

NEW PROGRAM PROPOSAL EXECUTIVE SUMMARY

Bachelor of Science in Financial Technology [CIP Code: 30.7104]

Winthrop University [Site Code: 51801]

A. SUMMARY

Winthrop University (WU) proposes a new Bachelor of Science in Financial Technology program. The program will require 4 new courses. There are currently 2 similar programs within the state. The proposed B.S. program requires a comprehensive course of study that includes 24 credit hours each of finance and computer sciences courses. The program fulfills the REACH Act requirements and received all institutional approval on June 6, 2024. There are 4 new courses and 1 new finance faculty in AY 2026-2027. The program will be delivered in a traditional face to face model and will begin Fall 2025.

B. UNIVERSITY Undergraduate ENROLLMENT

Undergraduate In-state: 754 (87%)	Undergraduate Out-of-State: 113 (13%)
--	--

*Fall 2023 provisional enrollment data

C. Undergraduate ENROLLMENT PROJECTIONS

A. Projected Undergraduate Enrollment			
Year	Fall Headcount	Spring Headcount	Summer Headcount
2025-2026	10	10	0
2026-2027	25	23	0
2027-2028	37	33	0
2028-2029	48	43	0
2029-2030	60	54	0

We anticipate modest enrollment of 10 students in the program's first year followed by about 15 students entering the program each fall. We base these numbers on current enrollment in our business programs. We assume a 10% attrition rate. We expect the program to grow to about 60 students, which would be similar to our current enrollment in the BS BADM - Finance concentration.

D. INDUSTRY-RELATED OCCUPATIONAL WAGES AND PROJECTIONS IN SOUTH CAROLINA

Occupation	State		National		Data Type and Source
	Expected Number of Jobs	Employment Projection	Expected Number of Jobs	Employment Projection	
Financial and Investment Analyst	3,440 in 2030	13% growth from 2020 to 2030	341,400 in 2032	8% growth from 2022 to 2032	U.S. Bureau of Labor Statistics
Financial Managers	7,760 in 2030	25% growth from 2020 to 2030	919,200 in 2032	16% growth from 2022 to 2032	U.S. Bureau of Labor Statistics
Management Analysts	19,020 in 2030	18% growth from 2020 to 2030	1,083,300 in 2032	10% growth from 2022 to 2032	U.S. Bureau of Labor Statistics
Operations Research Analysts	1,210 in 2030	32% growth from 2020 to 2030	134,700 in 2032	23% growth from 2022 to 2032	U.S. Bureau of Labor Statistics
Statisticians	450 in 2030	41% growth from 2020 to 2030	43,900 in 2032	32% growth from 2022 to 2032	U.S. Bureau of Labor Statistics (BLS)

As presented in the table above, the national labor market demand for fintech-related occupations shows projected growth well-above the average for all occupations (3%), ranging from 8% to 32% growth. The South Carolina labor market demand is even stronger, with projected growth between 13% and 41%. We included occupations such as operations research analysts and statisticians because our fintech program includes substantial coverage of data analytics and artificial intelligence topics.

E. CHE STAFF STAGES OF CONSIDERATION

Considerations	Date	Comments
Program proposal received	8.1.2024	Original Proposal received via email. Assigned lead reviewer and second reader
Summary of staff comments, responses, and versions	8.15.2024	Revision request V1 included: <ul style="list-style-type: none"> Revised CIP code Site code missing

		<ul style="list-style-type: none"> • Support letters. • Single program courses i.e. Math, Statistics • Prerequisites and Co requisites • Comparison to minors for a BS degree proposal • Budgeted position • Facility space • Renewal fees for Bloomberg Terminal License • New Program Proposal updated form. • Faculty • Post program survey timeline.
ACAP Considerations		ACAP questions Responses Vote
CAAL Considerations (See attached commissioner questions and responses)		CAAL questions Responses Vote
CHE Considerations		CHE questions Responses Vote
Submission to IT for addition to inventory		Date completed

F. STAFF, ACAP, CAAL AND CHE RECOMMENDATIONS

a. STAFF RECOMMENDED ACTION

Recommended

b. ACAP RECOMMENDATION

Approved

c. CAAL RECOMMENDATION

Choose an item.

d. CHE RECOMMENDATION

Choose an item.

Additional Comments:

--

NEW PROGRAM PROPOSAL FORM

Name of Institution: **Winthrop University**

Name of Program (include degree designation and all concentrations, options, or tracks): **Bachelor of Science in Financial Technology**

Program Designation:

- | | |
|---|--|
| <input type="checkbox"/> Associate's Degree | <input type="checkbox"/> Master's Degree |
| <input checked="" type="checkbox"/> Bachelor's Degree: 4 Year | <input type="checkbox"/> Specialist |
| <input type="checkbox"/> Bachelor's Degree: 5 Year | <input type="checkbox"/> Doctoral Degree: Research/Scholarship (e.g., Ph.D. and DMA) |
| <input type="checkbox"/> Doctoral Degree: Professional Practice (e.g., Ed.D., D.N.P., J.D., Pharm.D., and M.D.) | |

Consider the program for supplemental Palmetto Fellows and LIFE Scholarship awards?

