

# Health Information Technology and Cancer Information

## Degrees, Certificates and Awards

Associate in Science Health Information Technology  
Associate In Science Cancer Information Management  
Certificate of Achievement Medical Coding Specialist  
Certificate of Achievement  
Cancer Information Management

## Program Description

Opportunities in the health information field have expanded with changes in health care delivery, utilization and reimbursement and with developments in information technology. The Health Information Technology and Cancer Information Management Department offers four exciting options to prepare for a health information career: (1) the Associate in Science in Health Information Technology; (2) the Associate in Science in Cancer Information Management; (3) the Certificate of Achievement in Cancer Information Management; and (4) the Certificate of Achievement in Medical Coding Specialist. These programs are all offered completely online.

Students must have access to the Internet to enroll in these programs and must complete online orientation activities as the first assignment of each course. Students must meet online technical requirements. Core elements of each online lecture course include successful completion of the course objectives using the Internet, textbooks, study materials and computer applications. Examinations are online. Professional directed practice, under the guidance of a clinical preceptor, is provided at facilities as close as possible to each student's residence.

## Health Information Technology

The Health Information Technology (HIT) Program prepares students for a career that places them where the expanding arena of healthcare meets the cutting edge of technology. HIT professionals are the experts on patient data that doctors, nurses and other providers rely on to perform their jobs and which consumers need to manage their own healthcare. By maintaining, collecting, analyzing and securing health information, their work makes an important contribution to the delivery of quality care.

Graduates of the program are granted the Associate in Science Degree in Health Information Technology. The program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). Graduates are eligible to take the national credentialing exam to become a Registered Health Information Technician (RHIT). CAHIIM is located at 233 N. Michigan Avenue, 21st Floor, Chicago, IL 60601-5800 or CAHIIM can be contacted via e-mail at [info@cahiim.org](mailto:info@cahiim.org)

## Cancer Information Management

The Cancer Information Management (CIM) Program prepares students for positions with hospital-based and population-based cancer registries. Responsibilities typically include identification of reportable cancer cases; abstraction of pertinent cancer data from patient records and pathology, radiology and surgical reports; coding and staging primary site, histology and extent of disease; monitoring completeness, timeliness and quality of cancer data; performing cancer patient follow-up activities to identify second primaries, recurrence and spread of disease; reporting cancer data to health care officials, hospital administrators, physicians and regulatory organizations for use in cancer prevention and control; assisting the medical staff and epidemiologists in special studies and research; and supervising staff.

Graduates of this program who earn the Associate in Science Degree in Cancer Information Management are eligible to take the national credentialing exam to become a Certified Tumor Registrar (CTR). Graduates who earn the Certificate of Achievement in Cancer Information Management and who have an Associate Degree or higher in any field are also eligible to the CTR exam. The program is accredited by the National Cancer Registrars Association (NCRA).

## Medical Coding Specialist

This completely online certificate program prepares students for a position as a medical coder in an acute care hospital, clinic or physician's office, long-term care facility, and other health care settings. Coders ensure that valid codes are applied to medical diagnoses and procedures per coding classification guidelines and to facilitate reimbursement, analyze patient outcomes, and medical research.

The Medical Coding Specialist Certificate of Achievement prepares students to take the national certification examination to become a Certified Coding Associate (CCA) offered by AHIMA. This program is approved by the American Health Information Management Association (AHIMA). AHIMA is located

at 233 N. Michigan Avenue, 21st Floor, Chicago, IL  
60601-5809 or at (312) 233-1100.

### Program Student Learning Outcomes

1. Apply biomedical knowledge to the process of clinical code assignment.
2. Analyze and communicate clinical and statistical data to improve patient care and facilitate financial planning.
3. Apply and demonstrate legal, ethical, accreditation and certification standards to health information.
4. Participate in planning and implementing clinical and administrative information systems in traditional and alternative healthcare settings.
5. Apply departmental and organizational standards to data storage, retrieval, retention and security.
6. Demonstrate the ability to work effectively as an individual and collaboratively in a group to resolve health information management challenges in a changing healthcare environment.

