

Health Informatics and Analytics (HIAN) Student Handbook

Master of Science (PSM) Graduate Certificate



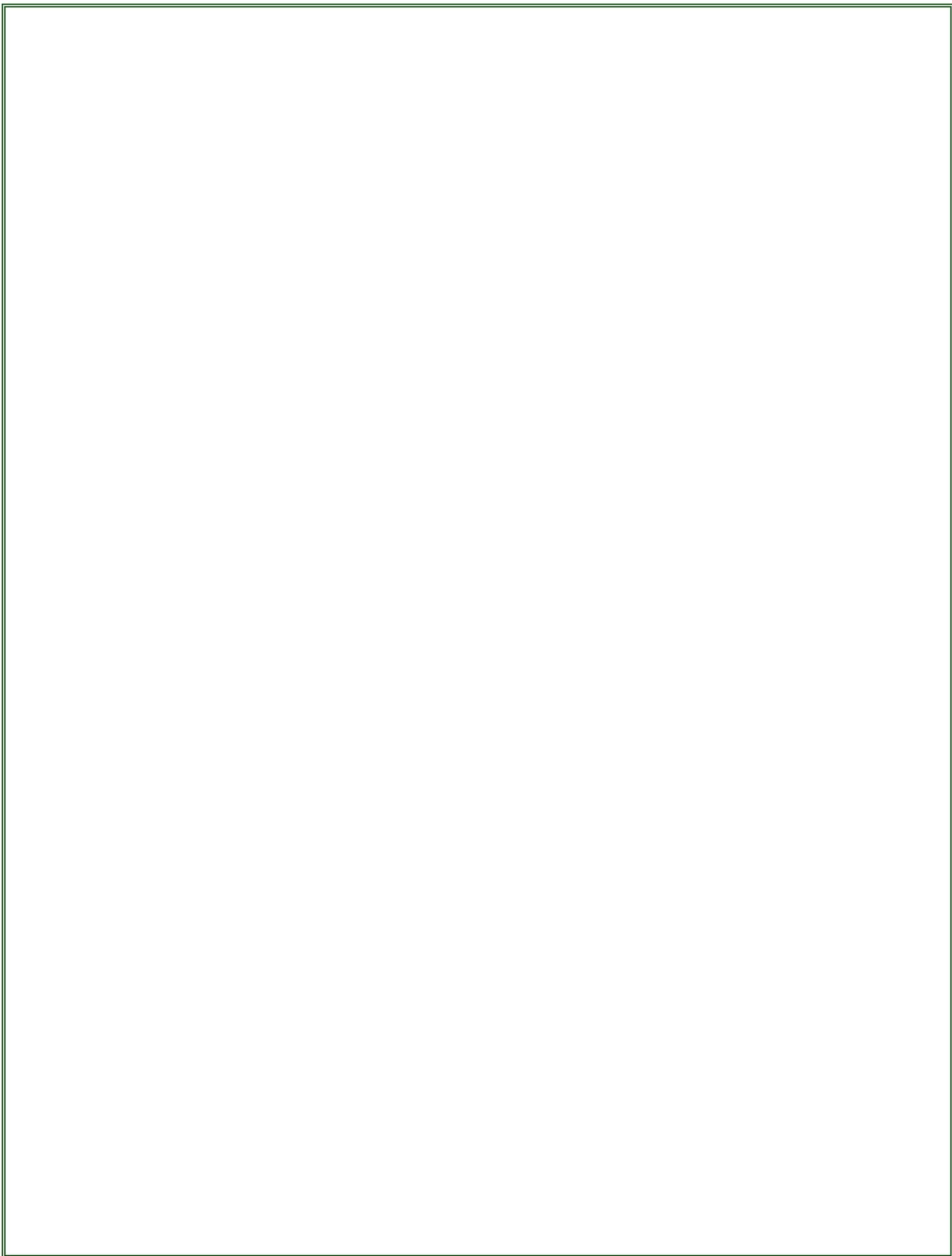
2019-2020

Effective 19 August 2019

Email inquiries: healthinformatics@uncc.edu

Program website: hi.uncc.edu

This Handbook describes the program, policies, and practices of the HIAN Program. In the event of a conflict between this document and University documents on any issue, University documents shall have precedence.



Congratulations and Welcome!

Congratulations! on your admission into our Health Informatics and Analytics (HIAN) Program, both graduate certificate and masters.

The Health Informatics and Analytics Program is a joint venture of the College of Health and Human Services and the College of Computing and Informatics within the framework of the university's Data Science Initiative (DSI) – soon to be School for Data Science (SDS).

This manual, which is provided to students upon request and is available on the program website (hi.uncc.edu), is intended as a resource for HIAN students, addressing program specific information such as expectations, policies, and requirements and summarizing and/or directing students to key Graduate School and University resources and policies. The summaries of higher unit policies and procedures included in this manual are intended to provide context and coordination of ideas with program policies. Should a conflict exist between a program policy and that of a higher unit, the higher unit policy will prevail.

Our DSI Student Services Director, Carly Mahedy (cfletcher@uncc.edu, healthinformatics@uncc.edu), can address most of your curricular and program operational questions. Ms. Mahedy is available to meet with students upon request, please email her to schedule an appointment. I post our open office hours for each semester outside my office doors. Please try to observe these hours. For current degree students, I also have an open door policy at other times, utilizing these courtesies: If my office door is fully open, feel free to knock and interrupt me. If my door is mostly closed, you may interrupt me briefly for urgent matters. If my door is closed, please do not disturb me except in an emergency. If I am unavailable, schedule an appointment with me via email or through our support staff.

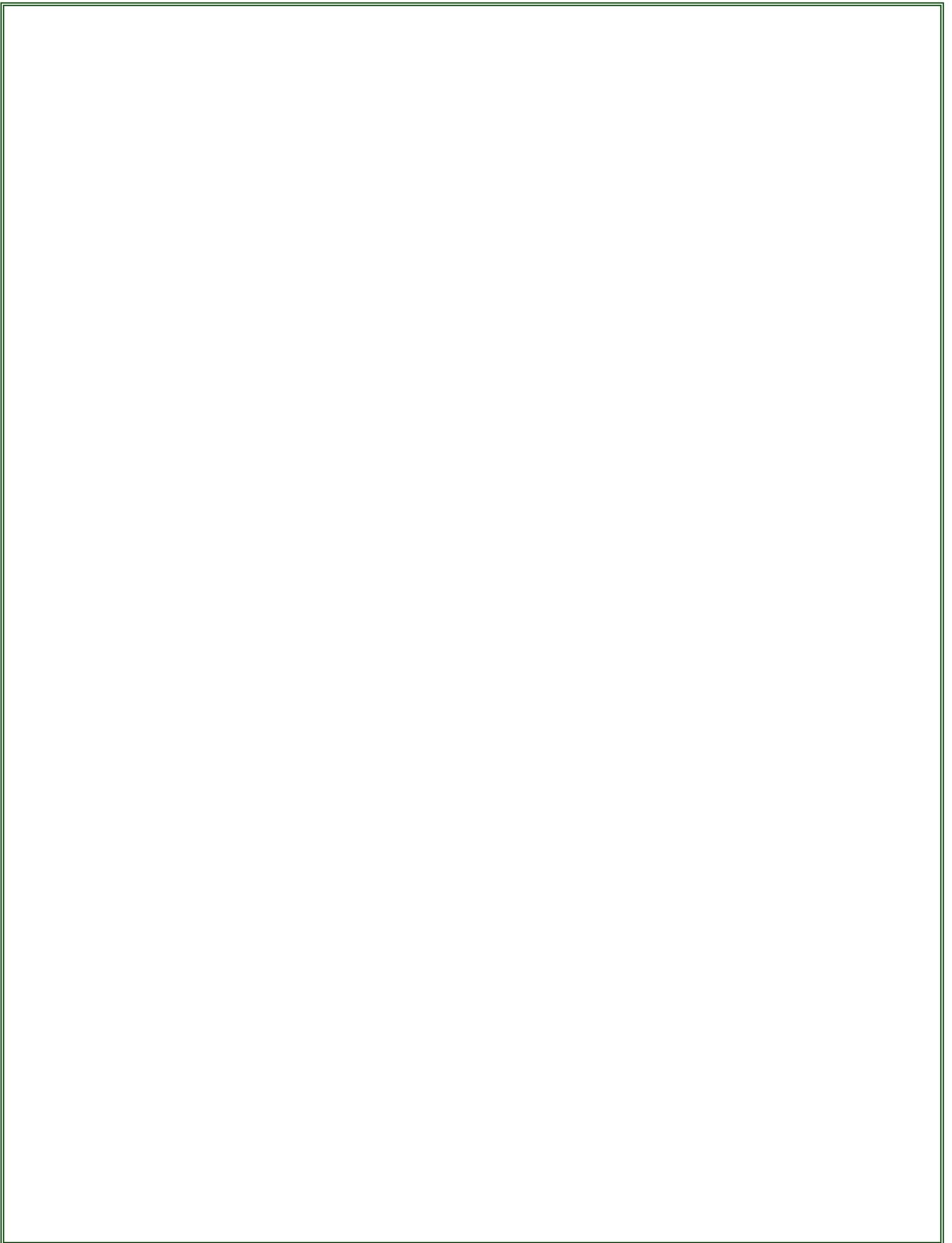
Note: Students are expected to check their @UNCC.edu email accounts at least once per day. If you do not regularly use that account, establish an auto-forward rule so that you do not miss time sensitive announcements.