- ☒ Yes
☐ No

Proposed Date of Implementation: Fall 2025

CIP Code: 30.7104 Financial Analytics

Delivery Site(s): Winthrop University (51801)

Delivery Mode:

- | | |
|---|---|
| <input checked="" type="checkbox"/> Traditional/face-to-face
*select if less than 25% online | <input type="checkbox"/> Distance Education |
| | <input type="checkbox"/> 100% online |
| | <input type="checkbox"/> Blended/hybrid (50% or more online) |
| | <input type="checkbox"/> Blended/hybrid (25-49% online) |
| | <input type="checkbox"/> Other distance education (explain if selected) |

Program Contact Information (name, title, telephone number, and email address):

Adriana Cordis, Ph.D.
Professor of Accounting
Chair, Accounting, Finance, and Economics Department
803-323-4622
cordisa@winthrop.edu

Institutional Approvals and Dates of Approval (include department through Provost/Chief Academic Officer, President, and Board of Trustees approval):

Department of Accounting, Finance, and Economics: 10/31/2023
College of Business Administration Curriculum Committee: 2/19/2024
College of Business Administration Faculty Assembly: 3/1/2024
Dean, College of Business Administration: 3/5/2024
University Committee on Undergraduate Curriculum: 3/28/2024
University Academic Council: 4/5/2024
University Faculty Conference: 4/19/2024
Provost: 5/10/2024

President: 5/15/2024

Winthrop Board of Trustees: 6/26/2024

REACH Act Compliance:

All Winthrop undergraduate students must take one course that meets the Founding Documents requirement. Students may choose from the following courses: ECON103, HIST211, HIST212, PLSC201, PLSC309, or PLSC356

Background Information

State the nature and purpose of the proposed program, including target audience, centrality to institutional mission, and relation to the strategic plan.

Financial institutions have increasingly begun to exploit recent technological advancements aimed to reimagine, improve, and automate financial services. Financial technology (fintech) is developing quickly and pushing the field of traditional finance to rethink the way it conducts business in order to create value for individuals and organizations (e.g., by delivering services more securely, cheaper, and faster). As a result, knowledge of fintech provides opportunities for new highly-compensated career options.

We propose a new Bachelor of Science in Financial Technology (B.S. in Fintech) to capitalize on the opportunities resulting from the rapidly growing fintech industry. The program is designed to build on traditional finance topics and equip students with knowledge of data-driven financial modeling and fintech tools, such as artificial intelligence, machine learning, blockchain, algorithmic trading, robo-advising, and others.

The target audience of the program is traditional students who enter from high school and are interested in understanding both traditional financial models and specialized fintech tools through a blend of coursework in finance and computer sciences. These tools are being used by financial institutions, such as banks, hedge funds, brokerage firms, and throughout the financial services industry in making decisions regarding portfolio management, investments, and securities trading, among others. In addition, fintech-trained professionals are in high demand in the fintech startup community and in other industries, such as health care, insurance, and Big-Tech firms.

Offering a B.S. in Fintech program aligns with Winthrop's mission of helping students acquire the knowledge, skills, and values that prepare them to meet employers' needs of an analytical and technological-savvy workforce. The program also helps advance Winthrop's strategic plan by (i) allowing us to market our program offerings strategically and attracting new students and (ii) increasing student success and placement with coursework that meets the needs of employers in the state and region, particularly the nearby Charlotte, NC metropolitan area, which is the 2nd largest financial center in the United States.

Assessment of Need

Provide an assessment of the need for the program for the institution, the state, the region, and beyond, if applicable.

Financial institutions have invested heavily in new technology, such as artificial intelligence, machine learning, and data analytics software in recent years. According to Wells Fargo research, "investment firms are at the forefront of adoption of AI,"¹ which can be deployed in a number of ways to evaluate potential investments, including sentiment analysis and portfolio monitoring. AI is expected to contribute 21% net increase to the U.S. GDP by 2030.² Furthermore, the AI market is expected to reach \$1.3 trillion by 2032.³ Given the significant growth of emerging technologies and their fast adoption by the financial services industry, offering a new educational program that emphasizes fintech skills

¹ <https://www.wellsfargo.com/com/insights/business-viewpoints/investment-firms-adoption-of-ai/>

² www.statista.com

³ <https://www.bloomberg.com/company/press/generative-ai-to-become-a-1-3-trillion-market-by-2032-research-finds/>

addresses the current market demand and offers graduates the needed training to take advantage of the career opportunities in this field.

The B.S. in Fintech distinguishes itself from other finance program offerings in the state and region by requiring students to complete a mix of coursework in finance, computer sciences, and analytics. The program is built around current faculty and courses, which helps make it financially viable. The proposed B.S. program requires a comprehensive course of study that includes 24 credit hours *each* of finance and computer sciences courses.

Winthrop is well-positioned geographically to offer this degree. Our location near Charlotte, NC, which is the 2nd largest financial center in the country and among the top 10 best fintech ecosystems in the world⁴ provides graduates with easy access to a rapid-growing job market, and corporations with recruitment prospects, both important factors in ensuring student and program success. Many large employers in the region, from Vanguard and Charles Schwab to major banks, actively seek Winthrop business students.

The proposed program will also have a direct and indirect economic impact on the state of SC and York County. Jobs in the financial data analytics area are in high demand and well paid. Increasing the supply of highly-trained financial analytics and technology talent will help retain financial services companies in the region and potentially attract employers from Charlotte, NC to relocate to the Fort Mill, SC area just outside of the NC state line.⁵

Transfer and Articulation

Identify any special articulation agreements for the proposed program. Provide the articulation agreement or Memorandum of Agreement/Understanding.

