New Program Proposal

Date Submitted: 09/05/25 1:49 pm

Viewing: BS-BCYB : Bachelor of Science in Business and Cybersecurity

Last edit: 09/05/25 1:49 pm

Changes proposed by: skang21

Program Status	Active			
Requestor	Name	Sang-Baum Kang	E-mail	skang21@stuart.iit.edu
Origination Date	2025-9-5			
Is this an interdisciplinary program?	Yes			
Academic Unit	Business Administration		College	Stuart School of Business

Contributing Academic Unit(s)	Academic Units
	Information Technology & Mgmt

Program Title	Bachelor of Science in Business and Cybersecurity		
Effective Academic Year	2025 - 2026	Effective Term	Fall 2025
Academic Level	Undergraduate		

In Workflow

1. SB Interdisciplinary Curriculum Committee Chair
2. Academic Affairs
3. Undergraduate Academic Affairs
4. Director of Assessment
5. SB Dean
6. Marketing and Communications
7. Undergraduate Studies Committee Chair
8. Faculty Council Chair
9. Faculty Council Chair
10. Provost
11. President
12. Board of Trustees
13. Academic Affairs

Approval Path

1. 03/16/25 8:00 pm Roland Calia (rcalia): Approved for SB Interdisciplinary

If all courses in a subject in your department are required, please enter each subject followed by the number ranges in the "Quick Add" field in the pop up box when you click the green plus button below. For example: ARCH 100-499.

What courses will factor the major GPA?	BUS 100 to 499 - Course BUS 100 to 499 not Found
	ECON 100 to 499 - Course ECON 100 to 499 not Found
	ITM 100 to 499 - Course ITM 100 to 499 not Found
	ITMD 100 to 499 - Course ITMD 100 to 499 not Found
	ITMM 100 to 499 - Course ITMM 100 to 499 not Found
	ITMO 100 to 499 - Course ITMO 100 to 499 not Found
	ITMS 100 to 499 - Course ITMS 100 to 499 not Found
	ITMT 100 to 499 - Course ITMT 100 to 499 not Found
Program Type	Degree
Degree Type	Bachelor of Science (BS)
CIP Code	11.1003 - Computer and Information Systems Security/Auditing/Information Assurance.
Program Code	BS-BCYB
Program Attribute	
Total Program Credit Hours	120

Program Narrative and Justification

Curriculum Committee Chair

2. 03/17/25 10:40 am Ayesha Qamer (aqamer): Approved for Academic Affairs

3. 03/17/25 10:55 am Joseph Gorzkowski (jgorzkow): Approved for Undergraduate Academic Affairs

4. 03/21/25 12:27 pm Nicholas Menhart (menhart): Approved for Director of Assessment

5. 03/21/25 2:19 pm Rich Klein (rklein6): Approved for SB Dean

6. 06/30/25 3:19 pm Ayesha Qamer (aqamer): Rollback to Initiator

7. 08/24/25 5:43 pm Roland Calia (rcalia): Approved for SB Interdisciplinary Curriculum Committee Chair

8. 09/03/25 1:24 pm Ayesha Qamer

(aqamer): Approved for Academic Affairs

9. 09/03/25 2:23 pm Joseph Gorzkowski (jgorzkow): Approved for Undergraduate Academic Affairs

10. 09/03/25 6:41 pm Nicholas Menhart (menhart): Approved for Director of Assessment

11. 09/03/25 7:36 pm Rich Klein (rklein6): Approved for SB Dean

12. 09/05/25 10:12 am Ayesha Qamer (aqamer): Rollback to Initiator

13. 09/05/25 1:50 pm Roland Calia (rcalia): Approved for SB Interdisciplinary Curriculum Committee Chair

14. 09/05/25 1:57 pm Ayesha Qamer (aqamer): Approved for Academic Affairs

15. 09/05/25 2:11 pm Joseph Gorzkowski

(jgorzkow):
Approved for
Undergraduate
Academic Affairs

Narrative description of how the institution determined the need for the program. For example, describe what need this program will address and how the institution became aware of that need. If the program is replacing a current program(s), identify the current program(s) that is being replaced by the new program(s) and provide details describing the benefits of the new program(s). If the program will be offered in connection with, or in response to, an initative by a governmental entity, provide details of that initiative.

