

INFORMATION TECHNOLOGY (IT) INNOVATION, BACHELOR OF SCIENCE

The IT Innovation (ITIN) program involves the study of entrepreneurship as it relates to IT and an individual field of interest. Courses in this degree program are listed in the catalog as IT Innovation (ITIN).

Why major in IT Innovation?

- To have flexibility in designing your own curriculum
- To be able to take more courses that are aligned with your career goals
- To be prepared to be an entrepreneur (an ambitious leader who combines his/her ideas with labor and capital to create and market new goods or services)
- To be prepared to be an intrapreneur (using entrepreneurial skills as an employee within an established organization)
- To have a degree that appeals to a wide variety of potential employers

The IT Innovation degree has three simple but distinguishing features:

1. You pick 33 credit hours from anywhere on campus that line up with your career goals.
2. You participate in seminars, workshops, and conferences on entrepreneurship.
3. You take a solid core of IT courses, plus a two-semester senior capstone course where:
 - You have an idea for a new IT product or service.
 - You document your idea's technical and market feasibility.
 - You carry your idea through to prototype stage.

Student Groups

UNO's IT Innovation students are invited to join the Information Technology Innovation Group (IT Inc.) (<https://www.unomaha.edu/college-of-information-science-and-technology/school-of-interdisciplinary-informatics/student-involvement/>)

Fast Track

The School of Interdisciplinary Informatics (SI2) has developed a Fast Track program for highly qualified and motivated students providing the opportunity to complete a bachelor's degree and a master's degree in an accelerated time frame. With Fast Track, students may count up to 9 graduate credit hours towards the completion of their undergraduate program as well as the graduate degree program. Students will work with both undergraduate and graduate advisors to ensure graduate classes selected will count toward both programs, should a student wish to earn a graduate degree in a separate College of Information Science & Technology (CIST) area than their undergraduate degree.

Program Specifics:

- This program is available for undergraduate students pursuing any CIST undergraduate degree desiring to pursue an MS in either the same or a related CIST field.
- Students must have completed no less than 60 undergraduate hours.
- Students must have a minimum undergraduate GPA of 3.0.
- Students must complete the Fast Track Approval form and obtain all signatures and submit to the Office of Graduate Studies prior to first enrollment in a graduate course.

- Students will work with their undergraduate advisor to register for the graduate courses.
- A minimum cumulative GPA of 3.0 is required for graduate coursework to remain in good standing.
- Students remain undergraduates until they meet all the requirements for the undergraduate degree and are eligible for all rights and privileges granted undergraduate status including financial aid.
- Near the end of the undergraduate program, formal application to the graduate program is required. All applicants will need to meet any other admission requirements established for the MS in selected CIST program. The application fee will be waived if the applicant contacts the Office of Graduate Studies for a fee waiver code prior to submitting the MS application.
 - Admission to Fast Track does NOT guarantee admission to the graduate program.
 - The admit term must be after the completion term of the undergraduate degree.

Contact

For more information, contact the College of IS&T Academic Advising Office at 402.554.3819.

Website (<https://www.unomaha.edu/college-of-information-science-and-technology/school-of-interdisciplinary-informatics/it-innovation/>)

Requirements

A minimum of 120 credit hours is required for a Bachelor of Science degree in IT Innovation. Thirty of the last 36 hours must be University of Nebraska at Omaha (UNO) courses. Registering for courses without having taken the stated prerequisites could result in administrative withdrawal.

To obtain a Bachelor of Science degree in IT Innovation, a student must fulfill the university, college and departmental requirements. Some courses may satisfy requirements in more than one area, but credit is awarded only once, thereby reducing the total number of credit hours for the degree to 120. (This total does not include prerequisites.)