### Department Offices

Health Information Technology and Cancer Information Management Programs ([hitcim@sbcc.edu](mailto:hitcim@sbcc.edu), ext. 2851)

Health Technologies Counselors  
([hitcimadvising@sbcc.edu](mailto:hitcimadvising@sbcc.edu), ext. 2285)

Alan Price, *Dean* (A-218, ext. 3044)

### Faculty/Staff

Denise Harrison, BS, CTR, *Chair and Program Director, Cancer Information Management*  
([dcharrison1@sbcc.edu](mailto:dcharrison1@sbcc.edu))

Janet Robertson, RHIA, *Program Director, Health Information Technology* ([robertso@sbcc.edu](mailto:robertso@sbcc.edu))

Lynette Williamson, MBA, RHIA, CCS, CPC, FAHIMA  
*Program Director, Medical Coding Specialist*  
([lmwilliamson@sbcc.edu](mailto:lmwilliamson@sbcc.edu))

Shawna Sweeney, MSHI, RHIA, CCS, *Faculty*

### AS Degree: Health Information Technology

#### Department Requirements (48 units)

*Recommended sequence of courses, offered online:*

COMP 101 — Introduction to Computer Applications .....	4
HIT 135 — Basic Medical Terminology.....	3
BMS 146 — Human Form and Function .....	3
HIT 101 — Intro. to Health Information Management.....	3
HIT 102 — Legal Aspects of Health Care.....	3

HIT 204 — Basic Pathophysiology .....	3
HIT 201 — Pharmacology for Allied Health .....	2
HIT 202 — ICD, Diagnostic Coding.....	2
HIT 203 — ICD, Procedural Coding .....	3
HIT 210 — CPT Procedural Coding .....	3
HIT 255+ — Medical Insurance and Reimbursement .....	4
HIT 220 — Health Information Management Statistics .....	2
HIT 240 — Health Care Quality Management Assessment ..	3
HIT 230 — Alternative Delivery Systems.....	2
HIT 265 — HIM Computer Applications.....	2
MGMT 101 — Introduction to Management .....	3
HIT 275# — HIM Practicum.....	3

+ *This requirement may be met by HIT 150 plus 250.*

*# It is recommended that all HIT classes be completed before HIT 275 is begun. A background check and drug screen may be required by the host facility at the student's expense.*

*Note: Each required course must be completed with a minimum grade of "C".*

### College Requirements

For complete information see "Graduation Requirements" in the *Catalog* Index.

### AS Degree: Cancer Information Management

#### Department Requirements (47 units)

*Recommended sequence of courses.*

HIT 135 — Basic Medical Terminology.....	3
BMS 146 — Human Form and Function .....	3
COMP 101 — Introduction to Computer Applications .....	4
CIM 100 — Cancer Registry Management I.....	3
HIT 101 — Introduction to Health Information Management.....	3
HIT 204 — Basic Pathophysiology .....	3
CIM 125 — Cancer Disease Management.....	4
CIM 201 — Abstracting Principles and Practice I.....	3
CIM 150 — Oncology Coding and Staging Systems.....	4
CIM 202 — Abstracting Principles and Practice II.....	3
CIM 225 — Cancer Registry Management-up .....	2
CIM 250 — Cancer Statistics and Epidemiology.....	3
HIT 240 — Health Care Quality Management.....	3

MGMT 101 — Introduction to Management .....3  
 CIM 275\* — CIM Practicum .....3

*\* It is recommended that all CIM classes be completed before CIM 275 is begun. A background check and drug screen may be required by the host facility at the student's expense.*

*Note: Each required course must be completed with a minimum grade of "C".*

**College Requirements**

For complete information see "Graduation Requirements" in the *Catalog* Index.

