expressing standards as vocational learning outcomes ensures consistency in the outcomes for program graduates, while leaving to the discretion of individual colleges, curriculum matters such as the specific program structure and delivery methods.

The Presentation of the Vocational Learning Outcomes

The vocational learning outcome statements set out the culminating demonstration of learning and achievement that the student must reliably demonstrate before graduation.

The elements of the performance for each outcome define and clarify the level and quality of performance necessary to meet the requirements of the vocational learning outcome. However, it is the performance of the vocational learning outcome itself on which students are evaluated. The elements of performance are indicators of the means by which the student may proceed to satisfactory performance of the vocational learning outcome. The elements of performance do not stand alone but rather in reference to the vocational learning outcome of which they form a part.

The Development of a Program Standard

In establishing the standards development initiative, the Government determined that all postsecondary programs of instruction should include vocational skills coupled with a broader set of essential skills. This combination is considered critical to ensuring that college graduates have the skills required to be successful both upon graduation from the college program and throughout their working and personal lives.

A program standard is developed through a broad consultation process involving a range of stakeholders with a direct interest in the program area, including employers, professional associations, universities, secondary schools and program graduates working in the field, in addition to students, faculty and administrators at the colleges themselves. It represents a consensus of
participating stakeholders on the essential learning that all program graduates should have achieved.

Updating the Program Standard

The Ministry of Training, Colleges and Universities will undertake regular reviews of the vocational learning outcomes for this program to ensure that the Health Information Management Program Standard remains appropriate and relevant to the needs of students and employers across the Province of Ontario. To confirm that this document is the most up-to-date release, please contact the Ministry of Training, Colleges and Universities at the address or email address noted on the inside cover page.
II. Vocational Standard

All graduates of the Health Information Management program of instruction must have achieved the eleven vocational learning outcomes listed in the following pages, in addition to achieving the essential employability skills learning outcomes and meeting the general education requirement.

Preamble

The role of managing health records has changed significantly over time and continues to do so. This is due in large part to the transition from paper-based record keeping to electronic records, but also to the growing needs and uses of quality health information for both primary and secondary purposes. Health care providers rely on timely, accurate information for primary purposes: assessment, planning and delivery of care. Secondary uses of the information include monitoring public health, studying patterns of disease for cause and effective interventions, clinical research, health care planning, funding, budgeting and resource allocation, and improving quality of care and delivery of services.

Data and information quality is critical for all uses and is central to the collection and management of health information. Graduates of the Health Information Management program are able to assess data from records of individual client visits and code or edit using appropriate standards and health information, classification and abstracting systems. They rely on knowledge of biomedical sciences*, medical diagnoses and interventions, causes of diseases, medical terminology, abbreviations and acronyms, Canadian coding and abstracting standards, and good computer skills to ensure accurate, consistent and timely collection of health information.

Maintaining the quality, integrity and security of health information throughout its lifecycle are also key aspects of its management. Graduates apply quality assurance and records management principles, tools, practices and procedures to perform this aspect of managing health information.

The privacy and security of personal health information is the subject of government regulation, organizational policies and practices, and professional and ethical standards. Graduates know and apply their compliance obligations and serve as a resource for others for information about their rights and responsibilities in the collection, use, access, distribution, retention, storage, and disposal of personal health information. This knowledge can also inform the continuous improvement of organizational policies and processes to support organizational goals, operations, regulatory compliance and client care.

Graduates serve as a resource for retrieving and releasing personal health information in response to legitimate requests for both primary and secondary
purposes. They also participate in researching, analyzing and presenting statistical data and health information to support organizational decision-making, epidemiology studies and clinical research. They can participate in the procurement and implementation of health information management systems using: knowledge of systems interoperability standards and database architecture; software versioning; classification and terminology mapping; data collection requirements, legal obligations, and the management of health information throughout its lifecycle; along with the application of fundamental project management principles and processes.

Keeping current with health care and health information management issues, trends and technologies allows graduates to enhance their work performance and guide continuous learning opportunities. Their knowledge of the structure and regulated nature of the health care system enables them to work professionally, ethically and collaboratively with stakeholders* and as members of interdisciplinary health care teams*.