Code	Title	Credits
	University General Education (46 hours, 18 of which can be satisfied by courses in the required areas below)	28
	College of IS&T Core	18
	ITIN Core	24
	ITIN Track	12-15
	Area of Emphasis	33
	Electives	3-5
	Total Credits	120

College of IS&T Core for ITIN Majors, ITIN Core, ITIN Track, and Area of Emphasis Courses

Code	Title	Credits
College of IS&T Core for ITIN Majors		18
CYBR 1100	INTRODUCTION TO INFORMATION SECURITY ¹	3
CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I	3
CIST 2100	ORGANIZATIONS, APPLICATIONS AND TECHNOLOGY ²	3
CIST 3110	INFORMATION TECHNOLOGY ETHICS ³	3
ISQA 3310	MANAGING THE DATABASE ENVIRONMENT	3
ISQA 4150	ADVANCED STATISTICAL METHODS FOR IS&T	3
	ITIN Core	24

ITIN 1010	ACTIVATING INNOVATION IN SOCIETY ²	3
ITIN 1110	INTRODUCTION TO IT INNOVATION	3
ITIN 2220	APPLIED I.T. INNOVATION	3
ITIN 2990	I.T. INNOVATION SYMPOSIUM ⁴	3
ITIN 3330	PRODUCT DESIGN AND DEVELOPMENT	3
ITIN 4440	AGILE DEVELOPMENT METHODS	3
ITIN 4980	INFORMATION TECHNOLOGY INNOVATION CAPSTONE PROJECT I	3
ITIN 4990	INFORMATION TECHNOLOGY INNOVATION CAPSTONE PROJECT PART II	3
ITIN Track		12-15
Each student must select one of the tracks below.		
Area of Emphasis*		33
Approval of ITIN Undergraduate Program Committee members required prior to enrollment in courses		
Electives		3-5
Total Credits		120

ITIN Tracks

In addition to the above IS&T courses, ITIN core courses, and the Area of Emphasis courses, all of which are required of all ITIN majors, each ITIN major must also select a track (below). The three tracks are Software Development, Analytics & Statistics, and Digital Humanities.

Software Development track (12 - 15 hours)

Code	Title	Credits
CSCI 1620	INTRODUCTION TO COMPUTER SCIENCE II	3
CSCI 2240	INTRODUCTION TO C PROGRAMMING	3
MATH 1930	CALCULUS FOR THE MANAGERIAL, LIFE, AND SOCIAL SCIENCES	3
or MATH 1950	CALCULUS I	
CIST 2500	INTRODUCTION TO APPLIED STATISTICS FOR IS&T	3

Data Analytics & Statistics track (15 hours)

Code	Title	Credits
CIST 2500	INTRODUCTION TO APPLIED STATISTICS FOR IS&T	3
CIST 1600	INTRODUCTION TO PROGRAMMING USING PRACTICAL SCRIPTING	3
MATH 1950	CALCULUS I	5
MATH 2050	APPLIED LINEAR ALGEBRA	3

Digital Humanities track (12 hours)

Code	Title	Credits
CIST 2500	INTRODUCTION TO APPLIED STATISTICS FOR IS&T	3
ISQA 4900	FULL STACK DEVELOPMENT	3
MATH 1320	PRE-CALCULUS ALGEBRA	3
SOC 2130	SOCIAL STATISTICS	3

¹ CYBR 1100 counts toward Global Diversity requirement.

² CIST 2100 and ITIN 1010 counts toward Social Sciences requirement.

³ CIST 3110 counts toward Humanities requirement.

⁴ ITIN 2990 is normally a 1 credit course that is taken three times, for a total of 3 credits

* Students are encouraged to submit their area of emphasis proposal at the end of their sophomore year and/or after they complete or are about to complete ITIN 2220. Proposed courses for the area of emphasis cannot include courses that are already part of the required core curriculum for ITIN and the required core curriculum for all IS&T majors (including prerequisites like IS&T 1300, etc.). In addition, the student cannot include a course that is already being used to satisfy general education requirements. The Program Committee expects courses to be mostly upper level, although it is understood that, sometimes, lower level courses are appropriate (because they may be the only place where necessary skills can be learned, or they may be required prerequisites for necessary upper level courses, or they are sufficiently rigorous despite their lower level designation).