We look forward to your success in our program and in your future careers.

Cheers,



Michael E. Thompson, MS, DrPH
Associate Professor; Associate Chair, Public Health Sciences
Director, Health Informatics and Analytics Program
Director, Master of Health Administration Program
healthinformatics@uncc.edu
704.687.8980



The Field of Health Informatics and Analytics.....	1
What is Health Informatics and Analytics?	1
Career Areas in Health Informatics (Health Data Science)	1
Resources for Information about Health Informatics and Analytics	2
The Data Science Initiative.....	2
The Health Informatics and Analytics Program	3
Program Contact Information	4
Master’s and Graduate Certificate Programs	5
Program Overview	5
HIAN PSM Student Learning Outcomes.....	5
HIAN CERT Student Learning Outcomes	6
HIAN PSM Program Course of Study.....	6
Internship	7
Advising.....	8
Graduation.....	8
Choosing a Plan of Study.....	8
Plans of Study – Master’s Program	10
MS-HIAN Fall Entry, 4 Semesters + Summer Completion Option	10
MS-HIAN Fall Entry, 3 Semesters + Summer Completion Option	11
MS-HIAN Spring Entry, 4 Semesters + Summer Completion Option.....	12
Plans of Study – Graduate Certificate.....	14
Dual Degree Options.....	15
HIAN PSM/MHA	16
HIAN PSM/MPH.....	16
HIAN PSM/MHA Dual Degree Articulated Curriculum	16
HIAN PSM/MPH Dual Degree Articulated Curriculum	17
Student Responsibilities, Policies and Procedures.....	19
Code of Student Academic Integrity.....	19
Good Scholar Tutorial.....	20
Preparatory Knowledge and Skills.....	20
Health and Informatics Vocabulary	20
Microsoft office	21
Writing for Public Health Professionals	21
Professional Conduct	21
Professional Responsibility.....	22
Evaluation Standards	22
Program Dismissal Policy.....	23
Grades of Incomplete/In Progress.....	24
Transfer Credit [Waivers, Transfers & Other Exceptions].....	25
Residency Requirement	27
HIAN Program Completion Time	27
Graduation Requirements	28
Deadlines.....	28
Policy Appeals	28
Final Grade Appeals	28
Non-discrimination Policy	29

Student Travel.....	29
Letters of Recommendation.....	29
Check E-mail Daily.....	30
Cancellations and Severe Weather Policy	30
Other Student Services.....	31
Data Science Initiative Student Organization (DSI SO).....	31
Career Services	31
Center for Graduate Life.....	31

The Field of Health Informatics and Analytics

What is Health Informatics and Analytics?

Health Informatics and Analytics is the interdisciplinary study of the design, development, adoption, and application of IT-based innovations in healthcare services delivery, management, and planning. It includes collecting, storing, analyzing, and presenting data in a digital format and harnessing the big data revolution to create secure, efficient systems that transmit and retain medical information.

Career Areas in Health Informatics (Health Data Science)

Increasingly, the terms Health Data Scientist or Health Data Analyst are also used to describe the field. Data scientists are the experts who compile, link, and analyze these disparate data to provide the evidence and insight to inform clinical and system level decision-making.

The health care industry generates as much as 30% of the entire world's stored data. A single patient typically generates close to 80 megabytes each year in imaging and electronic medical record (EMR) data. This trove of data has obvious clinical, financial, and operational value for the health care industry. McKinsey estimates that the new value pathways that such data could enable are worth more than \$300 billion annually in reduced costs alone.

The health care sector is a large component of the US economy, accounting for around nearly 18% US Gross Domestic Product (GDP) in 2017. Currently 1 in 6 new jobs in the American economy is in the health care sector. The field of health informatics is expanding: careers in health informatics now represent the eighth largest share of health care job postings. While job postings for RNs (the largest occupation in healthcare) remained constant between 2007 and 2011, jobs in health informatics increased by 36%. This growth outpaces other careers in healthcare.

Job Settings

Entry-level HIAN graduates can expect to hold positions such as data scientist, IT support specialist, medical data analyst, or clinical information specialist. Examples of the settings where our HIAN graduates currently work are:

- Hospitals and hospital systems
- Physician practices and clinics
- Long-term care facilities
- Home healthcare agencies
- Hospices
- Community health centers
- Managed care organizations
- Health Science centers
- Medical supply and equipment manufacturers
- Pharmaceutical firms
- Biotechnology companies
- Consulting firms
- Advocacy groups and associations
- Health insurance companies
- Local/State/Federal health agencies

Resources for Information about Health Informatics and Analytics

Below are listed several sources to further explore what health informatics and analytics is about and the type of career opportunities that are available.

AMIA – American Medical Informatics Association www.amia.org

AHIMA – American Health Information Management Association www.ahima.org

HIMSS – Healthcare Information and Management Systems Society
www.himss.org

IMIA – International Medical Informatics Association imia-medinfo.org/wp/

ANIA – American Nursing Informatics Association www.ania.org/

CAHIIM – Commission on Accreditation for Health Informatics and Information Management Education cahiim.org/

AMDIS – Association of Medical Directors of Information Systems amdis.org/

NAHDO – National Association of Health Data Organizations www.nahdo.org/

The Data Science Initiative

The Data Science Initiative (DSI) at UNC Charlotte is an industry-university-state partnership, led by the College of Computing and Informatics, the Belk College of Business, the College of Health and Human Services, and the College of Liberal Arts and Sciences.

The Data Science Initiative brings academia and industry together to turn data into knowledge, and knowledge into insight to see what's possible in the new digital age. The initiative holds the promise of creating drugs customized for individual patients, developing models for "predictive policing", and leading remedies for longstanding city planning challenges. Think about the unlimited possibilities to drive organizational performance. Think about the infinite potential of the "smart city". Think DSI.

DSI provides an effective solution to the challenge of "Big Data" by creating education, training, and research programs in data science and analytics integrated with business and industry expertise.

See dsi.uncc.edu for further details.

The Health Informatics and Analytics Program

In 2009, the College of Health and Human Services and the College of Computing and Informatics collaborated to launch a Graduate Certificate in Health Informatics. This highly flexible nascent program largely drew upon existing courses. In 2012, the program expanded to include a Master of Science degree program built on the professional science master's paradigm as part of the university's Data Science Initiative. The master's program responded to the 4 HI-TECH domain areas. In 2014, the curriculum was streamlined into two foci, but remained largely unstructured. These changes largely reflected the national lack of consensus about health informatics needs and the rapidly evolving field.

Guided by input from our Health Informatics Advisory Board, the 2018 curriculum revision provides students a structured, thorough grounding in data science, system architecture, and health analytics. It facilitates a seamless transition from the graduate certificate into the master's program and enhances practical application opportunities by the addition of a capstone course to complement the internship.

HIAN students take coursework with students in public health and health administration and data science, among others, providing a stimulating, inter-professional education environment. In addition, the HIAN program is formally available in dual degree configurations with the Department of Public Health Science's CAHME-accredited MHA (Master of Health Administration) and CEPH-accredited MPH (Master of Public Health) Programs.