Opportunities for graduates of health information management programs exist within a broad range of public, private, large and small health care providers (e.g., hospitals, clinics, long-term and community care facilities, physicians' offices and other primary care providers, etc.). Other employers of graduates include government health ministries and organizations, workplace safety and insurance boards, insurance and pharmaceutical companies, legal firms, health records and computer consultants, health information system vendors, and health research agencies. Graduates’ roles may encompass a variety of activities or focus on an area of specialization such as coding, classifications, terminologies and standards, privacy, data quality and integrity, research and analysis, decision support, or records management.

Graduates of programs accredited by the Canadian Health Information Management Association (CHIMA) may challenge CHIMA’s National Certification Examination and, if successful, will receive a certificate of registration in the Canadian College of Health Information Management and be eligible to use the CHIM credential and the title Certified HIM Professional.

There are opportunities for graduates to pursue further educational qualifications. Graduates should contact individual colleges and universities for further details.

Endnote: The Ontario Council on Articulation and Transfer (ONCAT) maintains the provincial postsecondary credit transfer portal, ONTransfer, at http://www.ontransfer.ca.

*See Glossary
Synopsis of the Vocational Learning Outcomes

Health Information Management (Ontario College Diploma)

The graduate has reliably demonstrated the ability to

1. keep current with relevant local, national and global health care and health information management issues, trends, technologies and standards to support health information management systems and processes and guide professional development.

2. assess personal health information from individual client visits for accuracy, completeness and consistency using knowledge of biomedical sciences*, medical diagnoses and interventions, causes of diseases, and medical terminology, abbreviations and acronyms.

3. apply current, accurate codes and standards to relevant personal health information from individual client visits using health information, coding, classification and abstracting systems proficiently.

4. comply with the legal obligations, as well as with the professional, ethical and organizational standards that ensure privacy, security and confidentiality in the access, retention, storage and disposal of personal health information.

5. contribute to the development, implementation and evaluation of health information management practices, policies and processes to support client care, organizational goals, operations, and regulatory compliance.

6. participate in maintaining the completeness, accuracy, consistency, timeliness and integrity of health information throughout the management of its lifecycle.

7. use knowledge of systems interoperability standards, database architecture, software versioning, classification and terminology mapping, data collection requirements, legal obligations, and the health information management lifecycle, and apply fundamental project management principles and practices to support the procurement and implementation of health information management systems.

8. retrieve and release personal health information in response to legitimate requests, in accordance with statutory requirements, and within specified deadlines.
9. participate in the retrieval, analysis and presentation of relevant health information to stakeholders* to support organizational decision-making, epidemiological studies and clinical research.

10. work professionally, ethically and collaboratively with stakeholders* and as a member of the interdisciplinary health care team*, within a structured, regulated and evolving system of health care, to enhance the collection, distribution, use, security and awareness of quality health information and its impact on client care.

11. use current and emerging technologies to support the management, analysis and presentation of health information.

*See Glossary

Note: The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance.
The Vocational Learning Outcomes

1. The graduate has reliably demonstrated the ability to keep current with relevant local, national and global health care and health information management issues, trends, technologies and standards to support health information management systems and processes and guide professional development.

Elements of the Performance

- Identify trends, issues, technologies and standards that may impact the delivery of health care and management of health information
- Select and use appropriate monitoring tools and news sources to keep informed of relevant health care and health information management-related issues and trends
- Assess the reliability, authority and relevance of information and information sources
- Use the benefits and resources associated with membership in relevant professional associations (e.g., the Canadian Health Information Management Association (CHIMA)) to stay current and guide professional development
- Identify tools and strategies to establish a network of health professionals to share knowledge and expertise, stay current and guide professional development
- Monitor a range of sources for changes to relevant coding, classification and abstracting systems and standards for electronic health information, to ensure complete, accurate, consistent and timely health information and interoperability of health information systems
- Participate in informed discussions on the impact of issues, trends, technologies and standards on the health information management profession
- Develop strategies and seek opportunities to support lifelong learning, professional development and career enhancement

* See Glossary
2. The graduate has reliably demonstrated the ability to assess personal health information from individual client visits for accuracy, completeness and consistency using knowledge of biomedical sciences*, medical diagnoses and interventions, causes of diseases, and medical terminology, abbreviations and acronyms.