> The Bachelor of Science in Business and Cybersecurity degree is a cross-disciplinary program that provides a technical and security-focused degree with a firm grounding in business. The curriculum combines core economics and business knowledge with an understanding of the conceptual and practical computer science and cybersecurity skills that will enable them to contribute to ensuring the reliability and security of cyberspace. Graduates will be prepared to become cybersecurity and information technology practitioners, investigators, managers, and leaders in one of the fastest growing job sectors.
>
> This program replaces the Bachelor of Science in Economics and Cybersecurity degree. This new degree program gives students choices of their studies within the economics and business domain. Students can choose upper-year economics courses or advanced finance, marketing, and business administration courses, depending on their career goals and academic interests. Like the Bachelor of Science in Economics and Cybersecurity degree, this program is also part of the incubator program. https://catalog.iit.edu/undergraduate/undergraduate-education/special-programs/#Incubator

Narrative description of how the program was designed to meet local market needs, or for an online program, regional or national market needs. For example, indicate if Bureau of Labor Statistics data or State labor data systems information was used, and/or if State, regional, or local workforce agencies were consulted. Include how the course content, program length, academic level, admission requirements, and prerequisites were decided; including information received from potential employers about course content; and information regarding the target students and employers.

> The Stuart School of Business developed the Bachelor of Science in Business and Cybersecurity program in consultation with the faculty and leadership of the Department of Information Technology and Management in the College of Computing, as well as industry experts and practitioners.

Narrative description of any wage analysis the institution may have performed, including any consideration of Bureau of Labor Statistics wage data related to the new program.

> A Bachelor of Science in Business and Cybersecurity degree can provide excellent preparation for private sector job markets, particularly in the technology sector. According to the Bureau of Labor Statistics, students with this degree have a relatively high mean salary of between $10,000 to $113,000. The job outlook is good, with job growth projected to increase by 33% for information security analysts and 36% for data science analysts for the next 10 years. See https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm and https://www.bls.gov/ooh/math/data-scientists.htm.

Narrative description of how the program was reviewed or approved by, or developed in conjunction with, one or more of the following: a) business advisory committees; b) program integrity boards; c) public or private oversight or regulatory agencies (not including the state licensing/authorization agency and accrediting agency); and d) businesses that would likely employ graduates of the program. For example, describe the steps taken to develop the program, identify when and with whom discussions were held, provide relevant details of any proposals or correspondence generated, and/or describe any process used to evaluate the program.

> The Bachelor of Science in Business and Cybersecurity was developed by the Stuart School of Business faculty in consultation with the faculty and leadership of the Department of Information Technology and Management in the College of Computing, industry experts, and practitioners.

Admission Entry Details

Available Fall Admit	Yes	Available Spring Admit	Yes	Available Summer Admit	No
Available On Campus	Yes			Available Online	No
Available Full-Time	Yes			Available Part-Time	Yes
Available International	Yes			Available Domestic	Yes

What are the enrollment estimates?

Year 1	5	Year 2	10	Year 3	12

Attach Additional   Curriculum BS Business Cybersecurity 20250728.pdf
Program
Justification
Document(s)

Academic Information

Advising

Since quality advising is a key component of good retention, graduation, and career placement, how will students be mentored? What student professional organizations will be formed? How will the department work with the Career Services office to develop industry connections?

Students will be primarily advised by the Stuart Undergraduate Program Director with the assistance of a designated advisor in the Department of Information Technology and Management.

Program Resources

Which program   Personnel
resources are   Facilities
necessary to offer
this program?

Describe the personnel requirements necessary to offer the program. Describe how and when resources will be made available to hire any additional personnel that are required.

No new personnel are required.

Describe the facilities requirements necessary to offer the program. Describe how and when resources will be made available to obtain any additional facilities that are required.

No new facilities are required.

Proposed Catalog Entry

Admission   The B.S. in Business and Cybersecurity degree will give students a strong foundation in
Requirements   business, economics, quantitative analysis, and technology. The curriculum will cover

accounting, finance, econometrics, marketing analytics, data analytics, and data visualization. Students will develop deep expertise in business concepts and strong quantitative and analytical skills, enabling them to bridge business and technology effectively.