Mission

The UNC Charlotte Health Informatics and Analytics Program leverages its position within the university's Data Science Initiative and capitalizes on the strength of its parent colleges, Health & Human Services and Computing and Informatics, to prepare national and international students to advance the professional practice of health informatics through a thorough grounding in data science, system architecture, and health analytics

We pursue our mission through education, research, and service efforts that:

1. Provide qualified and motivated students from a variety of disciplines, levels of experience, and backgrounds – with a special emphasis on individuals and groups historically underrepresented in graduate education – the knowledge, skills, and abilities to become exemplary practitioners of and advocates for health informatics
2. Contribute to the body of knowledge related to the design, operation, and analysis of healthcare information systems
3. Apply our expertise to support health leaders and the communities they serve in advancing the public's health.

Vision

The UNC Charlotte Health Informatics and Analytics Program is the nation's premier program in developing practitioners who bridge data sciences and analytics in support of optimal population health.

Program Contact Information

Program Director: **Michael E. Thompson, MS, DrPH**

healthinformatics@uncc.edu

CHHS 423E

704-687-8980

Student Services (DSI):

Carly Mahedy

cletcher@uncc.edu

healthinformatics@uncc.edu

BINF 214

704-687-0068; 704-687-1668 fax

2019-2020 Faculty Governance, Health Informatics and Analytics Program

Michael E. Thompson, MS, DrPH

Associate Professor, Public Health Sciences

Program Director

Susan Lynch, PhD, RN, CNE

Clinical Assistant Professor, School of Nursing; Associate Director, Undergraduate Programs & SON Operations

J. Franck Diaz, PhD

Assistant Professor, Public Health Sciences

Nadia Najjar, PhD

Teaching Assistant Professor, Computer Science

Laura Gunn, PhD

Associate Professor, Public Health Sciences; Director, Health Informatics and Outcomes Research Academy

Albert Park, PhD

Assistant Professor, Computer Science

Daniel Janies, PhD

Carol Grotnes Belk Distinguished Professor, Bioinformatics and Genomics

George Shaw, PhD

Assistant Professor, Public Health Sciences

Please see our program website – hi.uncc.edu – for updated content and additional information, including our Advisory Board members.

Master's and Graduate Certificate Programs

Program Overview

The HIAN Program is recently updated to reflect best practices and state-of-the-art thinking in the profession.

The 36-credit program is designed to be completed in two academic years (plus intervening summer), but can be completed in 3 semesters (plus summer), or extended to up to 5 years for part-time students. We schedule most required classes during the early evening or weekend hours to accommodate working professionals.

The 15-credit Graduate Certificate program comprises the first 15 (foundational and core knowledge) of the master's curriculum and is now available (part-time) in a fully online format.

Starting with a pre-program, self-directed online training in basic concepts and vocabulary in health, medical nomenclature, and computer science terminology, the program begins by building foundational knowledge in the both computer and health systems sciences and then developing competence in core domains. This foundation comprises the graduate certificate curriculum.

Students then develop additional depth in either or both foundational pillars and select focused elective content consistent with the individualized career plans. Students integrate and apply their new found knowledge and skills within most classes, where problem sets and projects are a main assessment tool, as well as via a mid-program internship and a culminating capstone.

HIAN PSM Student Learning Outcomes

The UNC Charlotte Health Informatics and Analytics Program is committed to continuous improvement of student learning. Student Learning Outcomes (SLOs) allow the HIAN Program to describe, assess, and evaluate the degree to which students acquire specific knowledge, skills, and abilities related to Health Informatics and Analytics.

Upon successful completion of the UNC Charlotte HIAN PSM Program, students should expect the following outcomes:

Student Learning Outcome 1: Students will apply knowledge of healthcare analytics to demonstrate an understanding of its application in solving the problems of health care organizations.

Assessment of SLO 1 includes completion of an exam in Intro to Health Informatics (HCIP 6380) that will showcase their acquired knowledge and the application of such in a healthcare organization. The exam will establish students' baseline knowledge and equip them to be successful in future courses.

Student Learning Outcome 2: Students will apply health informatics knowledge and techniques to inform appropriate actions for business decision-making in a healthcare internship setting.

Assessment of SLO 2 includes the internship project (HCIP 6400), which requires students to apply knowledge from HCIP 6380 in an internship setting.

Student Learning Outcome 3: Students will demonstrate team-work skills through the completion of a team consulting project that addresses an organization's need in health informatics and analytics.

Assessment of SLO 3 includes elements of a consulting project in their capstone course (HCIP 6250), where their performance in the areas of decision-making, social interaction, contributing, on-task behavior, and group structure and functioning will be assessed to show their mastery of teamwork skills.

HIAN CERT Student Learning Outcomes

Upon successful completion of the UNC Charlotte HIAN CERT Program, students should expect the following outcome:

Student Learning Outcome 1: Students will apply knowledge of healthcare analytics to demonstrate an understanding of its application in solving the problems of healthcare organizations.

Assessment of SLO 1 includes completion of an exam in Intro to Health Informatics (HCIP 6380) that will showcase students' acquired knowledge and the application of such in a healthcare organization. The exam will establish students' baseline knowledge and equip them to be successful in future courses.

HIAN PSM Program Course of Study

The Professional Science Master in Health Informatics and Analytics is a 36-hour degree program. Students complete 24 hours of core courses including a 3 credit hour internship and a 3 credit hour capstone course, and 12 hours of elective courses. Students **may not** substitute courses for any of the Core Requirement courses.

In addition, prior to arrival on campus (or early during the first semester of matriculation as specified by the program) students must complete an online asynchronous training module (via Canvas). The training in health systems, medical, and computer terminology earns no academic credit but its completion is tied to progression into the program.

Foundational Core HIAN Courses (6 hours)*

HADM 6100 - Introduction to the US Health Care System (3)

HCIP 5376 - Introduction to Programming for Health Informatics (3)

**The HIAN Program Director may approve substituting HCIP electives for either or both of these classes in cases where the student demonstrates having successfully completed comparable undergraduate and/or graduate work.*

Core Requirements (12 hours)

HCIP 6102 Health Care Data Analysis (3)

HCIP 6160 Big Data Design, Storage, and Provenance in Healthcare (3)

HCIP 6201 Health Information Privacy and Security: Law, Ethics, and Technology (3)

HCIP 6380 Introduction to Health Informatics (3)

Selectives (6 hours)

Take at least 2 of these 5 courses. Additional selections from these options are encouraged and will fulfill the restricted elective requirement described below.

HCIP 5122 Visual Analytics [prereq HCIP 6380] (3)

HCIP 6108 Intermediate Decision Analysis in Healthcare [prereq HCIP 5376] (3)

HCIP 6392 Enterprise Health Information Systems [prereq HCIP 6160] (3)

HCIP 6393 Health Data Integration [prereq HCIP 6160] (3)

HCIP 6396 Business Intelligence in Healthcare [prereq HCIP 5376] (3)

Restricted Elective(s) (6 hours)

Select from any HCIP offerings*

**The HIAN program director may approve substituting demonstrably relevant non HCIP electives for either or both of these classes.*

Health Informatics and Analytics Internship (3 hours)

HCIP6400 Health Informatics and Analytics Internship Project [prereq: at least 12 credits in the degree program, including HADM 6100 and HCIP 6380, and instructor permission]

Health Informatics and Analytics Capstone (3 hours)

HCIP 6250 – Problem Solving in Healthcare Analytics [prereq HCIP 6400 and instructor permission]

Internship

Each student in the program is required to demonstrate professional experience in the health care delivery system through an internship experience in a health care (broadly defined) setting. Students complete a minimum of 160 hours of practical, professional internship experience with the selected organization during the semester of enrollment in the HCIP 6400 Internship course.

Dual degree students typically complete an internship that is coordinated with the other program such that the experience counts towards both programs' requirements. Dual degree students should consult with both program directors when planning their internship.

Refer to the **HIAN Student Internship Manual** and Canvas Project site for complete instructions including writing objectives, and proper formatting of the final internship report.

Advising

While the program staff handles most administrative aspects related to advising and registration, we assign each student an academic advisor. This advisor works with the student throughout the program of study, mostly focusing on selective/elective course selection, internship venue selection, job search advice, and additional matters appropriate for preparing students to meet their career objectives.

Most HCIP coded courses are open to qualified students (e.g., those in the program and having any prerequisite coursework). The internship, capstone, and some elective coursework require program or instructor permission. The internship and capstone have specific processes for requesting and securing those permits.

Students should alert the program and their advisor if their GPA falls below a 3.0, they accumulate 2 or more Cs, they are struggling in or have failed a course, or they encounter other unexpected academic difficulties. Students should regularly consult their advisors about internship opportunities, professional development, and career planning.