Writing in the Discipline

All UNO students are required to take a writing-in-the-discipline course within their major. ITIN degree students must take CIST 3000

Second Bachelor's Degree for IT Innovation General Requirements

Students who have satisfied the requirements for a first bachelor's degree other than IT Innovation (ITIN) at the University of Nebraska at Omaha must complete a **minimum** of 30 additional semester hours at the University for a second bachelor's degree.

IT Innovation Requirements (87 hours)

To obtain IT Innovation as a second Bachelor's degree, students must complete academic requirements for the degree which include 6 credit hours of Mathematics courses, 24 credit hours of required IS&T core courses, 24 credit hours of required ITIN core courses, and 33 credit hours of area of emphasis courses. (Approval of the area of emphasis courses by the ITIN Undergraduate Program Committee is required prior to course enrollment.) Students must consult an academic advisor in the College of IS&T prior to starting this program. Some transfer coursework may apply; however, 30 of the last 36 hours for the degree must be University of Nebraska at Omaha courses.

Minor Offered

- ITIN Minor (<http://catalog.unomaha.edu/undergraduate/college-information-science-technology/school-interdisciplinary-informatics-si2/itin-minor/>)

IT Innovation with Data Analytics and Statistics Track**First Year**

Fall		Credits
ENGL 1150	ENGLISH COMPOSITION I	3
ITIN 1010	ACTIVATING INNOVATION IN SOCIETY	3
CIST 1600	INTRODUCTION TO PROGRAMMING USING PRACTICAL SCRIPTING	3
MATH 1950	CALCULUS I ¹	5
Free Elective		1
Credits		15

Spring

ITIN 1110	INTRODUCTION TO IT INNOVATION	3
MATH 2050	APPLIED LINEAR ALGEBRA	3
ENGL 1160	ENGLISH COMPOSITION II	3
CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I	3
CYBR 1100	INTRODUCTION TO INFORMATION SECURITY	3
Credits		15

Second Year

Fall		
ITIN 2220	APPLIED I.T. INNOVATION	3
ITIN 2990	I.T. INNOVATION SYMPOSIUM	1
CIST 2100	ORGANIZATIONS, APPLICATIONS AND TECHNOLOGY	3
CIST 2500	INTRODUCTION TO APPLIED STATISTICS FOR IS&T	3
Natural/Physical Science Requirement		3
Free Elective		2

Credits 15

Spring		
CIST 3110	INFORMATION TECHNOLOGY ETHICS	3
ISQA 3310	MANAGING THE DATABASE ENVIRONMENT	3
ITIN 2990	I.T. INNOVATION SYMPOSIUM	1
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE	3
ISQA 4150	ADVANCED STATISTICAL METHODS FOR IS&T	3
Social Science/ US Diversity		3

Credits 16

Third Year

Fall		
ITIN 3330	PRODUCT DESIGN AND DEVELOPMENT	3
ITIN 2990	I.T. INNOVATION SYMPOSIUM	1
Humanities & Fine Arts Requirement		3
Natural/Physical Sciences Requirement with Lab		4
Area of Emphasis		3

Credits 14

Spring		
ITIN 4440	AGILE DEVELOPMENT METHODS	3
CIST 3000	ADVANCED COMPOSITION FOR IS&T	3
Humanities & Fine Arts Requirement		3
Area of Emphasis		3
Area of Emphasis		3

Credits 15

Fourth Year

Fall		
ITIN 4980	INFORMATION TECHNOLOGY INNOVATION CAPSTONE PROJECT I	3
Area of Emphasis		3
Area of Emphasis		3
Area of Emphasis		3
Area of Emphasis		3