Elements of the Performance

- Review the content of personal health information for accuracy and completeness using knowledge of the complete health record, biomedical sciences*, medical diagnoses and interventions, causes of diseases and medical terminology
- Review electronic health information for uniformity and standardization of data
- Decipher medical abbreviations and acronyms in personal health information to ensure accurate data collection
- Review personal health information and compare client history with recorded interventions and discharge summary to identify inconsistencies
- Compare relevant data elements and client demographic data for accuracy and consistency of health information (e.g., gender to diagnosis, diagnosis to diagnosis type, address to postal code, etc.)
- Use a variety of resources to assist in the accurate and complete interpretation of personal health information (e.g., medical dictionaries, medication and pharmacology references, government and health care provider information, etc.)
- Clarify information required to complete client health information and correct inconsistencies and inaccuracies by communicating professionally and ethically with relevant individuals and organizations

* See Glossary
3. The graduate has reliably demonstrated the ability to

apply current, accurate codes and standards to relevant personal health information from individual client visits using health information, coding, classification and abstracting systems proficiently.

Elements of the Performance

- Identify coding, classifications and standards applicable to personal health information collected in primary, hospital, community, and specialized care settings
- Describe the relationships and linkages between health information systems and standards across health care sectors, types of care and within an individual client’s health care experience
- Analyze client personal health information to identify the elements required for minimum data sets
- Apply codes to disease-related data elements from client information, consistently and accurately, using the International Statistical Classification of Diseases and Related Health Problems, 10th Revision, Canada (ICD-10-CA) classification system (or current Canadian version of the International Classification of Diseases)
- Apply codes to intervention-related data elements from client information, consistently and accurately, using the Canadian Classification of Health Interventions (CCI) classification system
- Edit electronic health information to improve uniformity and standardization of data
- Apply professional practice guidelines and requirements for documentation and electronic records standards across different types of care (e.g., primary, hospital, community, specialized services, pharmaceutical, etc.)
- Apply coding, classifications and abstracting standards that accurately reflect client diagnoses, treatment and resource use
- Consult with health professionals as necessary to clarify that coding classifications assigned align with clinical documentation
- Verify the application of current, accurate codes and standards by keeping well-informed of updates to ICD-10-CA, CCI and/or other relevant coding, classification, abstracting and electronic records standards (e.g., Pan-Canadian primary health care indicators and electronic medical record content standards, rehabilitation condition codes and interventions, etc.)
- Explain the importance of accurate application of codes and standards to personal health information for use by grouping and weighting methodology systems in Canada (e.g., Case Mix Groups (CMG), Resource Intensity Weight (RIW), Comprehensive Ambulatory Classification System (CACS), etc.)
4. **The graduate has reliably demonstrated the ability to**

comply with the legal obligations, as well as with the professional, ethical and organizational standards that ensure privacy, security and confidentiality in the access, retention, storage and disposal of personal health information.

**Elements of the Performance**

- Manage health information in compliance with relevant federal and Ontario legislation for the management of personal health information
- Manage health information in compliance with the privacy and confidentiality provisions of professional association codes of ethics and standards relating to personal health information (e.g., CHIMA)
- Maintain compliance obligations by keeping well-informed of changes to statutory, regulatory and professional and organizational standards, policies and procedures for protecting the privacy, confidentiality and security of personal health information
- Comply with policies and procedures to safeguard the privacy of personal health information (e.g., positioning of computer screens, use of blackboards in emergency rooms, etc.)
- Comply with risk management practices and guidelines related to privacy, access, storage, retention and destruction of personal health information
- Discuss appropriate practices for physical safeguards and controls for health information (e.g., fire and flood protection for physical files and computer equipment, on-site versus off-site storage, centralized versus decentralized file storage and server location, etc.)
- Describe technical safeguards and methods of control for electronic personal health information (e.g., authentication and identity management, role-based access and permission levels, encryption of stored and transmitted data, firewalls, backup systems, audit trails, etc.)
- Use manual and electronic systems and tools to control and monitor access and disclosure of health information (e.g., password protection policies, logs, forms, etc.)
5. **The graduate has reliably demonstrated the ability to**

contribute to the development, implementation and evaluation of health information management practices, policies and processes to support client care, organizational goals, operations, and regulatory compliance.