Graduation

Students must complete the steps below prior to the end of add/drop for the intended semester of graduation:

- 1) apply to graduate [Banner Self-Service]
- 2) be registered for the semester of intended graduation.*

**Students who otherwise have completed all coursework but have incomplete/in progress courses to resolve register for GRAD 7999 Residency rather than a course. Registration for GRAD 7999 is via graduate petition (petition) only.*

Students complete the **application for graduation** online via Banner. The 'Online Graduation Application' triggers a Graduate School review of academic progress (via DegreeWorks). DegreeWorks is the definitive record for graduation clearance. As such, students should notify the HIAN Director or Program Administrator of any discrepancy in their DegreeWorks audit.

Choosing a Plan of Study

The HIAN master's program offers 3 (plus summer) and 4 (plus summer) semester plans of study. These plans can be adapted for part-time students taking 6-8 semesters (or more). We expect students to pursue course loads consistent with their commitments outside of the classroom.

We strongly advise those students working full-time against taking more than six credits in any term (and, conversely, full-time students from working more than 20 hours per week). To do otherwise often compromises the quality of schoolwork, especially the ability to contribute equitably to the many group assignments. Since

group work is an inherent and integral component of the program, we must ensure all students emerge competent and pull their weight throughout the program. Our interest is ensuring the quality and integrity of the program, and the success (including the work-life balance and mental health) of our students.

Consider the following

- Are you planning to work while completing your HIAN degree program? If so, how many hours per week will you spend at work?
- Do you have additional responsibilities, beyond work and/or school?
- How will your schedule accommodate your required 160 hours of (summer) internship effort?
- Will your schedule allow you to take advantage of professional development, networking, and social opportunities?

Estimating commitment

- On average (anticipate higher loads at mid-term and final), expect to spend 2-3 hours per week in preparation for each classroom hour.
- For a 12 credit load, this expectation translates to a school work week of 36-48 hours [12 hours in class plus 24-36 in preparation]
- Many classes include group projects that require significant out of class coordination and meeting.
- We strongly recommend against working full-time time and taking more than 6 credits per semester

Plans of Study – Master’s Program

The Graduate School defines 9 credits per semester as normal full-time, with 12 credits being the maximum load per semester. The 36-credit hour HIAN program can be completed in as few as 3 semesters (plus a summer), but 4 semesters (plus a summer) is the normal/expected plan of study.

MS-HIAN Fall Entry, 4 Semesters + Summer Completion Option

Year 1

FALL SEMESTER

HADM 6100	Introduction to US Health Care System	3 hours
HCIP 5376	Introduction to Programming for Health Informatics	3 hours
HCIP 6380	Introduction to Health Informatics	3 hours

SPRING SEMESTER

HCIP 6102	Health Care Data Analysis	3 hours
HCIP 6160	Database Systems	3 hours
HCIP 6201	Health Information Privacy and Security	3 hours

or *Selective/Elective 1*

SUMMER SESSION

HCIP 6400	Internship*	3 hours
-----------	-------------	---------

Year 2

FALL SEMESTER

	<i>Selective/Elective 2</i>	3 hours
	<i>Selective/Elective 3</i>	3 hours
	<i>Selective/Elective 4</i>	3 hours

SPRING SEMESTER

HCIP 6250	Problem Solving in Healthcare Analytics**	3 hours
	<i>Selective/Elective 4</i>	3 hours

or *HCIP 6201 Health Information Privacy and Security*

MS-HIAN Program Total 36 hours

Note: Two selective and two restricted elective courses are required

*Internship requires prior completion of HADM 6100, HCIP 6380, and instructor permission.

**HCIP 6250 – Problem Solving in Healthcare Analytics requires prior completion of HCIP 6400 and instructor permission.

MS-HIAN Fall Entry, 3 Semesters + Summer Completion Option

Year 1

FALL SEMESTER

HADM 6100	Introduction to US Health Care System	3 hours
HCIP 5376	Introduction to Programming for Health Informatics	3 hours
HCIP 6102	Health Care Data Analysis	3 hours
HCIP 6380	Introduction to Health Informatics	3 hours

SPRING SEMESTER

HCIP 6160	Database Systems	3 hours
HCIP 6201	Health Information Privacy and Security	3 hours
	<i>Selective/Elective 1</i>	3 hours
	<i>Selective/Elective 2</i>	3 hours

SUMMER SESSION

HCIP 6400	Internship*	3 hours
-----------	-------------	---------

Year 2

FALL SEMESTER

HCIP 6250	Problem Solving in Healthcare Analytics**	3 hours
	<i>Selective/Elective 3</i>	3 hours
	<i>Selective/Elective 4</i>	3 hours

MS-HIAN Program Total

36 hours

Note: Two selective and two restricted elective courses are required

*Internship requires prior completion of HADM 6100, HCIP 6380, and instructor permission.

**HCIP 6250 – Problem Solving in Healthcare Analytics requires prior completion of HCIP 6400 and instructor permission.

MS-HIAN Spring Entry, 4 Semesters + Summer Completion Option

Year 1

SPRING SEMESTER

HADM 6100	Introduction to US Health Care System	3 hours
HCIP 5376	Introduction to Programming for Health Informatics	3 hours
HCIP 6380	Introduction to Health Informatics	3 hours

SUMMER SESSION

(selective/elective)

FALL SEMESTER

HCIP 6102	Health Care Data Analysis	3 hours
HCIP 6160	Database Systems	3 hours
	<i>Selective/Elective 1</i>	3 hours

Year 2

SPRING SEMESTER

HCIP 6201	Health Information Privacy and Security	3 hours
	<i>Selective/Elective 2</i>	3 hours
	<i>Selective/Elective 3</i>	3 hours

SUMMER SESSION

HADM 6400	Internship*	3 hours
-----------	-------------	---------

FALL SEMESTER

	<i>Selective/Elective 4</i>	3 hours
HCIP 6250	Problem Solving in Healthcare Analytics**	3 hours

MS-HIAN Program Total	36 hours
-----------------------	----------

Note: Two selective and two restricted elective courses are required

*Internship requires prior completion of HADM 6100, HCIP 6380, and instructor permission.

**HCIP 6250 – Problem Solving in Healthcare Analytics requires prior completion of HCIP 6400 and instructor permission.

MS-HIAN Spring Entry, 3 Semesters + Summer Completion Option

Year 1

SPRING SEMESTER

HADM 6100	Introduction to US Health Care System	3 hours
HCIP 5376	Introduction to Programming for Health Informatics	3 hours
HCIP 6102	Health Care Data Analysis	3 hours
HCIP 6380	Introduction to Health Informatics	3 hours

SUMMER SESSION

HCIP 6400	Internship*	3 hours
-----------	-------------	---------

FALL SEMESTER

HCIP 6160	Database Systems	3 hours
	<i>Selective/Elective 1</i>	3 hours
	<i>Selective/Elective 2</i>	3 hours
	<i>Selective/Elective 3</i>	3 hours

Year 2

SPRING SEMESTER

HCIP 6201	Health Information Privacy and Security	3 hours
HCIP 6250	Problem Solving in Healthcare Analytics**	3 hours
	<i>Selective/Elective 4</i>	3 hours

MS-HIAN Program Total

36 hours

Note: Two selective and two restricted elective courses are required.

*Internship requires prior completion of HADM 6100, HCIP 6380, and instructor permission.

**HCIP 6250 – Problem Solving in Healthcare Analytics requires prior completion of HCIP 6400 and instructor permission.

Plans of Study – Graduate Certificate

The Graduate School defines 9 credits per semester as normal full-time, with 12 credits being the maximum load per semester. The 15-credit hour HIAN certificate program can be completed in as few as 2 semesters but 3 semesters is the normal/expected plan of study. We offer courses such that the sequence is the same with either a fall or a spring start, however the available face-to-face and online course options will vary.

Students intending to transition to the MS Program should review the master's sequence and consult with the program director during their first semester of matriculation to ensure a smooth, uninterrupted transition from the certificate into the master's.

International students resident in the US on a student visa need to be mindful of the requirement to register for at least 6 face-to-face credits each semester.

