



Establishing a Student Pipeline to Undergraduate Health Informatics

Academic Forum
March 14, 2022



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College of Health Professions



Agenda

Challenges

- New circumstances

Perspective

- Background
- Trajectory

Approach

- Community Colleges
- High Schools
- Informatics Programs

Progress

- So far



Texas State University
Round Rock Campus
College of Health Professions
Department of Health Information Management

- Nursing
- Physical Therapy
- Respiratory Care
- Radiation Therapy
- Clinical Lab Science
- Communication Disorders
- Healthcare Administration
- Health Information Management

New Campus, New Challenges

Department moved in Summer 2021
Joined other units in the **College of Health Professions**
Office suite, faculty offices, campus labs/classrooms



Round Rock Campus
College of Health Professions
Junior/Senior/Graduate courses ONLY
Professional Programs

50 miles of I-35 *through Austin*
or a toll-road *around Austin*
1hr to 1.5hr drive

San Marcos Campus
All university services
All levels of courses
New BS Health Sciences

Austin wins worst traffic for cities of similar size in 2020, despite pandemic
– KXAN.com



<https://www.kxan.com/news/local/austin-wins-worst-traffic-for-cities-of-similar-size-in-2020-despite-pandemic/>

HOSA-Future Health Professionals

is a global student-led organization providing unique classroom experiences and opportunities in the health professions with enhanced leadership development and recognition opportunities for career-minded students in middle school, high school, postsecondary and collegiate institutions.

HOSA-Future Health Professionals is a member of the National Coordinating Council for Career and Technical Student Organizations.



HOSA Core Values

Learn · Lead · Serve · Innovate

HOSA Mission

Empower HOSA-Future Health Professionals to become leaders in the global health community through education, collaboration, and experience.

HOSA-Future Health Professionals

Vital Statistics

54 States, Territories, and Country Associations

HOSA Chapters 5,200

450 Attending Washington Leadership Academy & SAM

HOSA Members 260,000

12,000 International Leadership Conference Attendance (June)

National Affiliation Fee \$10

VARIES State Affiliation Fee (contact your local or state advisor)

HOSA Alumni Affiliation Fee **FREE!**

Conference Opportunities

- International Leadership Conference
- Fall Leadership Conferences
- Spring Leadership Conferences
- Washington Leadership Academy
- Regional Leadership Conferences
- State Leadership Conferences

Member Leadership Opportunities

- HOSA University (ILC)
- Committee Chair
- Chapter Officer
- Association Officer
- Executive Council Officer
- HOSA, Inc. Board of Directors



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HOSA.org

HOSA is for Future Health Professionals



hosa
future health professionals

Visit HOSA.org to learn more about preparing for a career in the health professions.

We Are Future Health Professionals



Health and Bio-medical Science Education Is Strengthened by Leadership Development and Teaming Skills

The HOSA-100 National Advisory Council emphasizes the importance of providing future health professionals with a strong foundation of technical content and soft skills. HOSA members are provided with leadership development opportunities as a member of a HOSA chapter and an active member of one or more HOSA committees and eventually chairing a committee or task force. Members have special opportunities to participate in local, state and national leadership development training and are encouraged to practice and refine their leadership skills as a chapter or association officer as needed. The HOSA chapter advisor will provide special experiences for members who wish to enhance their technical, leadership and teaming skills.



Competitive Events Provide Recognition Opportunities and Prepare Students for College and Beyond

The health industry approved curriculum and sponsored Competitive Events Program provides HOSA members with the best of both worlds – the best classroom education and the best student-led organizational opportunities – in becoming college and career ready. There are 82 health industry approved Competitive Events a HOSA member can explore for local competition in hopes of advancing to regional, state and international competition. The HOSA advisor uses the Competitive Events Program as one more tool to motivate and energize members to be the best they can while seeking recognition from HOSA and the health industry sponsor. Being an Event Champion is a resume attention getter!



HOSA Provides the Health Industry With A Pipeline of Future Health Professionals.