Illinois Tech undergraduate admission requirements can be found at http://bulletin.iit.edu/undergraduate/undergraduate-admission/.

Course Requirements

Business Core Required Courses		(36)
BUS 100	Introduction to Business and Economics	3
BUS 211	Financial Accounting	3
BUS 212	Managerial Accounting	3
BUS 221	Business Statistics	3
BUS 301	Organizational Behavior	3
BUS 305	Operation and Supply Chain Analytics	3
BUS 321	Analytics for Optimization	3
BUS 351	Financial Decision Making and Capital Budgeting	3
or ECON 423	Economics of Capital Investments	
BUS 371	Marketing Fundamentals	3
BUS 480	Strategic Management and Design Thinking	3
ECON 151	Microeconomics	3
ECON 152	Macroeconomics	3
Information Technology and Cybersecurity Required Courses		(36)
ITM 301	Introduction to Contemporary Operating Systems and Hardware I	3
ITM 313	Introduction to Open Source Application Development [1]	3
ITMD 321	Data Modeling and Applications	3

ITMO 340	Introduction to Data Networks and the Internet	3
ITMO 356	Introduction to Open Source Operating Systems	3
ITMS 418	Coding Security [2]	3
ITMS 438	Cyber Forensics	3
ITMS 443	Vulnerability Analysis and Control	3
ITMS 448	Cyber Security Technologies	3
ITMS 458	Operating System Security	3
ITMS 478	Cyber Security Management	3
ITMS 483	Digital Evidence	3
Mathematics Requirement		**(7)**
MATH 180	Fundamentals of Discrete Mathematics	3
MATH 148	Preparation for Calculus	4
or MATH 151	Calculus I	
or MATH 191	Business Calculus	
or MATH 192	Finite Mathematics	
Natural Science and Engineering Requirements		**(10)**
See Illinois Tech Core Curriculum, section D		10
Humanities and Social Science Requirements		**(21)**
See Illinois Tech Core Curriculum, section B and C		21
Interprofessional Projects (IPRO)		**(6)**
See Illinois Tech Core Curriculum, section E		6
Free Electives		**(4)**
Select 4 credit hours.		4

Total Credit Hours	120

[1]

ITM 313 satisfies Computer Science Requirement

[2]

Prerequisite ITMD 411--conditional permission to enroll in ITMS 418

Sample Curriculum/
Program
Requirements

Year 1

Semester 1	Credit Hours	Semester 2	Credit Hours
BUS 100	3	ECON 152	3
ECON 151	3	Social Science Elective (200 Level)	3
ITM 301	3	ITM 313[1]	3
Humanities Elective (200 Level)	3	MATH 180	3
MATH 148, 151, 191, or 192	4	Science Elective	4
	16		16

Year 2

Semester 1	Credit Hours	Semester 2	Credit Hours
BUS 211	3	BUS 212	3
BUS 321	3	BUS 221	3
ITMO 340	3	ITMS 448	3
ITMO 356	3	ITMD 321	3
Science Elective	3	Science Elective	3
	15		15

Year 3

Semester 1	Credit Hours	Semester 2	Credit Hours
BUS 301	3	BUS 305	3
BUS 371	3	BUS 351 or ECON 423	3
ITMS 443	3	ITMS 418[2]	3
ITMS 478	3	ITMS 458	3
Humanities Elective (300+)	3	IPRO Elective I	3

	15		15
			Year 4
Semester 1	Credit Hours	Semester 2	Credit Hours
ITMS 438	3	BUS 480	3
Humanities Elective (300+)	3	ITMS 483	3
IPRO Elective II	3	Humanities or Social Science Elective	3
Social Science Elective (300+)	3	Social Science Elective (300+)	3
Free Elective	4		
	16		12

Total Credit Hours: 120

1

ITM 313 satisfies Computer Science Requirement

2

Prerequisite ITMD 411 - conditional permission to enroll in ITM 418

Specialization
Requirements

Program Outcomes and Assessment Process

What are your learning objectives in this program? Please list each learning objective in the boxes below:

Note: These should be the same as described in your assessment plan at the bottom of this form.