**Elements of the Performance**

- Apply records management principles and practices to the collection, maintenance, storage, retrieval and destruction of individual health records within the regulatory framework of the Canadian health care system and the operations of various health care providers
- Use knowledge of the regulatory framework and legal and ethical obligations to support the development and evaluation of organizational policies and processes which ensure regulatory compliance in the management of health information
- Use knowledge of health information flow and data collection requirements through the various levels of care to contribute to the development, implementation and evaluation of policies and processes for the effective and efficient collection, storage, maintenance and retrieval of health records in a variety of formats
- Promote the standardization of personal health information data collection among primary care providers
- Identify information gaps in the electronic collection of personal health information and suggest system improvements
- Suggest ideas to manage and reduce the risks associated with the privacy, access, storage, and destruction of health information
- Use knowledge of organizational structure, labour relations, change management concepts and work flow analysis to inform the development and implementation of health information management policies and processes and to support organizational goals and operations
- Use knowledge of data and information standards to support development and implementation of organizational policies and processes to meet requirements for data collection, quality and information management
- Explain file organization as it relates to the management and storage of electronic health information
- Identify changes to statutory, regulatory and professional standards and obligations impacting health information management to inform organizational policies and processes
- Contribute to the preparation of templates and training materials to inform others of, and guide their compliance with, relevant health information policies and procedures

* See Glossary
6. The graduate has reliably demonstrated the ability to participate in maintaining the completeness, accuracy, consistency, timeliness and integrity of health information throughout the management of its lifecycle.

Elements of the Performance

- Describe the types of health care information systems and the information flow between them
- Explain the stages of the health information management lifecycle and their relationship to one another
- Explain the interface between health information, coding, classification, abstracting systems and standards for electronic health information and their impact on data quality and integrity
- Explain the relationship between the architecture of database and content management systems and data quality and integrity
- Suggest appropriate practices for maintaining the quality and integrity of health information throughout the management of its lifecycle
- Monitor and verify data integrity by performing appropriate data quality audits, checks and reviews (e.g., manual or automated reviews for identifying problems of duplication, incomplete records, incorrect fields, etc.)
- Investigate database content issues when errors are flagged or reported and participate in their resolution
- Support the standardization of personal health information data collection among primary care providers
- Identify information gaps in the electronic collection of personal health information and suggest system improvements
- Explain the impact of technology on the management of changing versions of health information (e.g., software upgrades, template and form changes, terminology and coding systems and standards, etc.)
- Discuss the impacts and benefits of different nomenclature standards on the integrity and distribution of health information (e.g., SNOMED CT, etc.)
- Maintain the quality and integrity of health information by supporting members of the interdisciplinary health care team* to record accurate, consistent and timely health information at its source

* See Glossary
7. The graduate has reliably demonstrated the ability to

use knowledge of systems interoperability standards, database architecture, software versioning, classification and terminology mapping, data collection requirements, legal obligations, and the health information management lifecycle, and apply fundamental project management principles and practices to support the procurement and implementation of health information management systems.

Elements of the Performance

- Participate in the requirements gathering process for health information management systems using knowledge of the health information management lifecycle, the regulatory framework and the privacy, confidentiality and security obligations with respect to personal health information
- Describe system end-user usability issues that influence system adoption, quality of input and accuracy of results
- Describe the levels and types of care and interoperable exchange of health information between them to inform the selection and implementation of appropriate health information management systems
- Discuss the impact of technological change on records management and the need for systems to accommodate and account for previous applications, templates, coding systems, terminologies, etc.
- Explain the purpose and process of terminology and classification mapping (e.g., SNOMED CT to ICD-10-CA, etc.)
- Describe the types of health care information systems and the information flow between them
- Apply fundamental project management principles, tools and skills to support the procurement and implementation of health information systems (e.g., GANTT charts, strengths, weaknesses, opportunities and threats (SWOT) analysis, project management software and applications, etc.)
- Participate in the review of system functionality to assess its alignment with project requirements
- Contribute to the design and implementation of basic health information databases
- Use appropriate tools and processes to bridge the transition from paper to electronic health records (e.g., scan paper records into electronic format; include bar codes on forms for ease of indexing; etc.)
- Discuss appropriate practices for physical safeguards and controls for health information throughout its management lifecycle (e.g., fire and flood protection for physical files and computer equipment, on-site versus off-site storage, centralized versus decentralized file storage and server location, etc.)
8. The graduate has reliably demonstrated the ability to retrieve and release personal health information in response to legitimate requests, in accordance with statutory requirements, and within specified deadlines.