Employment in the health industry is projected to grow 18% by 2026, much faster than the average growth for all professions, adding about 2.4 million new jobs.

Physical therapists, physician assistants, registered nurses, home health aides, pharmacists, dietitians, and nutritionists are among the professions highest in demand.

HOSA-Future Health Professionals provides opportunities for students to develop, practice, and refine their technical, leadership, and team skills to achieve a seamless transition from education to a health profession.



Health Informatics

2020 - 2021

Health Informatics is a new test event in the Health Science Category.
Competitor orientation deleted from ILC.

Event Summary

Health Informatics provides members with the opportunity to gain knowledge and skills regarding the management of health information and the assimilation of technology in health care. This competitive event consists of a written test and aims to inspire members to learn about concepts related to the study of informatics.

Dress Code Competitors must be in official HOSA uniform or in proper business attire. Bonus points will be awarded for [proper dress](#).

- General Rules**
1. Competitors in this event must be active members of HOSA-Future Health Professionals and in good standing.
 2. Secondary and Postsecondary/Collegiate divisions are eligible to compete in this event.
 3. Competitors must be familiar with and adhere to the "[General Rules and Regulations of the HOSA Competitive Events Program \(GRR\)](#)."
 4. All competitors shall report to the site of the event at the time designated for each round of competition. At ILC, competitor's [photo ID](#) must be presented prior to ALL competition rounds.

Official References

- [Hoyt, Robert E. and William R Hersh, Health Informatics Practical Guide, Informatics Education, Latest Edition.](#)
- [Nelson, Ramona and Nancy Staggers, Health Informatics An Interprofessional Approach, Elsevier, Latest Edition.](#)

Written Test

5. [Test Instructions](#): The written test will consist of 75 multiple choice items in a maximum of 90 minutes.
6. **Time Remaining Announcements**: There will be a verbal announcement when there are 30 minutes, 15 minutes, 5 minutes, and 1 minute remaining to complete the test.
7. A written tiebreaker will be administered with the original test. In case of a tie, this written response will be judged and used to break the tie.
8. The test plan and resources for Health Informatic Test are:
Test Plan:

History, Careers and Roles.....	5%
Healthcare Data and Analytics.....	10%
Electronic Health Records, Information Exchange & Retrieval.....	12%
Health Information Privacy & Security.....	5%

Health Information Ethics & Governance.....	5%
Patient Safety & Consumer Health Information.....	11%
Information Systems In Healthcare Delivery.....	10%
Evidence Based Clinical Practice.....	12%
Application: EBM Case Studies & Clinical Trials; EHR Data Entry, Retrieval & Analysis.....	30%

9. Case studies, clinical trials, and EHRs will be a part of the test and will assess knowledge and skills related to the analysis of background data and information; data entry and retrieval; and risk measures and calculations. A series of multiple choice questions related to the data will be included.
10. At the International Leadership Conference, HOSA will provide basic handheld calculators (no graphing calculators) for addition, subtraction, division, multiplication and square root. Check with State Advisor to determine if a calculator will be used at the State level.
11. All competitors will receive two (2) 8.5x11" sheets of blank paper for use during the test.

12. Sample Test Questions

1. Which discipline is defined as the management of healthcare data and information through the application of computers and other information technologies?
 - A. Bioinformatics
 - B. Public Health Informatics
 - C. Health Informatics**
 - D. Clinical Informatics

Hoyt/Hersh pp 2
2. In what year was the world's first computer-aided medical information system installed to aid in actual patient care?
 - A. 1958
 - B. 1962
 - C. 1971**
 - D. 1983

Nelson/Staggers pp 597
3. What is the term for online groups in which patients interact, sharing health-related data and learning from each other's experiences while being unbound by geographic limitations, social stigma, or other limiting characteristics?
 - A. eHealth precision medicine
 - B. ePatient exchange
 - C. Patient-focused virtual communities**
 - D. ePatient platform

Nelson/Staggers pp 213

Final Scoring

13. Final rank is determined by the test score. In case of a tie, the essay question will be used to determine the rank.

Competitors Must Provide:

- Two #2 pencils with erasers
- [Photo ID](#)



Texas HOSA

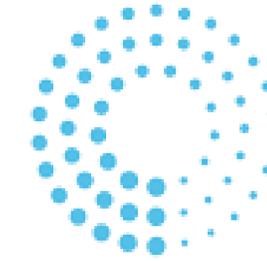
Fall Leadership Conference

Round Rock High School

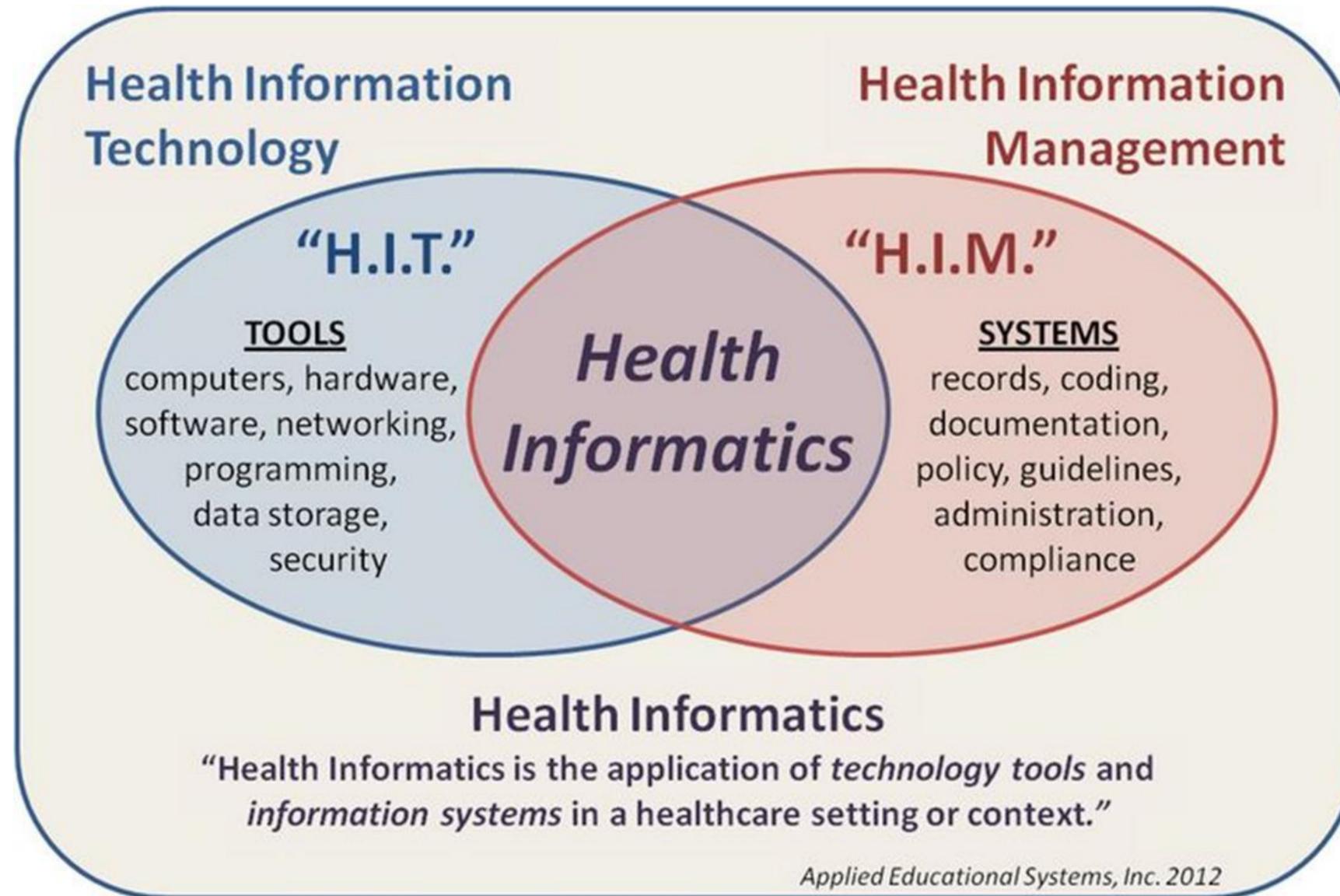
October 30, 2021

- 700 high school students
- Five 1-hour sessions
- Table near the registration desk
- Only other table was the HIT program at Austin Community College