There are no special articulation agreements for this program.

Employment Opportunities

Occupation	State		National		Data Type and Source
	Expected Number of Jobs	Employment Projection	Expected Number of Jobs	Employment Projection	
Financial and Investment Analyst	3,440 in 2030	13% growth from 2020 to 2030	341,400 in 2032	8% growth from 2022 to 2032	U.S. Bureau of Labor Statistics
Financial Managers	7,760 in 2030	25% growth from 2020 to 2030	919,200 in 2032	16% growth from 2022 to 2032	U.S. Bureau of Labor Statistics
Management Analysts	19,020 in 2030	18% growth from 2020 to 2030	1,083,300 in 2032	10% growth from 2022 to 2032	U.S. Bureau of Labor Statistics

⁴ <https://charlotteregion.com/news/2022/10/04/alliance-news/charlotte-ranks-among-top-10-best-fintech-ecosystems-in-the-world/>

⁵ <https://www.axios.com/local/charlotte/2023/08/24/charlottes-biggest-fintech-and-health-players-want-to-make-the-region-a-federally-recognized-tech-hub-337727>

Operations Research Analysts	1,210 in 2030	32% growth from 2020 to 2030	134,700 in 2032	23% growth from 2022 to 2032	U.S. Bureau of Labor Statistics
Financial Advisers	4,310 in 2032	39% growth from 2022-2023	369,600 in 2032	13% growth from 2022-2023	U.S. Bureau of Labor Statistics
Statisticians	450 in 2030	41% growth from 2020 to 2030	43,900 in 2032	32% growth from 2022 to 2032	U.S. Bureau of Labor Statistics (BLS)

Supporting Evidence of Anticipated Employment Opportunities

Provide supporting evidence of anticipated employment opportunities for graduates.

As presented in the table above, the national labor market demand for fintech-related occupations shows projected growth well-above the average for all occupations (3%), ranging from 8% to 32% growth. The South Carolina labor market demand is even stronger, with projected growth between 13% and 41%. We included occupations such as operations research analysts and statisticians because our fintech program includes substantial coverage of data analytics and artificial intelligence topics.

In addition to the job opening projections obtained from the U.S. BLS website, we searched career and employment websites to obtain information regarding the demand for professionals in this field. A June 1, 2024 search on **Indeed.com** for job openings within 35 miles of York County, SC revealed **344** openings for “financial management,” **204** for “financial analytics,” and **82** for “financial technology.” A June 1, 2024 search on **SC Works** for positions across the entire state of South Carolina reveals **460** available positions for “financial management,” **284** for “financial analysis,” and **22** for “fintech.”

Other than careers as financial or investment analysts, financial managers, or management analysts graduates with a fintech degree would be well suited for many positions, such as:

- Budget or credit analyst
- Financial advisor
- Financial risk manager
- Insurance underwriter
- Data scientist.

Description of the Program

Projected Enrollment			
Year	Fall Headcount	Spring Headcount	Summer Headcount
2025-2026	10	10	0
2026-2027	25	23	0
2027-2028	37	33	0
2028-2029	48	43	0
2029-2030	60	54	0

Explain how the enrollment projections were calculated.

We anticipate modest enrollment of 10 students in the program's first year followed by about 15 students entering the program each fall. These are conservative projections. We base these numbers on current enrollment in our business programs. We assume a 10% attrition rate. We expect the program to grow to about 60 students, which would be similar to our current enrollment in the BS BADM - Finance concentration. We list summer headcounts as zero because Winthrop traditionally offers very few courses in the major during summer session. Many students choose to pursue internships for academic credit during summer.

Besides the general institutional admission requirements, are there any separate or additional admission requirements for the proposed program? If yes, explain.

☐ Yes

☒ No

Curriculum

New Courses

List and provide course descriptions for new courses.

FINC 518 – Blockchain and AI Applications in Finance (3 cr.)

Course Description: This course examines the impact, capabilities, and solutions provided by blockchain and artificial intelligence technologies. It is designed for students who are interested in the applications of blockchain and artificial intelligence (AI) in finance. Students will explore the basics of blockchain, AI, and Machine learning (ML) technologies applications using real world examples in the financial services industries, such as digital currencies, portfolio management, algorithmic trading, fraud detection, and credit scoring. Students will also learn how to use open-source Python packages (or other programming languages) to design, test, and implement algorithms in finance. Prerequisites: C- or better in FINC 512 or FINC 517. All FINC courses numbered above 299 have a prerequisite of junior status, an overall GPA of at least 2.00 and a C- or better in HMXF 102.

FINC 522 – Options and Futures Markets (3 cr.)

Course Description: This course provides an introduction to financial derivatives products, such as options, futures, and swaps. It examines the characteristics and structure of (i) futures markets, pricing, and hedging, and (ii) options markets, pricing, and position analysis. Students will learn how derivative instruments can be used for risk management and investment purposes. Prerequisites: C- or better in FINC 311. All FINC courses numbered above 299 have a prerequisite of junior status, an overall GPA of at least 2.00 and a C- or better in HMXF 102.

CSCI 260 – Introduction to Artificial Intelligence (3 cr.)

Course Description: Course concentrates on application areas for AI. Course also introduces students to AI terminology, concepts, and an overview of types of AI systems. Ethical concerns, such as bias and job displacement, are discussed. Prerequisites: C- or better in CSCI 207.

