New Program Proposal

Date Submitted: 03/23/23 6:52 pm

Viewing: **BS-BUIT : Bachelor of Science in Business and Information Technology**

Last edit: 03/23/23 6:52 pm

Changes proposed by: rcalia

Program Status	Active			
Requestor	Name	Roland Calia		E-mail
rcalia@stuart.iit.edu				
Origination Date	2023-3-23			
Is this an interdisciplinary program?	No			
Academic Unit	Business Administration			
College	Stuart School of Business			

Program Title

Bachelor of Science in Business and Information Technology

Effective Academic Year	2023 - 2024	Effective Term	Fall 2023
Academic Level	Undergraduate		
Program Type	Degree		

Degree Type

Bachelor of Science (BS)

CIP Code

11.1006 - Computer Support Specialist.

Is there more than one Academic Unit proposer?

No

Program Code	BS-BUIT
Program Attribute	
Total Program Credit Hours	126

Program Narrative and Justification

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.

This program is part of the undergraduate program incubator.
See https://docs.google.com/document/d/1e5Mlgsk_Fh4CJgkSBxhUjW--KqFrzZa3QMAYNd8uDO0/edit

The Bachelor of Science in Business and Information Technology degree is a cross-disciplinary program that prepares graduates for careers at the intersection of business and technology. It provides them with critical thinking skills and technical expertise that prepares them to adapt to changing technological environments, successfully lead teams, and make key strategic management decisions.

The Business and Information Technology STEM curriculum includes a solid foundation in both business and information technology fundamentals. The curriculum explores business management strategies, accounting, data analytics, finance, optimization, entrepreneurship, operations, leadership, data modeling and applications and business computer applications. The program enables graduates to work successfully in technologically-oriented positions across organizations.

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 Bachelor of Science in Business and Information Technology 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 as 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 Information Technology degree can provide an excellent preparation for private sector job markets, particular in the technology sector. Students with degree have a relatively high mean salary of between $93,000 to 100,000 according to the Bureau of Labor Statistics. The job outlook is good, with job growth projected to increase at a range of 9% annually for financial analyst to 36% for data scientists. See https://www.bls.gov/ooh/business-and-financial/financial-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 Information Technology was developed and approved 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 as as well as industry experts and practitioners.

What are the enrollment estimates?

Year 1   5   Year 2   10   Year 3   15

Attach Additional
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 resources are necessary to offer this program?
  Personnel
  Facilities

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 will be 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 will be required.

Proposed Bulletin Entry

Admission
Requirements
  The Bachelor of Science in Business and Information Technology degree is a cross-disciplinary program that prepares graduates for careers at the intersection of business and technology. It provides them with critical thinking skills and technical expertise that prepares them to adapt to changing technological environments, successfully lead teams, and make key strategic management decisions.
  The Business and Information Technology STEM curriculum includes a solid foundation in both business and information technology fundamentals. The curriculum explores business management strategies, accounting, data analytics, finance, optimization, entrepreneurship, operations, leadership, data modeling and applications and business computer applications. The program enables graduates to work successfully in technologically-oriented positions across organizations.

Course Requirements

Business Requirements		(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 Design	3
BUS 321	Optimization and Decision-Making	3
BUS 351	Financial Decision-Making	3
BUS 371	Marketing Fundamentals	3
BUS 480	Strategic Management and Design Thinking	3
ECON 151	Microeconomics	3
ECON 152	Macroeconomics	3
Business Electives		(6)
Choose two courses		6
BUS 311	Strategic Cost Management	3
BUS 341	Business Law	3
BUS 361	Entrepreneurship	3
BUS 452	International Finance	3
BUS 454	Investments	3
BUS 455	Corporate Finance	3
BUS 457	Financial Modeling	3
BUS 458	Financial Derivatives	3
BUS 472	New Product Development	3
BUS 473	Marketing Research	3
BUS 475	Sales Management	3
BUS 476	Consumer Behavior	3
ECON 251	Introduction to Econometrics	3
ECON 311	Intermediate Microeconomics	3
ECON 312	Intermediate Macroeconomics	3
ECON 382	Business Economics	3
ECON 383	Sports Economics	3
Information Technology Required Courses		(36)
ITM 301	Introduction to Contemporary Operating Systems and Hardware I	3
ITM 313	Introduction to Open Source Application Development	3
ITMD 321	Data Modeling and Applications	3
ITMD 361	Fundamentals of Web Development	3
ITMD 362	Human-Computer Interaction and Web Design	3
ITMD 413	Open Source Programming [1]	3
ITMO 340	Introduction to Data Networks and the Internet	3
ITMO 356	Introduction to Open Source Operating Systems	3
ITMM 471	Project Management for Information Technology and Management [2]	3
ITMT 330	Introduction to Information Systems and the IT Profession	3
ITMT 430	System Integration	3
ITMS 448	Cyber Security Technologies	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	
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
Computer Science Requirement	(4) [3]
Free Electives	4
Total Credit Hours	126

[1]
Prerequisite ITMD 411--conditional permission to enroll in ITMD 413

[2]
Prerequisite ITM 100

[3]
ITM 313 satisfies Computer Science Requirement

Program Outcomes and Assessment Process

- -

What are the learning goals for this program?