CERT- HIAN (3 semester)

SEMESTER 1

HADM 6100	Introduction to US Health Care System	3 hours
HCIP 6380	Introduction to Health Informatics	3 hours

SEMESTER 2

HCIP 5376	Introduction to Programming for Health Informatics	3 hours
HCIP 6160	Database Systems	3 hours

SEMESTER 3

HCIP 6102	Health Care Data Analysis	3 hours
-----------	---------------------------	---------

Cert-HIAN Program Total 15 hours

CERT- HIAN (2 semester)

SEMESTER 1

HADM 6100	Introduction to US Health Care System	3 hours
HCIP 5376	Introduction to Programming for Health Informatics	3 hours
HCIP 6380	Introduction to Health Informatics	3 hours

SEMESTER 2

HCIP 6102	Health Care Data Analysis	3 hours
HCIP 6160	Database Systems	3 hours

Cert-HIAN Program Total 15 hours

CERT- HIAN (fully online, part-time 3 semester)*

SUMMER 2

HADM 6100	Introduction to US Health Care System	3 hours
-----------	---------------------------------------	---------

FALL

HCIP 5376	Introduction to Programming for Health Informatics	3 hours
-----------	--	---------

HCIP 6380	Introduction to Health Informatics	3 hours
-----------	------------------------------------	---------

SPRING

HCIP 6102	Health Care Data Analysis	3 hours
-----------	---------------------------	---------

HCIP 6160	Database Systems	3 hours
-----------	------------------	---------

Cert-HIAN Program Total		15 hours
-------------------------	--	----------

**Students pursuing a fully online (part-time) pathway should start in Summer 2 (July). This sequence allows completion of the certificate in 11-months. Those with US healthcare system experience may start in fall (mid-August) and complete the following August (12-months). Students pursuing a fully online (distance education) program are assessed tuition and fees per the distance education scheme. Please see details at distanceed.uncc.edu, being mindful to review the fee structure for the HIAN program described under the CHHS specific listing.*

Dual Degree Options

In certain instances, students may pursue simultaneously degrees in two master's programs through the development of an integrated curriculum. Dual programs may require as little as 75% of the credits required if pursuing the programs consecutively. No degree program is obligated to enter into such an arrangement.

Although other restrictions may apply, as indicated in UNC Charlotte materials, basic admission and degree requirements are specified below:

- The student must apply to each program separately and be admitted to both. No admission requirements established by the Graduate School or by either individual program may be waived. For example, if one degree requires acceptable scores for the GRE and the other the GMAT, the applicant must take each standardized exam to be considered for admission to both degrees.
- Unless a formally established dual degree program exists (see below), once admitted, the student must develop a suitable plan of study that is acceptable to both programs and to the Graduate School. This plan of study must be approved within the first semester of matriculation into either program and in conjunction with both program directors. The plan of study must be forwarded to the Dean of the Graduate School for review and approval.
- Students in dual degree programs **are billed tuition increments for both programs each semester.** We and our partner programs have agreed to waive one of the increments (based on a 'winner take all' approach) such that each program will effectively collect 75% of the increment it would normally receive from one of its degree candidates. A preliminary waiver plan is developed when completing the dual degree plan of study, and modified based upon actual registration.

The student is responsible for contacting the appropriate program to request a waiver

of one of the tuition increments each semester, ideally at the time of registration. After we forward the waiver request to student accounts, the charges for both increments will remain on the student's account until the add/drop deadline has passed, but the student's registration will not be dropped for nonpayment of the waived amount.

Students are expected to request the waiver prior to the first day of classes for a given semester. The program will not honor late requests initiated after the last day of classes for a given semester.

Described below are two formally established dual HIAN degree options.

HIAN PSM/MHA

The Master of Health Administration (MHA) and Professional Science Master's in Health Informatics and Analytics (HIAN PSM) dual degree program allows students to earn both a [Master of Health Administration](#) and a [M.S. in Health Informatics and Analytics](#) degree. The MHA and HIA PSM dual degree program (outlined below) consists of 66 credit hours of coursework, in contrast to the 87 credit hours required if these degrees were pursued separately. Both programs' admissions committees review applicants to the dual degree program. Applicants might be offered admission into only the individual MHA or HIA PSM programs instead of the dual degree program. Interested applicants should contact the MHA Program Director (mhaprogram@uncc.edu) and HIAN Program Director (healthinformatics@uncc.edu) before submitting applications intended for dual degree enrollment.

HIAN PSM/MPH

The Master of Public Health (MPH) and Professional Science Master's in Health Informatics and Analytics (HIAN PSM) dual degree program allows students to earn both an [MPH](#) and an [M.S. in Health Informatics and Analytics](#) degree. The MPH and HIAN PSM dual degree program consists of 63 credit hours of coursework, in contrast to the 81 credit hours required if these degrees were pursued separately. Interested individuals are required to submit a separate and simultaneous application to the HIAN PSM and MPH programs. Please contact the HIAN Program Director (healthinformatics@uncc.edu) and MPH Program Director (jwarren1@uncc.edu) before submitting applications.

HIAN PSM/MHA Dual Degree Articulated Curriculum

Students in the dual HIAN PSM/MHA program develop a program of study, working with the HIAN Program Director and the MHA Program Director in accord with the plan of study below. The minimum number of credit hours for the dual MHA/HIAN PSM is 66.

HADM 6100	Introduction to the US Health Care System	3 hours
HADM 6104	Health and Disease	3 hours
HADM 6116	Accounting for Healthcare Management	3 hours
HADM 6120	Health Economics	3 hours
HADM 6124	Marketing in Healthcare	3 hours
HADM 6128	Human Resources Management	3 hours
HADM 6134	Quality and Outcomes Management in Healthcare	3 hours
HADM 6138	Health Care Finance	3 hours

HADM 6142	Health Policy Development	3 hours
HADM 6145	Organizational Behavior in Health Care	3 hours
HADM 6146	Information Resources Management	3 hours
HADM 6150	Health Law and Ethics	3 hours
HCIP 5376	Introduction to Programming for Health Informatics	3 hours
HCIP 6102	Healthcare Data Analysis	3 hours
HCIP 6108	Intermediate Decision Analysis in Healthcare	3 hours
HCIP 6160	Big Data Design, Storage, and Provenance in Healthcare	3 hours
HCIP 6201	Health Information Privacy and Security	3 hours
HCIP 6380	Introduction to Health Informatics	3 hours

Plus one of the following 4 options:

HCIP 5122	Visual Analytics	3 hours
HCIP 6392	Enterprise Health Information Systems	3 hours
HCIP 6393	Health Data Integration	3 hours
HCIP 6396	Business Intelligence in Healthcare	3 hours

HADM 6400	Health Administration Internship	3 hours
HADM 6154	Strategic Management of Health Services Organizations	3 hours
HCIP 6250	Capstone: Problem-Solving in Healthcare Analytics	3 hours

HIAN PSM-MHA Dual Degree Program Total 66 hours

HIAN PSM/MPH Dual Degree Articulated Curriculum

Students in the dual MPH/Health Informatics and Analytics (HIAN) PSM programs develop a program of study, working with the MPH Program Director and the HIAN PSM Program Director in accord with the plan of study below. The minimum number of credit hours for the dual MPH/HIAN PSM is 63.

HADM 6100	Intro to U.S. Healthcare System	3 hours
HCIP 5376	Introduction to Programming for Health Informatics	3 hours
HCIP 6102	Healthcare Data Analysis	3 hours
HCIP 6160	Big Data Design, Storage, and Provenance in Healthcare	3 hours
HCIP 6200	Case Studies in Public Health	3 hours
HCIP 6201	Health Information Privacy and Security	3 hours
HCIP 6211	Evidence-Based Methods in Public Health	3 hours
HCIP 6212	Health Promotion Program Management	3 hours
HCIP 6213	Policy and Leadership	3 hours
HCIP 6380	Introduction to Health Informatics	3 hours
HCIP 6108	Intermediate Decision Analysis in Healthcare	3 hours
HCIP 6250	Capstone: Problem-Solving in Healthcare Analytics	3 hours

Plus one of the following 4 options:

HCIP 5122	Visual Analytics	3 hours
HCIP 6392	Enterprise Health Information Systems	3 hours
HCIP 6393	Health Data Integration	3 hours
HCIP 6396	Business Intelligence in Healthcare	3 hours

HLTH 6471	Public Health Internship	3 hours
	Interprofessional Elective Course	3 hours

Select MPH Concentration:

Epidemiology (EPID) or Community Health Practice (CHPR)

Epidemiology Concentration (EPID)