**Certificate of Achievement:**

**Cancer Information Management**

**Department Requirements (47 units)**

*Recommended sequence of courses.*

HIT 135 — Basic Medical Terminology.....3  
 BMS 146 — Human Form and Function .....3  
 COMP 101 — Introduction to Computer Applications .....4  
 CIM 100 — Cancer Registry Management I.....3  
 HIT 101 — Introduction to Health Information Management.....3  
 HIT 204 — Basic Pathophysiology .....3  
 CIM 125 — Cancer Disease Management.....4  
 CIM 201 — Abstracting Principles and Practice I.....3  
 CIM 150 — Oncology Coding and Staging Systems.....4  
 CIM 202 — Abstracting Principles and Practice II.....3  
 CIM 225 — Cancer Registry Management-up .....2  
 CIM 250 — Cancer Statistics and Epidemiology.....3  
 HIT 240 — Health Care Quality Mgmt Assessment .....3  
 MGMT 101 — Introduction to Management .....3  
 CIM 275\* — CIM Practicum .....3

*Note: Each required course must be completed with a minimum grade of "C". It is recommended that all CIM classes be completed before CIM 275 is begun. A background check may be required by the host facility.*

**Certificate Requirements:**

**Medical Coding Specialist Certificate**

**Department Requirements (36 units prior to ICD-10 Implementation OR 38 units as of ICD-10 implementation; see ^ note)**

*Recommended sequence of courses.*

COMP 101 — Introduction to Computer Applications .....4  
 HIT 135\* — Basic Medical Terminology .....3  
 BMS 146\* — Human Form and Function .....3  
 HIT 101\* — Intro. to Health Information Management .....3  
 HIT 102 — Legal Aspects of Health Care.....3  
 HIT 204 — Basic Pathophysiology .....3  
 HIT 201 — Pharmacology for Allied Health .....2  
 HIT 202^ — ICD, Diagnostic Coding .....2  
 HIT 203^ — ICD, Procedural Coding.....3  
 HIT 210 — CPT Procedural Coding .....3  
 HIT 255+ — Medical Insurance and Reimbursement .....4  
 HIT 205 — Advanced Coding Applications.....4  
 HIT 280# — Medical Coding Practicum .....1

*+HIT 150 plus HIT 250 will also satisfy this requirement. # It is recommended at all other classes be completed before HIT 280 is begun. A background check and drug screen may be required by the host facility at the student's expense.*

*Note: Each required course must be completed with a minimum grade of "C".*

**Planning a Program of Study**

Continually updated program information is available at [www.sbccc.edu/HIT/website](http://www.sbccc.edu/HIT/website).

**Program Cost and Outcome**

For planning purposes, the following webpages provide information on the cost of attendance, program length (assuming a student attends full-time), financing options and historical student completion rates:

*Cancer Information Management*  
[www.sbccc.edu/financialaid/gainfulemployment/Cancer%20Information%20Management.htm](http://www.sbccc.edu/financialaid/gainfulemployment/Cancer%20Information%20Management.htm)

*Medical Coding Specialist*  
[www.sbccc.edu/financialaid/gainfulemployment/Medical%20Coding%20Specialist.htm](http://www.sbccc.edu/financialaid/gainfulemployment/Medical%20Coding%20Specialist.htm)

## Health Information Technology Courses

### **HIT 101 — Intro. to Health Information Management (3) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 54 lecture*

Introduction to the fundamental theories/practices of HIT, including health services organization and delivery; health data/record structure, content/standards; HIT functions/responsibilities; information systems, technologies/requirements; health information privacy/security.

### **HIT 102 — Legal Aspects of Health Care (3) — CSU**

*Corequisites: Prior or concurrent enrollment in HIT 101*  
*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 54 lecture*

Introduction to legal issues pertaining to healthcare, health information and the health record as a legal document. Patient privacy and confidentiality, patient rights, release of information, informed consents, advance directives, compliance, fraud and abuse, HIPAA and E-Health.