Elements of the Performance

- Describe the types of information needed by health care practitioners, clients, administrators, researchers, government agencies and other stakeholders*
- Apply relevant regulations and privacy principles to assess the legitimacy of requests for personal health information and the risks of data release
- Apply records management principles and practices, and statutory requirements, to the retrieval and release of personal health information for primary and secondary purposes
- Use tools to control and monitor consent to access, release, distribute and track personal health information (e.g., consent forms, release of information forms, privacy impact assessments, role-based access policies, consent management systems, release of information tracking logs, etc.)
- Process requests for release of personal health information consistently, efficiently and in accordance with policies and legal requirements
- Prioritize personal health information requests and manage time on task to complete work within specified deadlines
- Inform others of their privacy rights and/or confidentiality and security obligations relative to personal health information and the process for its release in a variety of circumstances (e.g., for client and family access, to facilitate care, for non-medical purposes (e.g., insurance, legal matters, etc.), for research and clinical trials, to correct records, etc.)
- Submit abstracted data to the appropriate health data and information repositories in a secure and timely manner
- Release routine health information and statistical reports in compliance with statutory regulations and organizational policies and practices

* See Glossary
9. The graduate has reliably demonstrated the ability to participate in the retrieval, analysis and presentation of relevant health information to stakeholders* to support organizational decision-making, epidemiological studies and clinical research.

Elements of the Performance

- Identify relevant sources of demographic, clinical, and financial data (e.g., internal databases, the Canadian Information Health Institute (CIHI), other registries, Family Health Teams, etc.), and authoritative sources of routinely collected data for purposes of epidemiological research (e.g., CIHI, Statistics Canada, Health Canada, provincial and federal registries, Canada Census, the World Health Organization (WHO), the Organization for Economic Co-operation and Development (OECD), etc.), necessary to meet requested information needs
- Use knowledge of biomedical sciences*, medical terminology, interventions, causes of diseases, coding and classification standards to locate and retrieve appropriate information for specific queries (e.g., admissions data, diagnosis and intervention data, use of facilities and equipment data, etc.)
- Explain the business aspects of health care organizations and the alignment of health information management services with strategic planning
- Participate in tracking trends and identifying typical and atypical events revealed through the compilation and analysis of health information
- Use basic descriptive statistics (e.g., mean, median, mode, range, standard deviation, etc.) and correct statistical terminology to support the analysis and presentation of health information for organizational decision-making and research purposes
- Use knowledge of performance indicators, standards and benchmarks and the relationship between outcome measurement and quality management initiatives to support data analysis and presentation for decision-making purposes
- Conduct literature searches using appropriate databases (e.g., PubMed, ProQuest, etc.) and with regard to medical and scientific literature appraisal
- Use knowledge of the research ethics approval process, applicable legal and organizational standards, biomedical sciences*, medical terminology, interventions and causes of diseases to support clinical research
- Use knowledge of relevant terms, authoritative sources of administrative and population data, biomedical sciences*, interventions and causes of diseases, and concepts of health and wellness to support epidemiological studies
- Explain the steps, approaches, methods, strategies and tools used for data collection in the design of qualitative and quantitative research studies
• Suggest appropriate research methods for a variety of information needs
  ○ (e.g., interviews, surveys, experiments, online and library research, etc.)
• Use applications and tools proficiently to analyze and present health data and information (e.g., spreadsheet and presentation software, etc.)
• Participate in the preparation and presentation of reports and visual representations of the results of statistical analysis (e.g., charts, graphs, plots, histograms, etc.) to facilitate organizational decision-making

* See Glossary
10. *The graduate has reliably demonstrated the ability to*

work professionally, ethically and collaboratively with stakeholders* and as a member of the interdisciplinary health care team*, within a structured, regulated and evolving system of health care, to enhance the collection, distribution, use, security and awareness of quality health information and its impact on client care.