CSCI 450 – Artificial Intelligence (3 cr.)

Course Description: Survey of AI techniques, including knowledge representation, search methods and reasoning. AI applications such as planning, learning, natural language and game play. Students develop AI systems. Prerequisites: C- or better in CSCI 208; CSCI 260; either MATH 341 or BSAN/QMTH 205

BACHELOR OF SCIENCE IN FINANCIAL TECHNOLOGY		
General Education		Hours
ACAD 101	Principles of the Learning Academy	1
Shared Skills and Proficiencies		
Writing and Critical Thinking		
WRIT 101	Composition	3
HMXP 102	Human Experience	3
CRTW 201	Critical Reading, Thinking & Writing	3
Oral Communication	Met in major with CSCI 327	0
Technology	Met in major with CSCI 207 and 327	0
Intensive Writing	Met in major with CSCI 327	0
Founding Documents Req.	See approved list; may be met with other requirement	0-3
Physical Activity	See approved list	1
Thinking Critically Across Disciplines		
Global Perspectives	See approved list	3
Historical Perspectives	See approved list	3
Introducing Students to Broad Disciplinary Perspectives		
Social Science	See approved list; must include 2 designators	6
Humanities and Arts	See approved list; must include 2 designators	6
Quantitative Skills and Natural Science		
Quantitative Skills	MATH 151 or 105 or 201; BSAN 205 (in major)	3
Natural Science	See approved list; must include a lab science	4
Subtotal		36-39
Requirements for the Major		
Foundation/Business Courses		21.5
CSCI 101B	Using Microsoft Excel	0.5
ACCT 280	Introduction to Financial Accounting	3
ECON 215	Principles of Microeconomics	3
ECON 216	Principles of Macroeconomics	3
BSAN 205	Business Statistics	3
BSAN 210	Business Analytics	3
FINC 311	Principles of Finance	3
Choose one from:		
ECON 506	Applied Econometrics	3
ECON 508	Forecasting and Predictive Analytics	3
Finance Courses		21
FINC 312	Intermediate Corporate Finance	3
FINC 512	Investments	3
FINC 517	Introduction to Fintech	3
FINC 518	Blockchain and AI Applications in Finance	3
FINC 570	Financial Data Analytics	3
Choose one from:		
FINC 498	Advanced Corporate Finance	3
FINC 522	Options and Futures Markets	3
Choose one FINC Elective:	Any FINC>299	3
Computer Sciences Courses		24

CSCI 207 & 208	Intro to Computer Science I & II	8
CSCI 210	Programming Tools	1
CSCI 260	Introduction to Artificial Intelligence	3
CSCI 327	Social Implications of Computing	3
CSCI 350	Programming for Business	3
CSCI 355	Database Processing	3
CSCI 450	Artificial Intelligence	3
Electives		14.5-17.5
Total		120

Total Credit Hours Required: 120

Curriculum by Year					
Course Name	Credit Hours	Course Name	Credit Hours	Course Name	Credit Hours
Year 1					
Fall		Spring		Summer	
ACAD 101	1	HMPX 102	3		
WRIT 101	3	CSCI 207	4		
CSCI 101B	0.5	BSAN 205	3		
Natural Science/Lab	4	ACCT 280	3		
Historical Perspectives	3	Social science	3		
MATH 105/151/201	3-4				
Total Semester Hours	14.5-15.5	Total Semester Hours	16	Total Semester Hours	0
Year 2					
Fall		Spring		Summer	
CRTW 201	3	ECON 216	3		
CSCI 208	4	CSCI 260	3		
CSCI 210	1	CSCI 327	3		
ECON 215	3	Humanities and Arts	3		
BSAN 210	3	Global Perspectives	3		
Physical Activity	1				
Total Semester Hours	15	Total Semester Hours	15	Total Semester Hours	0

Course Name	Credit Hours	Course Name	Credit Hours	Course Name	Credit Hours
Year 3					
Fall		Spring		Summer	
CSCI 355	3	FINC 312	3		
FINC 311	3	FINC 512	3		
ECON 506/508	3	FINC 570	3		
MGMT 341	3	Elective	3		
Humanities and Arts	3	Founding Doc./Elective	3		
Total Semester Hours	15	Total Semester Hours	15	Total Semester Hours	0
Year 4					
Fall		Spring		Summer	
FINC 517	3	FINC 498/522	3		
FINC 518	3	FINC>299	3		
CSCI 350	3	CSCI 450	3		
Elective	3	Elective	3		
Elective>299	3	Elective	3		
Total Semester Hours	15	Total Semester Hours	15	Total Semester Hours	0

Similar Programs in South Carolina offered by Public and Independent Institutions

Identify the similar programs offered and describe the similarities and differences for each program.

There are no other programs in Financial Technology that we could find offered by other institutions in South Carolina.