### **HIT 135 — Basic Medical Terminology (3) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 54 lecture*

Introduction to medical terminology for body structure, body systems and diagnostic work. Prefixes, suffixes, word roots and combined word forms. Includes instruction in spelling, definition and pronunciation.

### **HIT 200 — ICD-9-CM Coding (3) — CSU**

*Prerequisites: HIT 101, 135, 202, BMS 146*  
*Corequisites: Prior or concurrent enrollment in HIT 204*  
*Skills Advisories: ENG 110 or 110H*  
*Hours: 54 lecture*

Beginning overview of nomenclature/classification systems, focusing on coding inpatient clinical information. Introduction to ICD-9-CM. Instruction in coding diagnoses and procedures using ICD-9-CM coding, sequencing and coding conventions. Review of complications/co-morbidities. Coding software applications introduced.

### **HIT 201 — Pharmacology for Allied Health (2) — CSU**

*Prerequisites: BMS 146*  
*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Course Advisories: HIT 135*  
*Hours: 36 lecture*

Introduction to pharmacology, basic pharmacological terminology and concepts, drug categories and their uses, mechanisms of drug action, dosage forms, routes of administration, and common generic and trade name medications.

### **HIT 202 — International Classification of Diseases, Diagnostic Coding (2) — CSU**

*Prerequisites: HIT 101, 135 and BMS 146*  
*Corequisite: HIT 204 (prior or concurrently)*  
*Course Advisories: HIT 201*  
*Hours: 36 lecture*

Beginning overview of nomenclature and classification systems, with focus on coding inpatient clinical information from medical records. Instruction in coding diagnoses, using International Classification of Diseases, sequencing and coding conventions. Coding software applications introduced.

### **HIT 203 — International Classification of Diseases, Procedural Coding (3) — CSU**

*Prerequisites: HIT 101, 204, 135 and BMS 146*  
*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 54 lecture*

Overview, structure and organization of International Classification of Diseases, Procedure Classification System (ICD-10-PCS). Instruction in coding procedures per national coding guidelines. Coding software applications (Encoder) are used. Coding instruction entails coding from cases and health records.

**HIT 204 — Basic Pathophysiology**

**(3) — CSU**

*Prerequisites:* BMS 146

*Skills Advisories:* Eligibility for ENG 110 or 110H

*Hours:* 54 lecture

Introduction to the fundamentals of pathophysiology, focusing on essential concepts of physiologic changes and altered functions in the human body resulting from disease processes. Principles from A&P and chemistry provide the foundation for the study of pathophysiology, body systems, etiology and pathogenesis. Diagnostic procedures, preventative measures and current therapeutic regimens are explored.

**HIT 205 — Advanced Coding Applications**

**(4) — CSU**

*Prerequisites:* HIT 202 and 203 and 210

*Course Advisories:* HIT 255

*Hours:* 72 lecture

Advanced medical coding for addressing more complex issues related to the -CM and HCPCS/CPT coding. Lectures and assignments focus on using case studies, mock records and applying learning at a higher coding skill level. Computerized encoders and groupers emphasized.

**HIT 210 — CPT Procedural Coding**

**(3) — CSU**

*Prerequisites:* HIT 101 and 135 and BMS 100

*Skills Advisories:* Eligibility for ENG 110 or 110H

*Hours:* 54 lecture

Beginning HCPCS/CPT coding class for ambulatory services coding related to facility and professional services, with overview of coding conventions, principles, regulatory guidance and coding software.

**HIT 220 — Health Information Management Statistics**

**(2) — CSU**

*Prerequisites:* COMP 101

*Corequisites:* Prior or concurrent enrollment in HIT 101

*Skills Advisories:* MATH 4 and Eligibility for ENG 110 or 110H

*Hours:* 36 lecture

Introduction to healthcare statistics, including a review of mathematics, interpretation of healthcare statistical formulas, presentation of data, and application of medical research tools. Use of statistics in relation to long-range healthcare planning and development, application of automated systems, integration of reports and registration of vital statistics.