**Elements of the Performance**

- Share knowledge, skills and experience with others to build professional relationships and effective interdisciplinary health care teams*
- Comply with relevant professional association and industry codes of ethics, health information management professional standards and practices, legal obligations, protocols and policies, to support the quality and management of health information and its impact on client care
- Use knowledge of the Canadian health care system (i.e., its history, governance, regulatory framework, care and funding structures) and influential national and international agencies and organizations, to enhance work performance and collaboration with stakeholders*
- Provide examples of improvements to health care delivery and client care resulting from the use and analysis of health data and information
- Explain the roles and responsibilities of health information management professionals within the interdisciplinary health care team* and the broader organizational and health care system
- Use knowledge of organizational structure, labour relations issues and leadership and team building principles to enhance collaboration with stakeholders*, including members of the interdisciplinary health care team*
- Inform others of their privacy rights and/or confidentiality and security obligations relative to personal health information and the process for its release in a variety of circumstances (e.g., for client and family access, to facilitate care, for research and clinical trials, to correct records, for non-medical insurance and legal purposes, etc.)
- Inform health care providers of the complexities of coding classifications and abstracting standards and the importance of complete records to improve the quality of data collection
- Assess the need for health information management knowledge and skills in a variety of circumstances
- Use knowledge of biomedical sciences* and medical terminology and the regulatory framework and legal obligations impacting the health information management lifecycle to enhance communications with stakeholders*, health care practitioners and other members of the interdisciplinary health care team*

* See Glossary
11. *The graduate has reliably demonstrated the ability to*

use current and emerging technologies to support the management, analysis and presentation of health information.

*Elements of the Performance*

- Select and use appropriate monitoring tools and news sources to keep informed of relevant health and health information management-related technologies
- Use current and emerging technologies to support the transition from paper to electronic records (e.g., scanners, indexing and other applications, etc.) and implementation and management of electronic health information systems
- Select and use appropriate applications and tools to complete tasks proficiently and effectively (e.g., managing time on task, organizing files and schedules, tracking deadlines, progress and completion of work, etc.)
- Use current and emerging technologies to support the collection and analysis of health data and information and enhance its presentation to stakeholders* (e.g., Web-based applications, social media, mobile devices, etc.)
- Use electronic systems and tools to control and monitor access to and disclosure of health information (e.g., password protection policies, logs, forms, etc.)
- Use the functionality and features of systems and applications to input and retrieve relevant information proficiently and accurately
- Suggest applications of current and emerging technologies to facilitate communications within and across organizations and sectors and to enhance the collection of complete, accurate, consistent and timely health information
Glossary

**Biomedical sciences** – Sciences that support the study of the human body and systems and diagnosis and treatment of illnesses, injuries and diseases, including but not limited to anatomy, physiology, pathology, and pharmacology.

**Interdisciplinary health care team** - A team of health professionals from various disciplines working collaboratively to achieve the common goal of optimal client care.

**Stakeholders** - Individuals, groups or other organizations with a direct interest in or impact on an organization’s delivery of care and/or management of personal health information.
III. Essential Employability Skills

All graduates of the Health Information Management program of instruction must have reliably demonstrated the essential employability skills learning outcomes listed on the following pages, in addition to achieving the vocational learning outcomes and meeting the general education requirement.

Context

Essential Employability Skills (EES) are skills that, regardless of a student’s program or discipline, are critical for success in the workplace, in day-to-day living and for lifelong learning.

The teaching and attainment of these EES for students in, and graduates from, Ontario’s colleges of applied arts and technology are anchored in a set of three fundamental assumptions:

- these skills are important for every adult to function successfully in society today;
- our colleges are well equipped and well positioned to prepare graduates with these skills;
- these skills are equally valuable for all graduates, regardless of the level of their credential, whether they pursue a career path, or they pursue further education.

Skill Categories

To capture these skills, the following six categories define the essential areas where graduates must demonstrate skills and knowledge.