Credits 15

Spring		
ITIN 4990	INFORMATION TECHNOLOGY INNOVATION CAPSTONE PROJECT PART II	3
Area of Emphasis		3
Area of Emphasis		3
Area of Emphasis		3
Area of Emphasis		3

Credits 15

Total Credits 120

IT Innovation with Digital Humanities Track

First Year			Credits
Fall			
ENGL 1150	ENGLISH COMPOSITION I		3
ITIN 1010	ACTIVATING INNOVATION IN SOCIETY		3
ITIN 1110	INTRODUCTION TO IT INNOVATION		3
MATH 1320	PRE-CALCULUS ALGEBRA ((or Test Out))		3
CIST 1300	INTRODUCTION TO WEB DEVELOPMENT		3
Free Elective			1

Credits 16

Spring			Credits
ENGL 1160	ENGLISH COMPOSITION II		3
CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I		3
CYBR 1100	INTRODUCTION TO INFORMATION SECURITY		3
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE		3
Natural/Physical Sciences Requirement			3

Credits 15

Second Year

Fall			Credits
ITIN 2220	APPLIED I.T. INNOVATION		3
ITIN 2990	I.T. INNOVATION SYMPOSIUM		1
CIST 2100	ORGANIZATIONS, APPLICATIONS AND TECHNOLOGY		3
CIST 2500	INTRODUCTION TO APPLIED STATISTICS FOR IS&T		3
Natural/Physical Sciences Requirement with Lab			4

Credits 14

Spring			Credits
CIST 3110	INFORMATION TECHNOLOGY ETHICS		3
ISQA 3310	MANAGING THE DATABASE ENVIRONMENT		3
ITIN 2990	I.T. INNOVATION SYMPOSIUM		1
SOC 2130	SOCIAL STATISTICS		3
Humanities & Fine Arts Requirement			3
US Diversity/Social Sciences Requirement			3

Credits 16

Third Year

Fall			Credits
ITIN 3330	PRODUCT DESIGN AND DEVELOPMENT		3
ISQA 4900	FULL STACK DEVELOPMENT		3
CIST 3000	ADVANCED COMPOSITION FOR IS&T		3
ITIN 2990	I.T. INNOVATION SYMPOSIUM		1
Area of Emphasis			3
Humanities & Fine Arts			3

Credits 16

Spring			Credits
ITIN 4440	AGILE DEVELOPMENT METHODS		3
ISQA 4150	ADVANCED STATISTICAL METHODS FOR IS&T		3
Area of Emphasis			3
Area of Emphasis			3
Area of Emphasis			3

Credits 15

Fourth Year

Fall		
ITIN 4980	INFORMATION TECHNOLOGY INNOVATION CAPSTONE PROJECT I	3
Area of Emphasis		3
Area of Emphasis		3
Area of Emphasis		3
Area of Emphasis		3
Credits		15
Spring		
ITIN 4990	INFORMATION TECHNOLOGY INNOVATION CAPSTONE PROJECT PART II	3
Area of Emphasis		3
Area of Emphasis		3
Area of Emphasis		3
Free Elective		1
Credits		13
Total Credits		120

IT Innovation with Software Development Track**First Year**

Fall		Credits
ENGL 1150	ENGLISH COMPOSITION I	3
ITIN 1010	ACTIVATING INNOVATION IN SOCIETY	3
ITIN 1110	INTRODUCTION TO IT INNOVATION	3
MATH 1930	CALCULUS FOR THE MANAGERIAL, LIFE, AND SOCIAL SCIENCES ¹	3
CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I	3
Free Elective		1
Credits		16
Spring		
ENGL 1160	ENGLISH COMPOSITION II	3
CSCI 1620	INTRODUCTION TO COMPUTER SCIENCE II	3
CYBR 1100	INTRODUCTION TO INFORMATION SECURITY	3
CMST 1110 or CMST 2120	PUBLIC SPEAKING FUNDS or ARGUMENTATION AND DEBATE	3
Natural/Physical Sciences Requirement with Lab		4
Credits		16