HLTH 6260	Analytic Epidemiology	3 hours
HLTH 6270	Epidemiologic Methods	3 hours
HTLH 6271	Public Health Data Analysis	3 hours
HTLH 6280	Epidemiology Capstone Course	3 hours

Plus one of the following:

HLTH 6273	Infectious Disease Epidemiology	3 hours
HLTH 6274	Chronic Disease Epidemiology	3 hours
HTLH 6275	Reproductive Epidemiology	3 hours
HTLH 6276	Environmental and Occupational Epidemiology	3 hours

Community Health Practice Concentration (CHPR)

HLTH 6220	Applied Health Behavior Change	3 hours
HLTH 6225	Health Education and Health Promotion	3 hours
HTLH 6226	Community Health Methods	3 hours
HTLH 6227	Community Health Planning and Evaluation	3 hours
HLTH 6228	Social Determinants of Health	3 hours
HLTH 6230	Community Health Practice Capstone	3 hours

MPH-HI PSM Dual Degree program Total **63 hours**

* Students in the MPH/M.S. in Health Informatics and Analytics Degree Program **cannot** pursue the MPH concentration in Population Health Analytics

Student Responsibilities, Policies and Procedures

The Health Informatics and Analytics Program, through its program and parent department/college faculty governance structures, sets forth the student policies and procedures that apply to students enrolled in its programs. Because of the professional nature of the HIAN program, it has different expectations of students than do non-professional degree programs. The standards provide clear expectations and procedures for academic and professional integrity and responsibility and are designed to determine students' aptitudes for becoming effective health informatics and analytics professionals. All HIAN students are expected to read, understand, know, and follow the applicable program policies and procedures. "Not knowing" does not excuse a violation.

In addition to the HIAN Program policies and procedures discussed in this section, students are expected to know and abide by the policies outlined for the Graduate School (see <https://catalog.uncc.edu/index.php>), and the University (university-level policies can be found at <http://www.legal.uncc.edu/policies/>)

University-level policies and procedures of direct import to HIAN students include the following:

- ◆ **The Code of Student Responsibility** (<http://www.legal.uncc.edu/policies/up-406>);
- ◆ **The Code of Student Academic Integrity** (<http://www.legal.uncc.edu/policies/up-407>);
- ◆ **Student Appeals and Grievances** (<http://legal.uncc.edu/policies/up-403>);
- ◆ **Student Grievance Procedure** (<http://legal.uncc.edu/policies/up-411>);
- ◆ **Sexual Harassment Policy and Grievance Procedures** (<http://legal.uncc.edu/policies/up-502>);
- ◆ **UNC Charlotte Standard for Responsible Use** (<http://itservices.uncc.edu/iso/standard-responsible-use>).

Code of Student Academic Integrity

Students enrolled in any educational program within the Department of Public Health Sciences are required to demonstrate the highest ethical standards. These requirements pertain to both academic and professional behavior.

All HIAN students are required to read and abide by the Code of Student Academic Integrity (<http://www.legal.uncc.edu/policies/up-407>). Please note: students are held accountable to this code even if the violation is inadvertent.

Violations include the following:

Cheating - Intentionally using or attempting to use unauthorized materials, information, notes, study aids, or other devices in any academic exercise. This definition includes unauthorized communication of information during an academic exercise.

Fabrication and falsification - Intentional and unauthorized alteration or invention of any information or citation in an academic exercise. Falsification is a matter of altering information, while fabrication is a matter of inventing or counterfeiting information for use in any academic exercise.

Multiple submissions - The submission of substantial portions of the same academic work (including oral reports) for credit more than once without instructor approval.

Plagiarism - Intentionally or knowingly presenting the work of another as one's own (i.e., without proper acknowledgment of the source). The sole exception to the requirement of acknowledging sources is when the ideas, information, etc., are common knowledge.

Abuse of academic materials - Intentionally or knowingly destroying, stealing, or making inaccessible library or other academic resource material. Typical Examples: Stealing or destroying library or reference materials needed.

Complicity in academic dishonesty - Intentionally or knowingly helping or attempting to help another to commit an act of academic dishonesty.

Good Scholar Tutorial

We ask that all HIAN students complete the "Good Scholar" tutorial, located at: <http://publichealth.uncc.edu/student-resources/good-scholar-tutorial>, or on the Public Health Sciences website under "student resources." Proof of its completion is required as part of HADM 6100 Introduction to US Healthcare System.

Note: The Graduate School has adopted policies requiring students to demonstrate knowledge and awareness of academic integrity violations and policies.

Preparatory Knowledge and Skills

Health and Informatics Vocabulary

Students are required to complete a pre-program, self-directed online training module in basic concepts and vocabulary in health, medical nomenclature, and computer science terminology. The training course provides students a grounding in vocabulary and core concepts needed for success in our foundational courses.

This canvas-based training course is designed as a series of units within three larger modules. Each unit has an associated quiz. Students must complete all modules in

order to receive the required certificate of completion. Entering students are encouraged to complete this training PRIOR to arrival in campus. Providing proof of its completion is a requirement early on in HCIP 6380 (Introduction to Health Informatics).

Microsoft office

We expect students entering the MHA Program to be proficient in Microsoft office applications, especially MS Word, MS Excel, and MS PowerPoint. Faculty will not alter assignments, expectations, or deadlines when students lack basic proficiency with these packages. Students are strongly encouraged to review the Microsoft Office training and self-assessment modules provided free of charge by the Goodwill Community Foundation at <https://edu.gcfglobal.org/en/topics/office/> and linked from the student resources tab on the department website (or a comparable resource).

Writing for Public Health Professionals

Students entering our MHA Program should have an understanding of writing skills needed for public health professionals. Students are strongly encouraged to review the [Boston University School of Public Health's comprehensive writing guide](https://populationhealthexchange.org/teph-public-health-writing-guide/) for students (<https://populationhealthexchange.org/teph-public-health-writing-guide/>).

Professional Conduct

Throughout the HIAN program, including classes, guest speaker and panel presentations, and internships, students should conduct themselves as professionals. The guidelines of professional conduct are consistent with the program's educational competencies. The professional guidelines listed below were authored by six of our HIAN students during the summer of 2010, and are included in our Handbook verbatim as written by our students:

- The HIAN program is centered on professional development as evidenced by the competencies outlined in the HIAN handbook. They include: leadership, critical thinking, science/analysis, management, political and community-stakeholder development, and communication. Developing and demonstrating these competencies should be the ultimate goal of the student with grades merely being a representation of successful development.
- To this end, intellectual curiosity and a desire to master the subject matter should be a student's primary drivers. In this regard, students are expected to complete coursework and assignments (including readings) within required timeframes, participate substantively in class discussions, and demonstrate a genuine interest in the field.
- In keeping with the professional nature of the program, students should view class time and especially their internships the same way they would a professional work environment. This entails acting with courtesy, responsibility, ethics, maturity, and a general professional demeanor towards

professors, guest lecturers, and fellow students. Although most learning is in a classroom setting, students should view faculty in a supervisory role and fellow students as professional peers.

- In keeping with this paradigm, students should recognize that many professors and guest lecturers are active professionals in the healthcare industry and potential employers. Since professional paths are likely to cross again, acting with professionalism, courtesy, and responsibility is strongly advised.
- Likewise, fellow students are currently or will someday be active professionals in the healthcare industry, possibly in a peer or supervisory role. As such, classroom behavior and academic conduct may affect future professional development. It is important for students to develop a professional network during their studies, and this network starts with their fellow students.
- Overall, students should recognize that instead of pursuing a career in healthcare administration following receipt of a HIAN, they are already doing so! Their career began once they enrolled in the program, and all behavior and actions should reflect this commitment.

Professional Responsibility

Graduate assistantships and internships are intended to serve as an extension of the teaching and research mission of HIAN program and the Department of Public Health Sciences, by giving students work experience in the public health, health services, or research environments in which they will eventually pursue careers. While serving in on- or off-campus graduate assistantships or internships, students are representatives of the Department. As such, they will act with total professionalism at all times.

Students participating in assistantships or internships need to follow the dress standards of their work environment. All students need to comply with the work hours associated with their assistantship or internship. While at work, all students should ensure that their level of effort and contribution to the work environment meet and, preferably, exceed sponsor expectations.