Program Name and Designation	Total Credit Hours	Institution	Similarities	Differences

Faculty

Rank and Full- or Part-time	Courses Taught for the Program	Academic Degrees and Coursework Relevant to Courses Taught, Including Institution and Major	Other Qualifications and Relevant Professional Experience (e.g., licensures, certifications, years in industry, etc.)
Assistant Professor, Full time	FINC 512 Investments FINC 517 Introduction to Fintech FINC 570 Foundations in Financial Data Analytics	PhD, Finance, University of Massachusetts Boston	Wharton's Fintech Certificate CFA Level I candidate 1 year of experience
Professor, Full time	FINC 311 Principles of Finance FINC>299 Elective	PhD, Financial Planning, Texas Tech University	Certified Financial Planner 10 years of experience
Assistant Professor, Full time	FINC 312 Intermediate Corporate Finance FINC 498 Advanced Corporate Finance	PhD, Finance, University of Massachusetts Lowell	Bloomberg Market Concept Certificate Bloomberg ESG Certificate 5 years of experience
Assistant Professor (Finance) – year 2 hire	ECON508 Forecasting and Predictive Analytics, FINC518 Blockchain and AI applications in Finance, FINC522 Options and Futures Markets	PhD in Finance, or closely related field	
Associate Professor, Full time	CSCI 355 Database Processing	PhD, Information Technology, UNC Charlotte	7 years in higher education Several years of part-time work in IT, Intern with Google Security Team SEED Cybersecurity Workshop
Associate Professor, Full time	CSCI 327 Social Implications of Computing CSCI 350 Programming for Business	PhD, Computer Science & Engineering, Auburn University	25 years in higher education
Associate Professor, Full time	CSCI 207 CS1	PhD, Information Technology, UNC Charlotte	10 years in higher education 20 years at IBM SEED Cybersecurity Workshop
Associate Professor, Full time	CSCI 208 CS2 CSCI 210 Programming Tools CSCI 260 Introduction to Artificial Intelligence CSCI 450 Artificial Intelligence	PhD, Computer Science, George Mason University	20 years in higher education

Total FTE needed to support the proposed program:

Faculty: 2

Staff: 0.5

Administration: 0.5

Faculty, Staff, and Administrative Personnel

Discuss the Faculty, Staff, and Administrative Personnel needs of the program.

The proposed B.S. in Fintech program is designed to leverage existing resources to launch and grow and uses existing courses that are part of other degree programs. Thus, existing College of Business and Technology (CBT) full-time faculty will be sufficient to successfully launch the program. We currently have 3 full-time finance faculty members and 4 full-time computer science faculty members with terminal degrees in their fields dedicated to teaching courses in the program. However, these faculty members serve several other finance and computer science programs in the college.

Thus, we will need one (1) new finance faculty member with a specialization in fintech beginning in the AY 2026-27.

The CBT does not dedicate staff to individual degree programs. Across all programs offered by the college, there are 2 full-time staff for advising and 2 for administrative support.

Resources

Library and Learning Resources

Explain how current library/learning collections, databases, resources, and services specific to the discipline, including those provided by PASCAL, can support the proposed program. Identify additional library resources needed.

As the primary provider of scholarly information for the Winthrop University community, the Ida Jane Dacus Library is an integral part of Winthrop's instructional program. Through its collections, reference services, information literacy classes, and outreach programs, the library enables university faculty, students, and staff to achieve their research and curricular goals.

The library is staffed by 5 professional librarians, 7 paraprofessionals/library technical assistants, and several student employees. During the fall and spring semesters the library hours are as follows:

Monday – Wednesday	8:30 a.m. – 9:00 p.m.
Thursday	8:30 a.m. – 8:00 p.m.
Friday	8:30 a.m. – 5:00 p.m.
Saturday	Closed
Sunday	3:00 p.m. – 9:00 p.m.

A variety of library spaces - including group and individual study rooms, tables, and carrels - are available. There are 58 personal computers on the main and upper levels, and 8 Apple Macintosh computers on the main level. Many study rooms also have computers, and the Wi-Fi network enables those with laptops to set up a study space throughout the building. Black-and-white and color printing is available, as well as two flatbed scanners.

The [Dacus Library website](#) provides the Winthrop community with information about the library's services, programs, collections, spaces, hours of operation, and contact information. One-on-one reference instruction and consultation is available during hours of operation either in-person, or via chat, text, phone, or email, or in a virtual space such as Zoom or Microsoft Teams. Researchers can drop in or make an appointment to meet with a librarian through the Book-a-Librarian service. Instructional faculty have the option to request in-class information literacy sessions. These sessions, whether on

campus/in-person or virtual, are conducted by librarians and are tailored to meet the needs of each individual class.

The library's online catalog, OneSearch, is also available via the website and is the gateway to the resources available in the library's collections. Dacus Library is a member of PASCAL (Partnership Among South Carolina Academic Libraries), a consortium of over 50 academic libraries in the state of South Carolina. The online catalog is shared among PASCAL libraries, enabling patrons to find resources not only in Dacus but also in other members' collections. Links in the catalog records provide direct access to electronic books and articles. Physical materials in the circulation collections can be borrowed for the semester. Patrons who are unable to visit the library can request delivery of physical books through FedEx and email delivery of scanned chapters or articles. Winthrop students can expand their access to library resources through PASCAL's visiting patron service: with a valid Winthrop ID, currently enrolled students are able to visit any PASCAL library and borrow materials directly. Through PASCAL's Pick Up Anywhere and Return Anywhere services, students may return library materials to any participating PASCAL library.

A portion of the library's annual book budget is allocated to the Accounting, Finance, and Economics and the Computing and Information Sciences departments for the purpose of purchasing books and instructional materials. The departments select a person to serve in the capacity of departmental liaison. The liaison's responsibility is to monitor departmental expenditures and make sure the teaching and research needs of the university are being supported. Departmental faculty are encouraged to submit requests for needed materials.