Learning goal	Courses/student work used to assess achievement of this goal
SSB Common Goal 1 a: Oral Communications Skills Students will prepare and deliver oral presentations that are well-structured, technically competent and make good use of aids to support evidence-driven conclusions. SSB Common Goal 1 b: Written Communications Skills Students will prepare documents in text-based media that are clear, accurate, and appropriate for the intended audience	BUS 305
SSB Common Goal 2: Critical Thinking Skills Students will analyze and critique presented arguments as well as develop well-reasoned arguments that are supported by arguments..	BUS 480
BSBA Analytical Skills - Graduates will possess the analytical skills to support business decision making.	BUS 455
BE Application of Business Principles	BUS 321, BUS 351
ITM 301: Problem solve and create innovative answers to provide technology solutions for the problems of business, industry, government, non-profit organizations, and individuals	ITM 301

Learning goal	Courses/student work used to assess achievement of this goal
See https://itm.iit.edu/data/CourseRubrics/ITM301Rubric.pdf	

In what semesters
will the data be
collected to assess
this learning goal,
and by whom?
  Each semester in which the course is offered.

Provide the name
of the rubric that
will be used to
assess the extent to
which students are
achieving this
learning goal.
  See above

How often and by
whom will the data
be analyzed? What
benchmarks or
targets will be used
to interpret your
results?
  Each semester. The data will be analyzed by assigned faculty evaluators. Benchmarks are set
  by faculty.

Briefly describe the
process that will be
used to share the
results with faculty
and use these to
motivate program
improvement.
  The Program Director meets with faculty on a regular basis to evaluate results of evaluations
  and to develop improvement programs. Students have access to IIT Career Center as well as
  Stuart Career Management Center services.

Attach Additional
Assessment
Document(s)
  SSBCommonCommunication Final.xls
  Application of Business Principles.xlsx
  BUS Analytical Skills.xlsx

Undergraduate Program Requirements

Undergraduate Degree Requirements

Minimum credit hours	126
Specialization required?	No
Minor required?	No

Proposed General Curriculum

List Major Course Requirements

Business Requirements

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 Design	3
BUS 321	Optimization and Decision-Making	3
BUS 351	Financial Decision-Making	3
BUS 371	Marketing Fundamentals	3
BUS 480	Strategic Management and Design Thinking	3
ECON 151	Microeconomics	3
ECON 152	Macroeconomics	3

Information Technology Requirements

ITM 301	Introduction to Contemporary Operating Systems and Hardware I	3
ITM 313	Introduction to Open Source Application Development	3
ITMD 321	Data Modeling and Applications	3
ITMD 361	Fundamentals of Web Development	3
ITMD 362	Human-Computer Interaction and Web Design	3
ITMD 413	Open Source Programming	3
ITMO 340	Introduction to Data Networks and the Internet	3
ITMO 356	Introduction to Open Source Operating Systems	3
ITMM 471	Project Management for Information Technology and Management	3
ITMT 330	Introduction to Information Systems and the IT Profession	3
ITMT 430	System Integration	3

ITMS 448	Cyber Security Technologies	3
Total Credit Hours		72

List Mathematics Requirements		
MATH 180	Fundamentals of Discrete Mathematics	3
MATH 148	Preparation for Calculus	4
or MATH 151	Calculus I	
or MATH 191	Business Calculus	
Total Credit Hours		7

List Science Requirements		
Natural Science and Engineering Requirements		
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		
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		
Business Electives		
Choose two courses		6
BUS 311	Strategic Cost Management	3
BUS 341	Business Law	3
BUS 361	Entrepreneurship	3
BUS 452	International Finance	3
BUS 454	Investments	3
BUS 455	Corporate Finance	3
BUS 457	Financial Modeling	3
BUS 458	Financial Derivatives	3

BUS 472	New Product Development	3
BUS 475	Sales Management	3
BUS 476	Consumer Behavior	3
ECON 251	Introduction to Econometrics	
ECON 311	Intermediate Microeconomics	
ECON 312	Intermediate Macroeconomics	
ECON 382	Business Economics	
ECON 383	Sports Economics	
Total Credit Hours		6

List Free Elective Credit Hours (if applicable)	4

Semester-by-semester plan of study for the degree program

Year 1

Semester 1	Credit Hours	Semester 2	Credit Hours
BUS 100	3	ECON 152	3
ECON 151	3	ITMD 413[1]	3
ITM 301	3	Humanities Elective (200 Level)	3
ITM 313 or MATH 151[3]	3	MATH 180	3
MATH 148	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
ITMT 330	3	ITMD 362	3
ITMD 361	3	Social Science Elective	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	3
ITMD 321	3	ITMM 471[2]	3
ITMO 356	3	ITMO 340	3
Social Science Elective (300+)	3	IPRO Elective I	3
	15		15

Year 4

Semester 1	Credit Hours	Semester 2	Credit Hours
Business Elective	3	BUS 480	3
ITMS 448	3	Business Elective	3
IPRO Elective II	3	ITMT 430	3
Social Science Elective (300+)	3	Humanities or Social Science Elective	3
Humanities Elective (300+)	3	Social Science Elective (300+)	3
Free Elective	4		
	19		15

Total Credit Hours: 126

Key: 614