- Communication
- Numeracy
- Critical Thinking & Problem Solving
- Information Management
- Interpersonal
- Personal
Application and Implementation

In each of the six skill categories, there are a number of defining skills, or sub skills, identified to further articulate the requisite skills identified in the main skill categories. The following chart illustrates the relationship between the skill categories, the defining skills within the categories and learning outcomes to be achieved by graduates from all postsecondary programs of instruction that lead to an Ontario College credential.

EES may be embedded in General Education or vocational courses, or developed through discrete courses. However these skills are developed, all graduates with Ontario College credentials must be able to reliably demonstrate the essential skills required in each of the six categories.

<table>
<thead>
<tr>
<th>SKILL CATEGORY</th>
<th>DEFINING SKILLS: Skill areas to be demonstrated by graduates:</th>
<th>LEARNING OUTCOMES: The levels of achievement required by graduates. The graduate has reliably demonstrated the ability to:</th>
</tr>
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</table>
| COMMUNICATION          | • Reading  
                         • Writing  
                         • Speaking  
                         • Listening  
                         • Presenting  
                         • Visual literacy                                                                                                                 | 1. communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and meets the needs of the audience.  
2. respond to written, spoken or visual messages in a manner that ensures effective communication. |
| NUMERACY               | • Understanding and applying mathematical concepts and reasoning  
                         • Analyzing and using numerical data  
                         • Conceptualizing                                                                                                                  | 1. execute mathematical operations accurately. |
| CRITICAL THINKING & PROBLEM SOLVING | • Analyzing  
                         • Synthesizing  
                         • Evaluating  
                         • Decision making  
                         • Creative and innovative thinking                                                                                                       | 1. apply a systematic approach to solve problems.  
2. use a variety of thinking skills to anticipate and solve problems. |
<table>
<thead>
<tr>
<th>SKILL CATEGORY</th>
<th>DEFINING SKILLS: Skill areas to be demonstrated by graduates:</th>
<th>LEARNING OUTCOMES: The levels of achievement required by graduates. The graduate has reliably demonstrated the ability to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFORMATION MANAGEMENT</td>
<td>• Gathering and managing information</td>
<td>1. locate, select, organize and document information using appropriate technology and information systems.</td>
</tr>
<tr>
<td></td>
<td>• Selecting and using appropriate tools and technology for a task or a project</td>
<td>2. analyze, evaluate and apply relevant information from a variety of sources.</td>
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<tr>
<td></td>
<td>• Computer literacy</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Internet skills</td>
<td></td>
</tr>
<tr>
<td>INTERPERSONAL</td>
<td>• Teamwork</td>
<td>1. show respect for the diverse opinions, values, belief systems and contributions of others.</td>
</tr>
<tr>
<td></td>
<td>• Relationship management</td>
<td>2. interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals.</td>
</tr>
<tr>
<td></td>
<td>• Conflict resolution</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Leadership</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Networking</td>
<td></td>
</tr>
<tr>
<td>PERSONAL</td>
<td>• Managing self</td>
<td>1. manage the use of time and other resources to complete projects.</td>
</tr>
<tr>
<td></td>
<td>• Managing change and being flexible and adaptable</td>
<td>2. take responsibility for one’s own actions, decisions and their consequences.</td>
</tr>
<tr>
<td></td>
<td>• Engaging in reflective practices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Demonstrating personal responsibility</td>
<td></td>
</tr>
</tbody>
</table>
IV. General Education Requirement

All graduates of the Health Information Management program must have met the general education requirement described on the following pages, in addition to achieving the vocational and essential employability skills learning outcomes.

Requirement

The General Education Requirement for programs of instruction is stipulated in the Credentials Framework (Appendix A in the Minister’s Binding Policy Directive Framework for Programs of Instruction).

In programs of instruction leading to either an Ontario College Diploma or an Ontario College Advanced Diploma, it is required that graduates have been engaged in learning that exposes them to at least one discipline outside their main field of study and increases their awareness of the society and culture in which they live and work. This will typically be accomplished by students taking 3 to 5 courses (or the equivalent) designed discretely and separately from vocational learning opportunities.

This general education learning would normally be delivered using a combination of required and elective processes.