Second Year

Fall		
CSCI 2240	INTRODUCTION TO C PROGRAMMING	3
ITIN 2220	APPLIED I.T. INNOVATION	3
ITIN 2990	I.T. INNOVATION SYMPOSIUM	1
CIST 2100	ORGANIZATIONS, APPLICATIONS AND TECHNOLOGY	3
CIST 2500	INTRODUCTION TO APPLIED STATISTICS FOR IS&T	3
Credits		13
Spring		
CIST 3110	INFORMATION TECHNOLOGY ETHICS	3
ISQA 3310	MANAGING THE DATABASE ENVIRONMENT	3
ITIN 2990	I.T. INNOVATION SYMPOSIUM	1

Humanities & Fine Arts Requirement	3
Free Elective	1
Natural/Physical Sciences Requirement	3
Credits	
	14

Third Year

Fall		
ITIN 3330	PRODUCT DESIGN AND DEVELOPMENT	3
CIST 3000	ADVANCED COMPOSITION FOR IS&T	3
ITIN 2990	I.T. INNOVATION SYMPOSIUM	1
Humanities & Fine Arts Requirement		3
Area of Emphasis		3
US Diversity/Social Sciences Requirement		3
Credits		16
Spring		
ITIN 4440	AGILE DEVELOPMENT METHODS	3
ISQA 4150	ADVANCED STATISTICAL METHODS FOR IS&T	3
Area of Emphasis		3
Area of Emphasis		3
Area of Emphasis		3
Credits		15

Fourth Year

Fall		
ITIN 4980	INFORMATION TECHNOLOGY INNOVATION CAPSTONE PROJECT I	3
Area of Emphasis		3
Area of Emphasis		3
Area of Emphasis		3
Area of Emphasis		3
Credits		15
Spring		
ITIN 4990	INFORMATION TECHNOLOGY INNOVATION CAPSTONE PROJECT PART II	3
Area of Emphasis		3
Area of Emphasis		3
Area of Emphasis		3
Free Elective		3
Credits		15
Total Credits		120

This roadmap is a suggested plan of study and does not replace meeting with an advisor. Please note that students may need to adjust the actual sequence of courses based on course availability. Please consult an advisor in your major program for further guidance.

This plan is not a contract and curriculum is subject to change

Additional Information About this Plan:

University Degree Requirements: The minimum number of hours for a UNO undergraduate degree is 120 credit hours. Please review the requirements for your specific program to determine all requirements for the program. In order to graduate on-time (four years for an undergraduate degree), you need to take 30 hours each year.

Placement Exams: For Math, English, Foreign Language, a placement exam may be required. More information on these exams can be found at <https://www.unomaha.edu/enrollment-management/testing-center/placement-exams/information.php>

**Transfer credit or placement exam scores may change suggested plan of study

ITIN 1010 ACTIVATING INNOVATION IN SOCIETY (3 credits)

This course surveys and applies the use of qualitative methods, especially interview-based research, in order to maximize the insight that informs and activates the innovation process, with emphasis on technological innovation.

Prerequisite(s): Not open to non-degree graduate students.

Distribution: Social Science General Education course

ITIN 1110 INTRODUCTION TO IT INNOVATION (3 credits)

In almost every modern human endeavor, creativity and Information Technology are essential. In the Internet age, information has become a commodity that is available to everyone. Similarly, current technology has largely become commoditized. Therefore, creating new value is becoming the basis for successful professionals. This course introduces students to tools, techniques, and methods for generating innovative information technology ideas and solutions. It teaches them to think about future possibilities and equips them with the ability to critically evaluate proposed innovations and ideas. The goal of the course is to increase students' ability to creatively solve challenging problems in new ways using information technology. This class is inherently interdisciplinary as IT now touches every aspect of modern academic pursuits.

Prerequisite(s): Not open to non-degree graduate students.