**HIT 230 — Alternative Delivery Systems**

**(2) — CSU**

*Prerequisites:* HIT 101

*Course Advisories:* COMP 101 and HIT 240

*Hours:* 36 lecture

Introduction to Health Information Management practice in alternative healthcare delivery systems, including ambulatory, long-term and managed care, mental health, rehabilitation medicine, and hospice and home health. Focuses on regulatory and accreditation requirements, funding and reimbursement, transition to the EHR, and health data privacy and security.

**HIT 240 — Health Care Quality Management**

**(3) — CSU**

*Prerequisites:* COMP 101 and HIT 101

*Skills Advisories:* Eligibility for ENG 110 or 110H

*Course Advisories:* HIT 255

*Hours:* 54 lecture

Applies continuous healthcare quality management and performance improvement principles to the hospital setting, focusing on historical, theoretical, and practical applications and methodologies. Includes data collection and analysis; regulatory, accreditation and patient safety compliance; credentialing and utilization; case and risk management.

**HIT 255 — Medical Insurance and Reimbursement**

**(4) — CSU**

*Corequisites:* HIT 102 and 202 and 203

*Skills Advisories:* Eligibility for ENG 110 or 110H

*Course Advisories:* HIT 210

*Hours:* 72 lecture

Introduction to the basics of medical insurance billing. Current payment methodologies in the inpatient, hospital outpatient, and physician office settings. Focus on compliance with regulatory requirements and common billing practices.

**HIT 265 — HIM Computer Applications**

**(2) — CSU**

*Prerequisites:* COMP 101 and HIT 101 with a minimum grade of "C"

*Skills Advisories:* Eligibility for ENG 110 or 110H

*Hours:* 36 lecture

Intermediate-level systems class focusing on computer applications in healthcare and health information management. Includes application of basic computer and communication concepts and technologies, systems development and analysis, workflow mapping,



queries and reports for information retrieval, and migration to the electronic health record.

### **HIT 275 — HIT Practicum**

**(3) — CSU**

*Prerequisites:* HIT 200, 202, 203, 220, 240, 255 and 265

*Corequisites:* HIT 230

*Limitation on Enrollment:* Health and safety regulations

*Skills Advisories:* Eligibility for ENG 110 or 110H

*Hours:* 162 lab

Supervised onsite experience performing CAHIM-required HIT competencies for an affiliated healthcare organization. Clinical practice is conducted as a non-paid, laboratory experience. Clinical practice may include a partial virtual practicum.

### **HIT 280 — Medical Coding Practicum**

**(1) — CSU**

*Prerequisites:* HIT 200, 210 and 255

*Corequisites:* Concurrent enrollment in HIT 205

*Limitation on Enrollment:* Health and safety regulations

*Skills Advisories:* Eligibility for ENG 100

*Hours:* 54 lab

Practicum in application of clinical classification systems, coding, case mix analysis and use of coded and abstracted data. Discussion focuses on directed practice activities. Supervised clinical experience focuses on coding patient care records. Students in supervised clinical practice have the status of learners. Clinical practice is conducted as a non-paid, laboratory experience.

### **HIT 284 — Certified Coding Associate**

#### **Exam Preparation**

**(3)**

*Hours:* 54 lecture

Review of principles of HIM documentation, coding reimbursement methodologies, compliance, and data quality to prepare medical coding certificate and medical coders for national coding certification examinations. Focus is on reviewing materials covered in the MCS Program, and on test-taking and studying techniques/strategies using mock test questions, discussion boards and other resources.

### **HIT 285 — Registered Health Information Technician Exam Preparation**

**(3)**

*Hours:* 54 lecture

In-depth review of HIM principles and applications to prepare HIT program graduates for the AHIMA national

RHIT examination. Focus is on reviewing materials covered in the HIT Program, as well as test-taking and studying techniques. Students use links to mock test questions, discussion boards and other resources to prepare them for the national exam.