Dacus Library has holdings that support all Winthrop academic programs, including the BS in Financial Technology. Overall monograph holdings across various access platforms include 285,200 unique print titles and 353,000 electronic books. An additional 731,700 e-books are available through PASCAL-managed collections. Dacus has 2,285 serial titles in its physical collection, and access to 124,530 in electronic format. Additional serials in PASCAL-managed collections total 87,000.

Winthrop students have access to over 170 electronic databases/collections (including those provided by the South Carolina State Library through the SCDiscus program) containing resources in a variety of formats (monographs, journals, newspapers, streaming video, etc.). Dacus uses the OpenAthens authentication system, which allows Winthrop students access to electronic subscription resources from anywhere they have internet access.

A search in the library's online catalog for ["financial technology" OR "fintech"] yields 207 results from the Dacus collection, including 191 books and 12 journals. Expanding this search to include all PASCAL libraries yields an additional 65 books. Expanding the search further to include resources within the databases provides Winthrop students access to over 7,000 articles from peer-reviewed journals. Financial Technology is a quickly evolving field, and the library's funding will need to be sufficient to purchase current materials in support of the program.

Books, book chapters, and articles that are not available in Dacus Library holdings or subscriptions can be borrowed from another library via PASCAL Delivers or interlibrary loan. Both Interlibrary Loan and PASCAL Delivers are cooperative services between libraries that allow Winthrop faculty, students, and staff to obtain materials NOT available from Dacus.

PASCAL Delivers is a rapid book-delivery service managed by the PASCAL consortium that enables resource sharing among member libraries. Students and faculty/staff can discover and request library materials that are not available at Dacus from participating PASCAL libraries. Digitized materials – such

as book chapters or journal articles – are sent to requesters electronically and physical materials are mailed to Dacus. Borrowed materials can be mailed to off-campus patrons upon request. Students in South Carolina have the option of going to a PASCAL library near them to pick up materials.

Dacus participates in OCLC – an international catalog that includes libraries from around the world. Interlibrary Loan through OCLC is available for books and articles that are not in the Dacus or PASCAL collections. Like PASCAL Delivers, materials will be sent to Dacus. Requesters can pick up the items or request mail delivery. Digitized materials such as book chapters or articles are sent electronically.

Student Support Services

Explain how current academic support services will support the proposed program. Identify new services needed and provide any estimated costs associated with these services.

All CBT students are assigned a faculty advisor. Students must meet with their faculty advisor before signing up for next semester's classes. Faculty report on their advising activities in their annual report for the purpose of performance evaluation. In addition, the CBT Student Services Office provides advice and support to students beginning at orientation and throughout their college journey. With two full-time advisors and several graduate assistants, this office has the capacity to support the proposed degree program effectively.

Institutional services include Student Health and Counseling that assist students with both physical and mental health, the Academic Success Center that coordinates and provides tutoring services and academic support workshops, the Writing Center, Mathematics Tutorial Center, and for students who qualify, the Honors Program and TRiO Student Support Services.

Students also have access the West Center, home of Recreational Services and the student recreation center, the DiGiorgio Student Center, home of student activities, organizations, and student events.

Students also utilize the services of the Office of Records and Registration, the Office of Financial Aid, and the Office of Student Financial Services for information on academic programs and processes, student aid, and tuition and fees, and payment processes.

Physical Resources/Facilities

Identify the physical facilities needed to support the program and the institution's plan for meeting the requirements.

The College of Business and Technology has two dedicated buildings on campus to support its programs: Thurmond Hall, which houses offices, classrooms, and conference rooms for business faculty and students in all disciplines, and Carroll Hall, which is primarily dedicated to the finance discipline.

Carroll Hall houses the Carroll Capital Markets Training and Trading Center, which connects students to global markets through interactive technology. This space is equipped with a stock ticker, world clocks, and a nine-screen data wall, for cable news feeds and Bloomberg, Telemet, and Morningstar data to use in real world trading simulations. The building also features several collaborative team learning rooms, a 220-seat auditorium, an executive seminar room, several classrooms, and finance faculty offices. Currently the building occupancy is at about 60%, so there is ample room for additional students.

Equipment

Identify new instructional equipment needed for the proposed program.

Bloomberg – The CBT currently has a Bloomberg Terminal license, which is a tool that is widely used in the finance industry and offers students access to real time and historical data, financial markets news, and analytics. It provides students with experiential learning opportunities. For example, Bloomberg offers three e-learning certificate courses (Bloomberg Finance Fundamentals, Bloomberg Market Concepts, and Bloomberg ESG) which prepare students and early-career finance professionals to obtain hands-on knowledge and real-world experience needed for a successful career in finance.

Impact on Existing Programs

Will the proposed program impact existing degree programs or services at the institution (e.g., course offerings or enrollment)? If yes, explain.

☒ Yes

☐ No

We expect the new degree program to result in an overall net gain in enrollment to the institution through new student recruitment. However, the proposed degree program is likely to have a small impact on existing degrees, particularly finance and computer sciences. Given that several courses overlap across these degrees, we expect that some students will choose to double major or switch degrees based on their areas of interest. However, offering more choices to students, particularly degrees that are in high demand and offer good career prospects and salaries, should benefit both the students and the institution.