ITIN 2150 AUDIO FOR MULTIMEDIA (3 credits)

This course provides an overview of audio production techniques as they pertain to multimedia.

Prerequisite(s): Not open to non-degree graduate students.

ITIN 2220 APPLIED IT INNOVATION (3 credits)

The course extends the concepts learned in the Introduction to IT Innovation course and focuses on market dynamics and monetizing innovations. It moves past idea generation and focuses on identifying and gathering resources, innovation implementation, sustainable innovation models and how ideas can be monetized. The goal is for students to take their original ideas from concept to initial implementation with thoughts towards commercialization. Upon completing the course, students will have created at least a rudimentary implementation of an original idea and have a defensible plan for how the idea can be monetized.

Prerequisite(s): ITIN 1110 & CIST 1400. Not open to non-degree graduate students.

ITIN 2990 IT INNOVATION SYMPOSIUM (1 credit)

The seminar exposes students to information technology innovators from multiple industries and varied backgrounds. It teaches the practical aspects of IT Innovation from those that have done it and are doing it in both research and practice. The purpose is to cause students to reflect on applying innovation to the real-world, connect them to the innovation community and to equip them with best practices and tools to make their innovations a reality.

Prerequisite(s): Enrollment in the IT Innovation Major or IT Innovation Minor. Not open to non-degree graduate students.

ITIN 3100 MUSIC INFORMATICS (3 credits)

Surveys the use of digital music data in the study, composition, performance, analysis, storage, and dissemination of music. Various computational approaches and technologies in music informatics including music information retrieval will be explored and implemented by students. (Cross-listed with MUS 3100).

Prerequisite(s): Successful completion of one of the following three courses satisfies the prerequisite requirement: CIST 1300 or MUS 3170 or MUS 3180. Not open to non-degree graduate students.

ITIN 3180 ELECTRONIC MUSIC PRODUCTION (3 credits)

An exploration of the potentials of electronic music. Concepts of electronic music are presented through the use of a computer, software, and appropriate hardware. Students create assignments that demonstrate the application of basic techniques. (Cross-listed with MUS 3180).

ITIN 3330 PRODUCT DESIGN AND DEVELOPMENT (3 credits)

This course will cover elements and principles of excellent product design and development. The history of design will be reviewed and overarching tenets of design will be introduced. The course will particularly focus on innovation and students will be expected to develop an original concept and create quality designs and low-fidelity prototype implementations of their unique idea. The proposed solutions must be novel and meet a real-world market need. This course will be hands-on and will examine developmental models for innovation.

Prerequisite(s): ITIN 2220. Not open to non-degree graduate students.

ITIN 4000 SPECIAL TOPICS IN IT INNOVATION (3 credits)

This course is designed to acquaint students with issues which are current to the field or emerging trends in the IT Innovation area. Topics will vary across terms. This course may be repeated, but no topic may be taken more than once. (Cross-listed with ITIN 8006).

Prerequisite(s): Permission of instructor. Additional prerequisites may be required for particular topic offerings.

ITIN 4090 MANAGING COLLABORATIVE ENGAGEMENT (3 credits)

This course will provide students with the opportunity to develop knowledge and strategies for leading teams, enhancing collaboration, building consensus, problem solving in teams, facilitating group processes, and designing collaborative workspaces. (Cross-listed with BSAD 8096, MGMT 4090).

Prerequisite(s): Junior standing or permission of instructor.

ITIN 4260 USER EXPERIENCE DESIGN (3 credits)

User experience (UX) design is concerned with the application of user-centered design principles to the creation of computer interfaces ranging from traditional desktop and web-based applications, mobile and embedded interfaces, and ubiquitous computing. This course provides in-depth, hands-on experience with real world application of the iterative user-centered process including contextual inquiry, task analysis, design ideation, rapid prototyping, interface evaluation, and reporting usability findings. (Cross-listed with CSCI 4260, CSCI 8266, ITIN 8266).