## **Cancer Information Management Courses**

### **CIM 100 — Cancer Registry Management I**

**(3) — CSU**

*Skills Advisories:* Eligibility for ENG 110 or 110H

*Hours:* 54 lecture

Introduction to hospital-based and central cancer registries; legal issues; confidentiality; standard-setting organizations; types of cancer registries and other disease registries; data users, computer applications; quality control; and registry operations, including case ascertainment and registry files.

### **CIM 125 — Cancer Disease Management**

**(4) — CSU**

*Prerequisites:* BMS 146 and HIT 135

*Corequisites:* CIM 100

*Skills Advisories:* Eligibility for ENG 110 or 110H

*Hours:* 72 lecture

Overview of the oncology disease process, using principles from anatomy, physiology and chemistry; diagnostic and staging procedures (laboratory, pathology, imaging and surgery); Treatments (surgery, radiation, chemotherapy, immunotherapy, etc.); emphasis on the major sites of cancer; overview of clinical trials/research protocols.

### **CIM 150 — Oncology Coding and Staging Systems**

**(4) — CSU**

*Prerequisites:* CIM 125

*Skills Advisories:* Eligibility for ENG 110 or 110H

*Hours:* 72 lecture

Overview of oncology coding and staging systems (ICD-O-3, SSS2K, AJCC, CSv2, the MP/H rules and the Hematopoietic DB/Manual). Focus on coding clinical information from medical records; staging and extent of disease concepts used by physicians and cancer surveillance organizations; the rules used to determine the number of primaries; and CSv2 for coding extent of disease.

**CIM 201 — Abstracting Principles and Practice I  
(3) — CSU**

*Prerequisites:* HIT 135

*Corequisites:* Prior or concurrent enrollment in CIM 125

*Skills Advisories:* Eligibility for ENG 110 or 110H

*Hours:* 54 lecture

Identification/selection of appropriate clinical information from medical records for capture on the abstract, in a manner consistent with cancer registry regulatory core data requirements.

**CIM 202 — Abstracting Principles and Practice II  
(3) — CSU**

*Prerequisites:* CIM 201

*Corequisites:* Prior or concurrent enrollment in CIM 150

*Skills Advisories:* Eligibility for ENG 110 or 110H

*Hours:* 54 lecture

Application of the principles of cancer registry abstracting. Identification, selection and recording of appropriate cancer-related information consistent with regulatory requirements. Manual quality control edits of abstracted information to assure timeliness, completeness and accuracy of data.

**CIM 225 — Cancer Registry Management II  
(2) — CSU**

*Corequisites:* Prior or concurrent enrollment in CIM 100

*Skills Advisories:* Eligibility for ENG 110 or 110H

*Hours:* 36 lecture

Overview of management reports, cancer reporting to the central registry and the NCDB, survival analysis, clinical practice guidelines, uses of central cancer registry data, standard setters and professional organizations, central cancer registries, geographic information systems, federal and other types of registries, clinical trials, and cancer registries in other countries.

**CIM 250 — Cancer Statistics and Epidemiology  
(3) — CSU**

*Prerequisites:* CIM 201

*Corequisites:* Prior or concurrent enrollment in CIM 202

*Skills Advisories:* MATH 100 and Eligibility for ENG 110 or 110H

*Hours:* 54 lecture

Introduction to cancer statistics, descriptive and analytic epidemiology, cancer surveillance, annual report preparation, presentation of cancer data and special studies. Use of cancer statistical data for marketing and strategic planning.

**CIM 275 — CIM Practicum  
(3) — CSU**

*Prerequisites:* CIM 202 and 225 and 250

*Corequisites:* HIT 240 prior to or concurrent

*Skills Advisories:* Eligibility for ENG 110 or 110H

*Hours:* 162 lab

Supervised clinical experience in performing NCRA-required CIM competencies in a cancer registry setting. Students are assigned to affiliated hospital or central cancer registry for supervised professional practice. Students have the status of learner and shall not be considered agency employees, nor do they replace employed staff. Clinical practice is conducted as a non-paid, laboratory experience.