Overlapping Fields



HIMSS[™]



Data Quality

Informatics

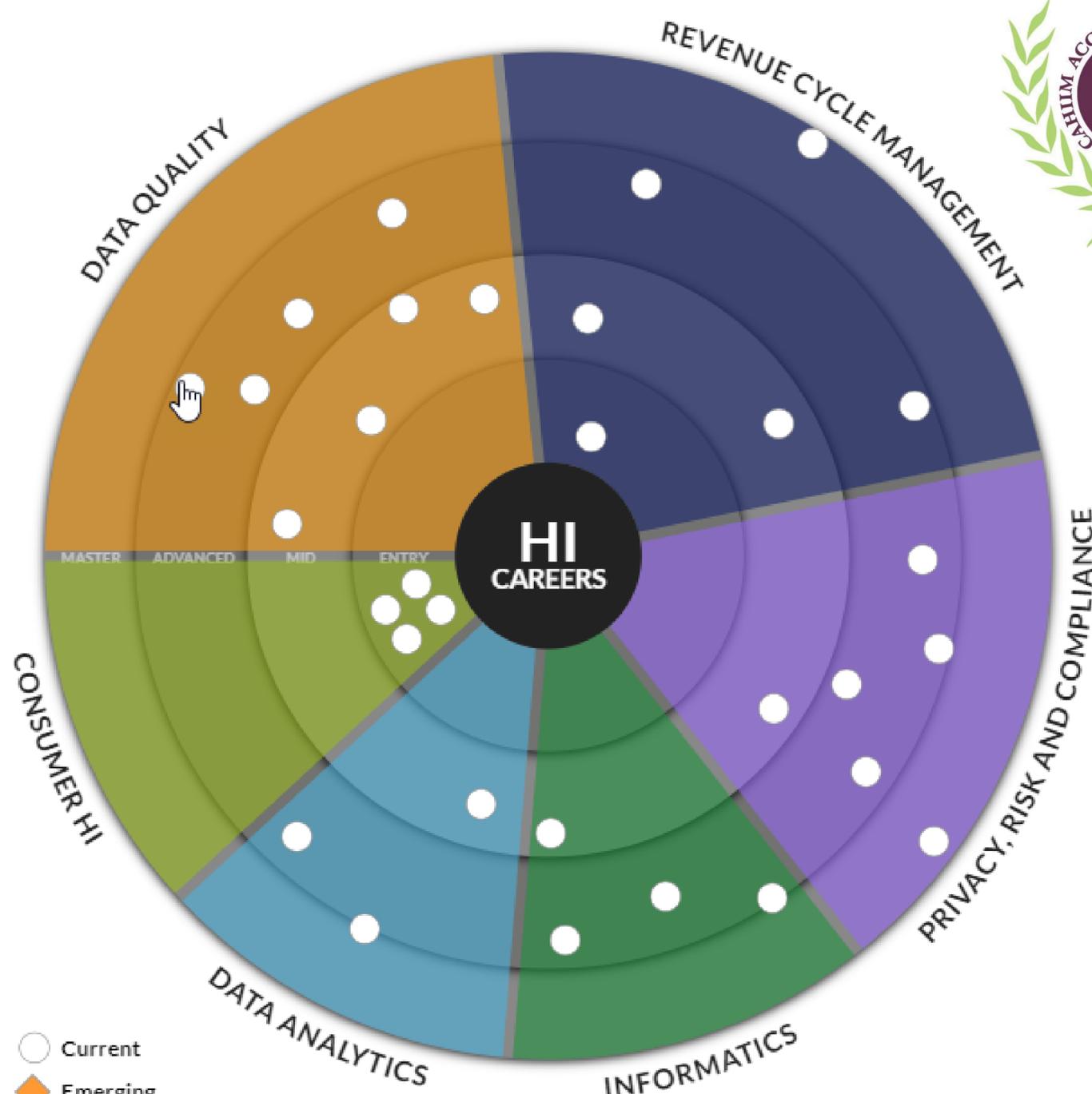
Data Analytics

Privacy, Risk & Compliance

Revenue Cycle Management

Consumer HI

Hover or click on the circles to learn more about your career path



AHIMA Council for Excellence in Education™ 2018 Health Information Management Baccalaureate Degree Curriculum Competencies

Domain III. Informatics, Analytics, and Data Use	
Competency	Bloom's Level
III.1 Examine health informatics concepts for the management of health information.	4
III.2. Analyze technologies for health information management.	4
III.3. Interpret statistics for health services.	5
III.4 Examine health care findings with data visualizations.	4
III.5. Compare research methodologies pertaining to health care.	5
III.6. Manage data within a database management system.	5
III.7 Identify standards for exchange of health information.	3

2021 Registered Health Information Administrator (RHIA) Exam Content Outline (Effective 3/1/21)

See below for 2021 Exam Content Outline.

[Download 2021 Exam Content Outline](#)

- Domain 1: Information Governance (19%)
- Domain 2: Compliance with Uses and Disclosures of PHI (26%)
- Domain 3: Data Analytics and Informatics (24%)
- Domain 4: Revenue Management (16%)
- Domain 5: Management and Leadership (15%)

○ Current
◆ Emerging



Health Information Management

Health Information Management

- » Requirements
- » Courses
- » Degree Plan
- » Career Opportunities
- » Simulation & Learning Labs
- » Scholarships in HIM

Health Services Administration (Online)

Pre-Dental Hygiene

Health Informatics Minor

Home » Academic Programs

Health Information Management

If you are interested in a career in healthcare, but not necessarily hands-on patient care, health information management may be right for you.

The four-year Bachelor of Science in Health Information Management combines course work with professional practice experience in a variety of healthcare settings. **Health Information Management students also earn a minor in Health Informatics as part of the program.**

A career in health information management combines healthcare with the business, management, and technology functions that are vital not only to the delivery of patient care, but to the overall operations of healthcare providers. Health information management professionals work in a variety of settings such as:

- hospitals
- physician offices



Hear from HIM students just like you!