Prerequisite(s): Required: C- or better in CIST 2500 and junior standing, or by permission of instructor. Recommended: C- or better in CSCI 4250 or ITIN 3330.

ITIN 4440 AGILE DEVELOPMENT METHODS (3 credits)

The course presents an introduction to agile development methods for IT application development. Students will also learn Unified Modeling Techniques as they go through the agile iterations. This course is a foundation course for the IT Innovation capstone course.

Prerequisite(s): CSCI 4850 or ISQA 3310. Not open to non-degree graduate students.

ITIN 4500 INDEPENDENT STUDIES (1-3 credits)

A variable credit course for the junior or senior who will benefit from independent reading assignments and research type problems. Independent study makes available courses of study not available in scheduled course offerings. The student wishing to take an independent study course should find a faculty member willing to supervise the course and then submit, for approval, a written proposal (including amount of credit) to the IT Innovation Undergraduate Program Committee at least three weeks prior to registration.

Prerequisite(s): Written permission required.

ITIN 4510 INFORMATION TECHNOLOGY INNOVATION INTERNSHIP (1-3 credits)

The purpose of this course is to provide the students with an opportunity for practical application and further development of knowledge and skills acquired in the ITIN undergraduate program. The internship gives students professional work experience and exposure to the challenges and opportunities faced by professionals in the workplace.

Prerequisite(s): Junior/Senior standing and permission of School of interdisciplinary Informatics Director. Not open to non-degree graduate students.

ITIN 4720 INNOVATION VENTURES (3 credits)

This team-based course provides students with the opportunity to practice the basic tools of business discovery and validation, both as an instrument for new venture formation and as a core capability for addressing challenges in competitive landscapes. As such, the course lies at the intersection of innovation, entrepreneurship and strategy. Students will develop practical experience by experimenting with and refining business ideas. (Cross-listed with BSAD 8726, ENTR 4720, ITIN 8256, MGMT 4720, MKT 4720).

Prerequisite(s): ITIN 1110 and junior standing or above or by instructor permission.

ITIN 4880 SYSTEMS SIMULATION AND MODELING (3 credits)

The course provides an introduction to the modeling and simulation with special emphasis on decision-theoretic models and rational decision-making. The ability to make good decisions is key to individuals and organizations and studying, understanding and improving decisions is vital to success. Students are given a background into systematic decision-making processes, and then are introduced to formal methods for decision modeling and analysis. Building on these foundational models, students learn how to perform process modeling and optimization. Finally, the course concludes with a look at psychological biases and traps that may affect decision-makers. (Cross-listed with ISQA 4880).

Prerequisite(s): CIST 1400, CIST 2500, or equivalent.

ITIN 4980 INFORMATION TECHNOLOGY INNOVATION CAPSTONE PROJECT I (3 credits)

This course serves as Part 1 of the capstone project for the Information Technology Innovation program. As such the student will design a prototype of an IT product or service as well as a business case pertaining to what is required to launch their project commercially. This effort will be under the guidance of an advisory committee.

Prerequisite(s): ITIN 4440. ITIN 4980 is for seniors who are enrolled in the BS in IT innovation degree. Before enrolling in ITIN 4980, a student must gain approval, from the ITIN Program Committee, of their Area of Emphasis. Not open to non-degree graduate students.

ITIN 4990 INFORMATION TECHNOLOGY INNOVATION CAPSTONE PROJECT PART II (3 credits)

This course serves as Part 2 of the capstone project for the Information Technology Innovation program. Following the designs and business plan developed in Part I ITIN 4980, the student will create a prototype of an IT product or service as well as refine and implement the required business aspects involved in launching their project commercially. This effort will be under the guidance of an advisory committee.

Prerequisite(s): ITIN 4980. This course is for seniors who are enrolled in the BS in IT Innovation degree. Not open to non-degree graduate students.