Evaluation Standards

To ensure the progression of competent students through the graduate programs, the following will be evaluated each semester for each student:

Grades and Grade Point Average

Graduate students are expected to earn a B or better in each course. Consequently, graduate students must maintain an overall GPA of at least 3.0 or they will be placed on academic probation or suspension by the Graduate School. (See Graduate School policies and procedures related to academic standing for further details.) Students should seek assistance as soon as possible, first from instructors and then their

advisors and/or the Program Director, if falling behind in any classes or having other issues that might affect acceptable academic performance. Faculty formally alert students to potential unsatisfactory grades through the midterm grade reporting system. Students should consider receiving such a message as cause for concern requiring, as a minimum, immediate follow-up with the course faculty. *Note - Given the back loading of assignments common in graduate courses, such warnings are not always possible.*

Attendance

Attendance policy is set by course faculty. Read each course syllabus carefully to determine expectations. Given that many classes involve group activities and assignments, experiential learning, and other practical demonstrations, students should anticipate that full attendance will be the normal expectation for all classes. If a student cannot make a scheduled class or event, he or she should, as a courtesy to the faculty member, communicate this to the instructor as soon as possible – preferably in advance of the absence. Extended absences should be communicated to the Program Director.

Professionalism

Students are advised to maintain a professional demeanor (i.e., be prepared, be responsible, and be courteous) in actions and interactions within courses and in the community. Please note the descriptions of professional conduct and professional interactions listed earlier in this section.

Program Dismissal Policy

The faculty members of the UNC Charlotte Graduate Programs in Public Health Sciences have an academic, legal, and ethical responsibility to protect members of the public and of the health care community from unsafe or unprofessional practices. The following should be considered a summary. Full details of these standards and procedures are found in the Graduate School Catalog.

A student may be dismissed from our Graduate Program under the following circumstances:

- ◆ **Grade Point Average:** has a GPA that falls below 3.0 and remains below 3.0 after the stipulated remediation period.
- ◆ **Course Grades:** Students are expected to earn a B in each class. Students may choose to repeat classes in which a C was earned and, unless terminated or otherwise prohibited, and must repeat classes in which a U was earned.
 - **Repeating courses.** Regardless of the cumulative GPA, a student may repeat AT MOST two classes. A course may only be repeated ONCE. Repeating a class does not remove the first grade from the transcript. The first grade is counted toward accumulated C/U credits, but is not included in the cumulative GPA.

- Accumulated low grades. A total of three C grades or a single grade of U results in suspension. A suspended student may not register for classes unless approved for reinstatement. If the program reinstates a student, a subsequent grade of C or U will result in immediate termination from the program. If a program does not approve reinstatement, the student is terminated from the program.
- ◆ Lack of progress. Students also are subject to dismissal (regardless of GPA, etc.) due to lack of satisfactory progress. Factors included in such a classification include time to complete the degree and professionalism. A student facing discipline under this heading will receive a written warning (probation letter) stating the specific cause, specific remediation, and specific timeframe to reach compliance (typically one semester). Failure to comply will result in termination.
 - Time. Students are expected to complete the HIAN program within 5 years (a sixth year is sometimes permitted with justification and advance notice).
 - Professionalism. Students are expected to demonstrate behavior consistent with the profession of public health and UNC Charlotte's academic integrity standards.

Recourse for Violations

Please see the sections of the Graduate School Catalog and the University Code of Student Academic Integrity related to appeal of probation, suspensions, and terminations.

Grades of Incomplete/In Progress

In accordance with University policy, a grade of "I" (Incomplete) is assigned at the discretion of the instructor when a student who is otherwise passing has not, due to circumstances beyond his or her control, completed all the work in the course. The missing work must be completed by the deadline specified by the instructor, but no later than 12 months after the term in which the "I" was assigned, whichever comes first. If the "I" is not resolved during the specified time, a grade of "U" (failing) is automatically assigned. The grade of "I" cannot be removed by enrolling again in the same course.

A grade of IP (in progress) is assigned for courses in which the work was reasonably not expected to be completed within the timeframe of the semester. This often happens with courses such as the internship or tutorial. Grades of IP are assigned to indicate that the student is not "late" in completing course requirements. These grades of IP must be resolved within the timeframe stipulated by the instructor, typically during the next semester of enrollment, or a grade will be assigned based on the work completed at that time. (This might include, at the instructor's discretion and in accord with any prior agreements with the student, an incomplete, a letter grade based on the work completed so far, or a failing grade (See section on suspension and dismissal).

In both I & IP cases, students are strongly advised to have written communication with the instructor to document expected timelines and deliverables and to maintain contact/

negotiate changes in expectations in a timely manner. Responsibility for resolving these missing grades lies with the student.

Transfer Credit [Waivers, Transfers & Other Exceptions]

Per Graduate School policy, master's students may transfer in up to six graduate credits earned outside of UNC Charlotte, provided, among other requirements, that a) the grade earned was a B or better, b) the credits were not used toward a degree or certification, and c) the courses are approved by the program director. It is the practice of the HIAN program that any courses meeting criteria a) and b) above and demonstrably health-related (broadly interpreted) will be approved for transfer.

Separate from the issue of transferability is the issue of equivalence to a core requirement (e.g., whether a transferred course can be substituted for a core HIAN requirement or whether prior graduate coursework not transferred can be used to exempt a student from repeating an HIAN requirement and gaining an elective). These expectations, timelines, and procedures are outlined in the following policy statement.

HIAN Program Policy Statement: Transfer Credits, Waivers & Credit by Exam

The HIAN Program is supportive of students gaining graduate academic credit at other institutions, especially for public health relevant content not available at UNC Charlotte, and applying it to their HIAN Program, provided the coursework meets the requirements set by the UNC Charlotte Graduate School and the additional requirements of the HIAN program. Furthermore, the HIAN Program sees no need to require students to complete essentially the same graduate course a second time.

After matriculation into the UNC Charlotte HIAN program, students seeking to transfer graduate credits from other academic institutions toward their UNC Charlotte HIAN Program or to be exempted from (or substitute another course for) core requirements are required to comply with the following policy statement adopted by the program faculty and supported by the Public Health Programs Governance Committee.

- **Transfer Credit.** The HIAN Program strictly adheres to the policies and procedures set forth by the UNC Charlotte Graduate School. Among the limitations detailed by the Graduate School, is that a maximum of six graduate credits can be transferred in. These credits cannot have been applied to a graduate degree at UNC Charlotte or another institution, and must have an earned grade of a B or better. Students are directed to the Graduate School website for university-wide policy and procedure details.

Within the discretion granted to the HIAN Program by the Graduate School, the HIAN program outlines the following additional constraints and expectations for transfer credit.

- Courses proposed for transfer to the HIAN degree must align with the broader health mission of the department (e.g., have a clear relevance to the HIAN Program).
- Courses proposed for transfer that are intended to fulfill an HIAN core requirement will be reviewed by the HIAN Program faculty for equivalence. Students seeking to use a transfer course in this way must submit a copy of the course syllabus along with their application for transfer credit to facilitate the assessment process. Comparable course titles are insufficient proof of equivalence.
- Students having completed graduate coursework outside of UNC Charlotte prior to matriculation into the HIAN program must apply for transfer of credit by the end of their first semester of study at UNC Charlotte. The Program Director will not approve requests for transfer credit of extant courses after this period. (Note: this does not mean that the process must have been completed, only that a formal application using the Graduate School form has been submitted to the HIAN Program Director).
- Students completing coursework outside of UNC Charlotte after their matriculation into the HIAN must apply for transfer of credit within one semester of completing the course. The Program Director will not approve requests for transfer credit after this period. (Note: this does not mean that the process has been completed, only that a formal application using the Graduate School form has been submitted to the HIAN Program Director).
- Transfer credits cannot be used to fulfill the internship or capstone (strategic management) requirements.
- **Waiver & Credit by Exam.** In addition to transfer of credit upon admission to the program, students should note that the Program Director may waive core requirements or allow substitutions based on having completed comparable graduate coursework elsewhere. This option is particularly helpful for students who have completed more than six credits of coursework elsewhere that fulfills HIAN Program core requirements but cannot formally transfer those credits or who have taken a comparable course and it was applied to another degree. In these cases, students may be exempted from the core requirement and be allowed to substitute either a specific alternate course or given additional free electives. In all cases, students must still accumulate sufficient credits on their UNC Charlotte transcript (including transfer credits) to fulfill degree requirements.
 - The HIAN Program does not routinely allow for credit by exam at this time.
 - As described previously, waivers/exemptions are sparingly given for the Internship requirement and not permitted for the capstone (strategic management)

- **Advisories.** Students are advised that:
 - Courses offered at other institutions may not (completely) align with the competencies expected from similarly titled UNC Charlotte courses. In many cases, courses offered at other schools may only partially fulfill our core requirements or partially cover several of our courses, but none of them completely, meaning the course is eligible for transfer credit, but not necessarily as a substitute for our core requirement.
 - Students having completed coursework prior to their matriculation at UNC Charlotte are strongly advised to submit their courses (with syllabi) to the HIAN Director for review prior to their first semester to ensure they do not mistakenly skip the UNC Charlotte required course.
 - Students planning to take an outside course after matriculation into the HIAN Program are encouraged to submit the course syllabus to the HIAN Program Director for review/approval prior to registering for the outside course.
 - It takes at least several weeks for transfer requests to be processed and for courses to appear on the official UNC Charlotte transcript. Students need to anticipate this lag when planning their graduation applications, etc., as only courses that appear on the UNC Charlotte transcript (either as having been completed or in process) can be listed on the application for graduation. If a transfer class does not appear on the transcript at the time graduation applications are due, the course cannot be used toward the credits required for the degree.