VIEW VIDEO

Student Fast Facts

CURRICULUM

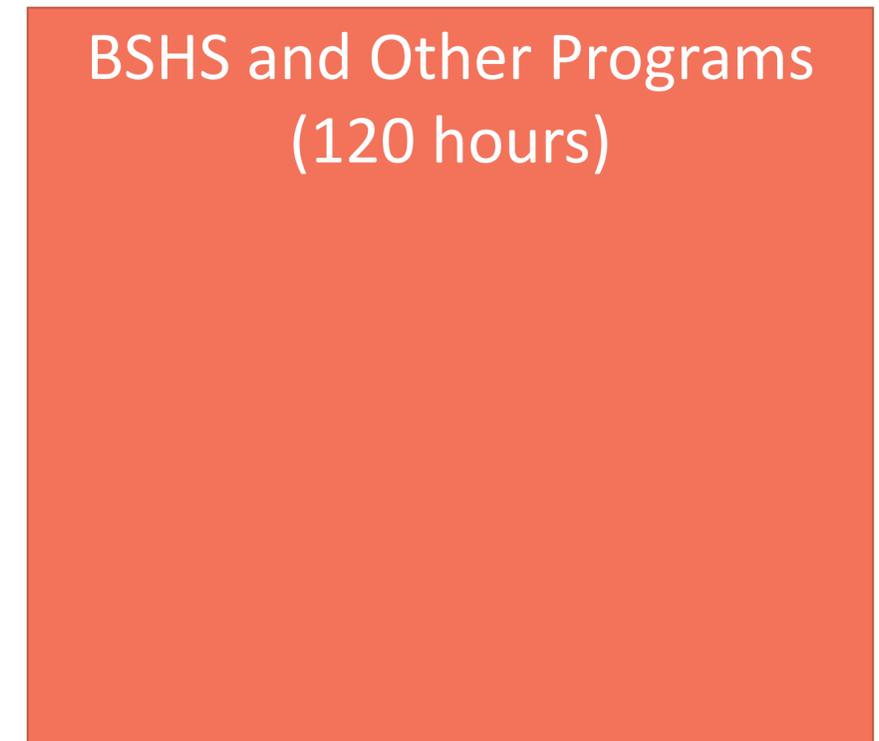
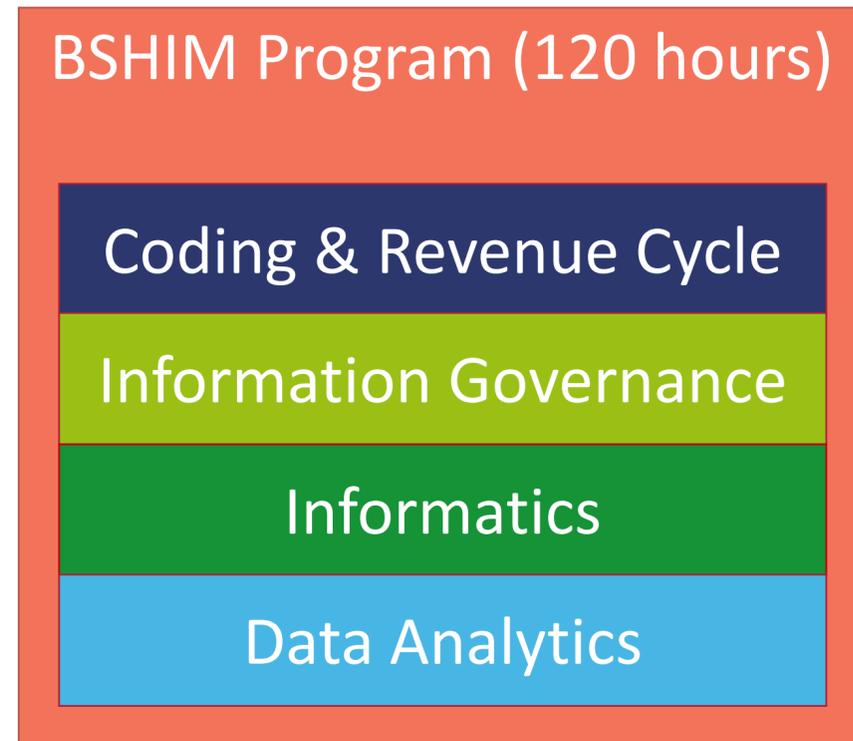


“Built-in” Minor in Health Informatics

- New BS Health Sciences attracting many students (2,000)
 - Requires a Built-in Minor, any minor at the university
 - Included in the required 120 hours
- Requested curriculum changes
 - New Minor in Health Informatics from existing courses
 - Minor available to any students, including the BSHS
 - HOSA HI test, HI grants, and other justifications
 - Updated existing BSHIM program to require the Minor in HI
 - Same courses, content, instructors as before
- Proposing a BS in Health Informatics



Existing courses “repackaged” to create a
Minor in Health Informatics
“built-into” the Major in Health Information Management



Progress

- College approval of curriculum changes approved
- University approval of curriculum changes expected March 11, 2022
 - Will report
- Strategic planning beginning for 2023-2029
 - Expect to propose additional programs
- Applications and interest expressed for programs in
 - Health Informatics
 - Data Analytics
 - Healthcare Security

Closing

- Perspective: New chair
- Challenges: New community, new competition, new pipeline
- Approach: New packaging, new programs
- Progress:
 - HOSA involvement showing promise
 - Curriculum change approval expected
- Questions and Discussion
- Contact
 - dgibbs@txstate.edu