Financial Support

Sources of Financing for the Program by Year												
Category	1 st		2 nd		3 rd		4 th		5 th		Grand Total	
	New	Total	New	Total	New	Total	New	Total	New	Total	New	Total
Tuition Funding	139,980	139,980	335,952	335,952	489,930	489,930	636,909	636,909	797,886	797,886	2,400,657	2,400,657
Program-Specific Fees	1500	1500	3750	3750	5550	5550	7200	7200	9000	9000	27,000	27,000
Special State Appropriation												
Reallocation of Existing Funds												
Federal, Grant, or Other Funding												
Total	141,480	141,480	339,702	339,702	495,480	495,480	644,109	644,109	806,886	806,886	2,427,657	2,427,657
Estimated Costs Associated with Implementing the Program by Year												
Category	1 st		2 nd		3 rd		4 th		5 th		Grand Total	
	New	Total	New	Total	New	Total	New	Total	New	Total	New	Total
Program Administration and Faculty/Staff Salaries		204,000	94,250	304,370	97,078	313,501	99,990	322,906	102,990	332,593	394,307	1,477,371
Facilities, Equipment, Supplies, and Materials	1500	1500	3750	3750	5550	5550	7200	7200	9000	9000	27,000	27,000
Library Resources												
Institutional Overhead	0	0	0	0	175,000	175,000	254,764	254,764	319,154	319,154	748,918	748,918
Total	139,980	205,500	241,802	308,370	217,853	494,051	361,953	584,870	375,742	660,748	1,257,432	2,253,289
Net Total (Sources of Financing Minus Estimated Costs)	139,980	(64,020)	241,702	31,582	217,853	1,429	282,156	59,239	375,742	146,138	1,257,432	174,368

Budget Justification

Provide an explanation for all costs and sources of financing identified in the Financial Support table. Include an analysis of cost-effectiveness and return on investment and address any impacts to tuition, other programs, services, facilities, and the institution overall.

The tuition revenue is based on the anticipated enrollment and the current in-state tuition rate.

Course fees are estimated at \$150 per student per year to cover Bloomberg and computer science course fees, but will depend on the specific courses and year taken. These fees are collected and then expended in the supplies section, usually for software licenses and for technology upgrades to our computer labs.

New faculty specializing in fintech salary is estimated at \$130,000, not including benefits. (\$188,500 with estimated benefits.) This faculty member will start in year 2. This new faculty member will teach half-time in the program. We also have 1.5 FTE also used toward this program, which is shown in the total cost for the program columns.

Institutional overhead is calculated as 40% of tuition revenue and is the amount of tuition generally used for campus-wide operations such as facilities, utilities, administration, and library services. Since the first couple years will not have a large enrollment, the contribution to institutional overhead is not required.

Evaluation and Assessment

Program Objectives	Student Learning Outcomes Aligned to Program Objectives	Methods of Assessment
Graduates will be able to communicate effectively and demonstrate leadership and collaboration skills.	Student communicate in oral and written format in a manner appropriate for business professionals.	Research paper, presentation
	Students can work effectively in teams.	Case studies/projects, presentation
Graduates analyze the ethical and societal implications of business decisions.	Students evaluate the consequences of business or economic decisions on personal and social welfare.	Assignments in CSCI 327
Graduates apply technical and analytical skills to build financial models and solve practical financial problems.	Students solve structured and unstructured business problems, using various methods.	Quizzes/labs/exams

Explain how the proposed program, including all program objectives, will be evaluated, along with plans to track employment. Describe how assessment data will be used.

The CBT Director of Assessment will be responsible for coordinating and implementing the assessment plan on an annual basis in concert with department faculty. The assessment information collected will be used to form recommendations that will be shared with faculty, and, after obtaining approval, deployed in future implementation plans. After the program begins, we will survey graduating classes one month after degree completion for program satisfaction and employment and one year later for ways to improve the program in concert with industry requirements.

Assessment Overview

Winthrop University executes an outcome-based programmatic assessment effort that allows for continuous improvement of academic programs, to include student learning outcomes. Part of a cyclical process, these assessment efforts are designed to determine the extent to which identified outcomes are met and findings used for continuous improvement efforts. The process of identifying outcomes, collecting and analyzing data, and using results for improvement of the academic programs support the assessment of the University's overall institutional effectiveness. The institution functions on the premise that assessment of academic programs maintains and strengthens the programs, while allowing the institution to achieve its stated outcomes.

The EDUCATE pillar of the University's strategic plan, *Winthrop: United in Excellence*, supports the assessment of academic programs; specifically by "advancing comprehensive student intellectual development" and through "innovate forward-looking academic programs." The process of student learning assessment, although focused at the program level, is informed by University structures and expectations.

Outcomes of individual academic programs are assessed through three major processes: (1) student learning outcomes assessment, focusing on what students know, think, and can do as a result of completing a program, (2) academic program review, a comprehensive evaluation of all areas of an academic program, including curriculum, faculty, students, and resources, and (3) professional accreditation review for specific disciplines. Assessment findings inform programmatic decisions, document student achievement, and improve the quality of learning for all students. The academic review system focuses on developing an institutional culture, with continual improvement at the core of assessment work.

Student Learning Outcome Assessment

Each academic program, within Winthrop University's five degree-granting colleges, is required to implement an annual assessment plan that clearly articulates student learning outcomes and program outcomes, identifies appropriate methodology, measures the extent to which students achieve the outcomes, analyzes the findings, and uses the results to make curricular and programmatic enhancements or adjustments.