Residency Requirement

In accordance with University policy, students having accumulated sufficient credits (including grades of I or IP which are being resolved) are advised to register for GRAD 7999 Residency in lieu of taking additional courses. Permits for GRAD 7999 are requested via the graduate petition (gpetition) process.

Note: While maintaining residence in the summer is not required, students must be enrolled during the semester in which they graduate. Please discuss questions related to residency requirements with the Program Director.

**Please note: Residency, as used here, is distinct from tests of residency within the state of North Carolina for purposes of assessing in-state versus out-of-state tuition. See the Graduate School catalog for further details.*

HIAN Program Completion Time

Students are expected to complete the HIAN program within five years (a sixth year is sometimes permitted with justification and advance notice). University policy requires that no course listed on a master's student's candidacy form be older than six years at the time of graduation. This policy is in place because of the University's interest in a degree being current when it is awarded. Courses that exceed this time limit must be

revalidated or retaken, whichever the graduate program decides necessary, if they are to count in a degree program.

Graduation Requirements

UNC Charlotte requires that graduate students maintain academic standards as outlined in the Graduate School Bulletin.

- Graduate students must average at least B (3.0 on a 4 point system) over all courses attempted as part of the requirements to qualify to receive a graduate degree.
- Comply with relevant university policies and procedures including:
 - Candidacy (degreeworks) and Diploma (banner selfservice, apply to graduate). See Graduate school website and/or the academic calendar for specific deadlines and fees.

Deadlines

Students are advised in the strongest possible terms to closely monitor and follow university-imposed deadlines for such important benchmarks as registration, payment, and application for graduation. Likewise, students are advised to closely monitor and follow college, departmental, and program policies and procedures, with special emphasis on internship planning and application for transfer credits, graduation, and the like. The consequences for missing these deadlines include termination of registration or delay of graduation by a semester.

Policy Appeals

To resolve disputes, students are directed to first discuss the issue with the course instructor. If the issue is not resolved at that level it should be brought to the Program Director (program or student-conduct related matters) or the Department Chair (faculty conduct related matters). If not resolved informally, students are directed to the formal college policy summarized below. Students may wish to consult with their academic advisor if unsure of their options.

A student who wishes to appeal a policy of the HIAN Program may do so by submitting a written appeal to the Chair of the Department of Public Health Sciences in accordance with the "Academic Grievance Policy of the College of Health and Human Services" (in the College of Health and Human Services Handbook). This appeal will be reviewed and judgment made by the faculty of the department

Final Grade Appeals

Appeals of final grades must follow the UNC Charlotte final grade appeal procedure described at <http://www.legal.uncc.edu/policies/up-410>.

Note: As discussed separately, appeals for suspension, termination, and academic integrity

violations are adjudicated through separate processes. See the relevant policies and procedures at the Graduate School and University websites

Non-discrimination Policy

The Department of Public Health Sciences is committed to equality of opportunity and does not discriminate in recruiting or admitting students, or in the hiring or promoting of faculty and staff, based on race, color, national origin, religion, gender, sexual orientation, age, or ability/disability.

Student Travel

In some circumstances, the HIAN Program may offer funding assistance to students for travel to professional conferences, competitions, educational events. The Graduate Professional Student Government Association also may provide funds. See the program website or contact the program for further details.

Letters of Recommendation

As a faculty we deplore the practice of programs that require students to solicit open (e.g., not confidential) letters of recommendation. To the extent possible, identify means for faculty to provide confidential letters of recommendation. If you are unable to do so, please make the fact that the letter will not be confidential explicit in your request.

When asking faculty for a letter of recommendation, students should send them the following information at least 2 weeks before the application is due; 3 weeks would be even better:

- ◆ Current resume/CV as an attachment.

*Note: Be sure the resume has been reviewed by someone in the UNC Charlotte Career Center, is free of typographical errors, and is saved as a "doc" file (rather than *.docx) in Word or as an Adobe (*.pdf) with a meaningful file name, e.g., "SmithAdam_Resume_Fall2018.doc" rather than just "resume.doc" Good resumes take time to develop. Students are advised to begin working with the Career Center ASAP.*

- ◆ Anticipated date of graduation
- ◆ Current GPA
- ◆ The name, title and address of the contact person for each application

Example

Susan Smith, M.S. Health Informatics and Analytics [or if no master's degree or higher, would be: Ms. Susan Smith]
 Administrative Fellow
 Palmetto Richland Hospital
 123 Gateway Road
 Columbia, SC 29221

- ♦ A brief statement for each organization, immediately below the name and address: (1) why interested in the opportunity; and (2) why well qualified for the opportunity. This information is intended to help faculty write a more compelling letter of support, so please write this brief statement with that purpose in mind. Note special training or skills (e.g., accounting, finance, gerontology, health information technology) or if completing a Graduate Certificate (e.g., Gerontology, Health Information Technology) in the statement.

Almost all applications require that materials be sent in one envelope. Letters of Recommendation will be provided to students in a sealed envelope, signed and dated over the seal. Remember to include the letter with the application.

Check E-mail Daily

We expect students to use their UNC Charlotte (name@uncc.edu) email accounts, and to check their accounts at least once per day while school is in session (including summer sessions, if students are attending). This practice facilitates good communication between the Department and students. Students are responsible for any and all information that is delivered by email. Students who choose to use another email account as their primary account are advised to set an “auto forward” rule from their UNC Charlotte account to ensure timely receipt of mail.

Cancellations and Severe Weather Policy

Students should follow the UNC Charlotte severe weather guidelines for class attendance. In the case of severe weather that results in the cancellation of University classes, students are not required to report to their internship assignments. Students are responsible for obtaining information about school closings and delays. Call 704-687-2877 or visit the home page at <http://www.uncc.edu/> for information about University closings or delays.

Faculty may have need, related to weather or other circumstances, to cancel classes unexpectedly. Every effort will be made to notify students of these changes in advance. This notification is typically accomplished via email communication to student UNC Charlotte email account and/or a notice placed on the classroom door.

Other Student Services

Data Science Initiative Student Organization (DSI SO)

The DSI SO serves the purpose of organizing programs, events, and meetings for current students of DSI academic programs. This organization creates opportunities to network with colleagues, professionals and alumni. The aim is to share, discuss and collaborate on various ideas and advance both academically and professionally in the analytics domain.

Contact the organizations officers for further details. Follow DSISO on Facebook: <https://www.facebook.com/UNCC.DSI.STUDENTS.ALUMNI.JOBREFERRALS/> .

Career Services

The UNC Charlotte Career Center for Work, Service, and Internships offers career development services to both graduate and undergraduate students. The office is located at 150 Atkins Building. This office exists to serve students who need assistance in making a successful transition from college or graduate school to their chosen field or career. Their contact information is, Phone: 704-687-0795, E-mail: career@uncc.edu, and internet: <http://www.career.uncc.edu>.

Student services offered by the Career Planning and Placement Office include workshops on career planning, internships, resumes and cover letters, and effective interviewing.

Center for Graduate Life

The Graduate School at UNC Charlotte offers a broad array of professional development activities throughout the year, including career fairs, funding opportunities, and special guest speakers. Please visit <http://gradlife.uncc.edu/what-we-offer/workshops-seminars> for additional details. Additionally, The HIAN Program Director notifies students about these opportunities through their 49er E-mail accounts.