Purpose

The purpose of General Education in the Ontario college system is to contribute to the development of citizens who are conscious of the diversity, complexity and richness of the human experience; who are able to establish meaning through this consciousness; and who, as a result, are able to contribute thoughtfully, creatively and positively to the society in which they live and work.

General Education strengthens students’ essential employability skills, such as critical analysis, problem solving and communication, in the context of an exploration of topics with broad-based personal and/or societal importance.
Themes

The themes listed below will be used to provide direction to colleges in the development and identification of courses that are designed to fulfill the General Education Requirement for programs of instructions.

Each theme provides a statement of Rationale and offers suggestions related to more specific topic areas that could be explored within each area. These suggestions are neither prescriptive nor exhaustive. They are included to provide guidance regarding the nature and scope of content that would be judged as meeting the intent and overall goals of General Education.

1. Arts in Society:

Rationale:

The capacity of a person to recognize and evaluate artistic and creative achievements is useful in many aspects of his/her life. Since artistic expression is a fundamentally human activity, which both reflects and anticipates developments in the larger culture, its study will enhance the student’s cultural and self-awareness.

Content:

Courses in this area should provide students with an understanding of the importance of visual and creative arts in human affairs, of the artist’s and writer’s perceptions of the world and the means by which those perceptions are translated into the language of literature and artistic expression. They will also provide an appreciation of the aesthetic values used in examining works of art and possibly, a direct experience in expressing perceptions in an artistic medium.

2. Civic Life:

Rationale:

In order for individuals to live responsibly and to reach their potential as individuals and as citizens of society, they need to understand the patterns of human relationships that underlie the orderly interactions of a society’s various structural units. Informed people will have knowledge of the meaning of civic life in relation to diverse communities at the local, national and global level and an awareness of international issues and the effects of these on Canada, as well as Canada’s place in the international community.
Content:

Courses in this area should provide students with an understanding of the meaning of freedoms, rights and participation in community and public life, in addition to a working knowledge of the structure and function of various levels of government (municipal, provincial, national) in a Canadian and/or in an international context. They may also provide an historical understanding of major political issues affecting relations between the various levels of government in Canada and their constituents.

3. Social and Cultural Understanding:

Rationale:

Knowledge of the patterns and precedents of the past provide the means for a person to gain an awareness of his or her place in contemporary culture and society. In addition to this awareness, students will acquire a sense of the main currents of their culture and that of other cultures over an extended period of time in order to link personal history to the broader study of culture.

Content:

Courses in this area are those that deal broadly with major social and cultural themes. These courses may also stress the nature and validity of historical evidence and the variety of historical interpretation of events. Courses will provide the students with a view and understanding of the impact of cultural, social, ethnic or linguistic characteristics.

4. Personal Understanding:

Rationale:

Educated people are equipped for life-long understanding and development of themselves as integrated physiological and psychological entities. They are aware of the ideal need to be fully functioning persons: mentally, physically, emotionally, socially, spiritually and vocationally.

Content:

Courses in this area will focus on understanding the individual: his or her evolution; situation; relationship with others; place in the environment and universe; achievements and problems; and his or her meaning and purpose. They will also allow students the opportunity to study institutionalized human social behaviour in a systematic way. Courses fulfilling this requirement may be oriented to the study of the individual within a variety of contexts.
5. Science and Technology:

Rationale:

Matter and energy are universal concepts in science, forming a basis for understanding the interactions that occur in living and non-living systems in our universe. Study in this area provides an understanding of the behaviour of matter that provides a foundation for further scientific study and the creation of broader understanding about natural phenomena.

Similarly, the various applications and developments in the area of technology have an increasing impact on all aspects of human endeavour and have numerous social, economic and philosophical implications. For example, the operation of computers to process data at high speed has invoked an interaction between machines and the human mind that is unique in human history. This and other technological developments have a powerful impact on how we deal with many of the complex questions in our society.

Content:

Courses in this area should stress scientific inquiry and deal with basic or fundamental questions of science rather than applied ones. They may be formulated from traditional basic courses in such areas of study as biology, chemistry, physics, astronomy, geology or agriculture. As well, courses related to understanding the role and functions of computers (e.g., data management and information processing) and assorted computer-related technologies should be offered in a non-applied manner to provide students with an opportunity to explore the impact of these concepts and practices on their lives.