Communication Proficiency (Presentation and Oral Communication Skills): Graduates will prepare and deliver effective oral business presentations.

Technological Proficiency: Graduates will demonstrate technological proficiency appropriate for business professionals.

Our graduates will be able to integrate knowledge from multiple disciplines inside and outside business to address business problems and opportunities.

Design and implement an enterprise security program using policy, technology, and awareness to implement appropriate controls and technically secure enterprise information assets and resources to deter, detect, and prevent the success of attacks and intrusions. (This particular LO is subject to change depending on the input from the College of Computing.)

Upload your assessment plan here:	Assessment Plan v2025 Stuart BS Business and Cybersecurity20250823.xlsx

Undergraduate Program Requirements

What courses will factor the major GPA?	BUS 100 to 499 - Course BUS 100 to 499 not Found ECON 100 to 499 - Course ECON 100 to 499 not Found ITM 100 to 499 - Course ITM 100 to 499 not Found ITMD 100 to 499 - Course ITMD 100 to 499 not Found ITMM 100 to 499 - Course ITMM 100 to 499 not Found ITMO 100 to 499 - Course ITMO 100 to 499 not Found ITMS 100 to 499 - Course ITMS 100 to 499 not Found ITMT 100 to 499 - Course ITMT 100 to 499 not Found

Undergraduate Degree Requirements

Minimum credit hours	120
Specialization required?	No

Minor required?   No

Proposed General Curriculum

List Major Course
Requirements

Business Core Required Courses		(36)
BUS 100	Introduction to Business and Economics	3
BUS 211	Financial Accounting	3
BUS 212	Managerial Accounting	3
BUS 221	Business Statistics	3
BUS 301	Organizational Behavior	3
BUS 305	Operation and Supply Chain Analytics	3
BUS 321	Analytics for Optimization	3
BUS 351	Financial Decision Making and Capital Budgeting	3
or ECON 423	Economics of Capital Investments	
BUS 371	Marketing Fundamentals	3
BUS 480	Strategic Management and Design Thinking	3
ECON 151	Microeconomics	3
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ITM 301	Introduction to Contemporary Operating Systems and Hardware I	3
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ITMO 340	Introduction to Data Networks and the Internet	3
ITMO 356	Introduction to Open Source Operating Systems	3
ITMS 418	Coding Security [2]	3
ITMS 438	Cyber Forensics	3
ITMS 443	Vulnerability Analysis and Control	3
ITMS 448	Cyber Security Technologies	3
ITMS 458	Operating System Security	3
ITMS 478	Cyber Security Management	3
ITMS 483	Digital Evidence	3
Total Credit Hours		72

[1]

ITM 313 satisfies Computer Science Requirement

[2]

Prerequisite ITMD 411--conditional permission to enroll in ITMS 418

List Mathematics Requirements		
Mathematics Requirement		**(7)**
MATH 180	Fundamentals of Discrete Mathematics	3
MATH 148	Preparation for Calculus	4
or MATH 151	Calculus I	
or MATH 191	Business Calculus	
or MATH 192	Finite Mathematics	
Total Credit Hours		7
List Science Requirements		

Natural Science and Engineering Requirements	(10)
See Illinois Tech Core Curriculum, section D	10
Total Credit Hours	10
List Computer Science Requirements	
Computer Science Requirement	
Fulfilled by ITM 313	
Total Credit Hours	0
List Humanities and Social Sciences Requirements	
Humanities and Social Science Requirements	(21)
See Illinois Tech Core Curriculum, section B and C	21
Total Credit Hours	21
List Interprofessional Project (IPRO) Requirements	
Interprofessional Projects (IPRO)	
See Illinois Tech Core Curriculum, section E	6
Total Credit Hours	6
List Technical	

Elective Course Options	
List Free Elective Credit Hours (if applicable)	4
Semester-by-semester plan of study for the degree program	

Reviewer Comments	**Ayesha Qamer (aqamer) (06/30/25 3:19 pm):** Rollback: Rollback requested by Sang-Baum Kang
	Ayesha Qamer (aqamer) (09/05/25 10:12 am): Rollback: roll back requested by Sang-Baum Kang

Key: 669