Academic Program Review

In addition to annual program Assessment Reports, all academic programs are required to conduct an Academic Program Review (APR) on a regular cycle, generally every five to seven years. APRs are conducted as an institutional review for non-accredited programs or as a professional accreditation review for specific disciplines. The purpose of the Academic Program Review is to ensure that Winthrop University preserves its reputation for offering national-caliber academic programs consistent with emerging best practices and to affirm program priorities are aligned with and support achievement of Winthrop University's mission and strategic priorities. The review process provides the program with quantitative and qualitative analyses for demonstrating accountability and institutional effectiveness. Results are used to enhance program quality and inform resource allocations.

The B.S. in Financial Technology will fall under the current AACSB accreditation and will be reviewed on the regular AACSB cycle with the other programs in Business.

Employment Tracking

Due to the relationships developed between program faculty and students, employment plans and career opportunities are common discussion topics, particularly as students approach graduation. Faculty are also aware of students' post-graduation employment via social media. Additionally, Winthrop University administers an annual Graduating Senior Survey and a biannual Alumni Survey. These surveys provide data on where our students are employed and the type of positions held. The Alumni survey is sent annually to graduates from the prior 4 years.

Accreditation and Licensure/Certification

Will the institution seek program-specific accreditation (e.g., CAEP, ABET, NASM, etc.)? If yes, describe the institution's plans to seek accreditation, including the expected timeline.

☐ Yes

☒ No

We will not need to seek accreditation with AACSB, as the program will fall under the institutional AACSB accreditation and will follow the normal review cycle. AACSB will be on campus this academic year for our cyclical review. The Fintech program will be added to the accreditation once approved.

Will the proposed program lead to licensure or certification? If yes, identify the licensure or certification.

☐ Yes

☒ No

Explain how the program will prepare students for this licensure or certification.

If the program is an Educator Preparation Program, does the proposed certification area require national recognition from a Specialized Professional Association (SPA)? If yes, describe the institution's plans to seek national recognition, including the expected timeline.

☐ Yes

☒ No



September 5, 2024

Dr. P.N. Saksena
Winthrop University
College of Business and Technology
204 Thurmond Building
Rock Hill, SC 29733

Bachelor of Science in Financial Technology

Dear Dr. Saksena,

We understand that the College of Business and Technology, through Winthrop University, is going through the process to begin offering a new Bachelor of Science degree in Financial Technology. As the Financial Technology (FinTech) industry continues to grow, business professionals will benefit from traditional financial education supplemented by knowledge of the emerging technologies that finance professionals are using to create value and deliver services.

PwC commends Winthrop University for offering opportunities like this proposed degree to educate students on data-driven financial modeling and FinTech tools. PwC will consider the talent completing this degree alongside our standard recruiting practices.

We look forward to discussing how PwC may support Winthrop University with the establishment of this new degree.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Michael E. Giles", written in a cursive style.

Michael E. Giles
Michael.e.giles@pwc.com
T: (205) 903-5242



**CPAS &
ADVISORS**

August 27, 2024

P.N. Saksena, Ph.D.
Dean and Professor of Accounting
College of Business and Technology
Winthrop University
204 Thurmond Building
Rock Hill, SC 29733

Dear Dr. Saksena,

I am writing on behalf of BNA CPAs & Advisors to express our strong support for the Bachelor of Science in Financial Technology degree program proposed by Winthrop University's College of Business and Technology. As a CPA firm deeply invested in the growth and development of our local economy, we recognize the critical need for advanced education in these rapidly evolving fields.

Bachelor of Science in Financial Technology:

The Bachelor of Science in Financial Technology is another forward-thinking degree program that we strongly support. Financial technology is transforming the finance industry, challenging professionals to innovate and rethink traditional business models. This degree program, with its emphasis on data-driven financial modeling, blockchain, algorithmic trading, and other Fintech tools, is exactly what is needed to prepare the next generation of financial professionals.

Winthrop University's strategic location near Charlotte, NC—a major financial hub—further enhances the value of this degree. The proximity to one of the largest financial centers in the country will provide graduates with unparalleled opportunities for internships, employment, and collaboration with industry leaders. The multidisciplinary approach that combines finance, computer science, and data analytics will give students a competitive edge in the job market and ensure they are well-prepared to drive innovation in the Fintech industry.

In conclusion, this degree program aligns with the needs of today's economy and the direction of future job markets. We are confident that graduates of this program will be highly sought after and will significantly contribute to the growth and innovation in their respective fields.

BNA CPAs & Advisors wholeheartedly endorses this program and strongly recommends that it be supported through any available grants and resources.

Thank you for considering our recommendation.

Sincerely,

Bernard N. Ackerman, CPA
BNA CPAs & Advisors

Tristan Britton

Winthrop Alumni & Sales Operations Analyst @ WTG

Charlotte, NC

Winthrop College of Business & Technology

701 Oakland Ave, Rock Hill, SC 29733

Dear Winthrop,

I've heard amazing changes coming to Winthrop such as the recent name change to highlight the importance of Computer Science. Given my three years of experience at an IT solutions company, it's highly important to provide everyone with as much technological expertise as possible. This is why I believe Financial Technology should be included as a major for many reasons including Cybersecurity & the need to adapt to future trends in the financial job sector.

Cybersecurity is on the rise due to the "zero-trust" approach: the thought that there should be no trust with a company's data including its employees. Therefore systems/applications are getting more complex; the need to understand these systems is essential for me and other financial/operations employees (i.e. ERP systems, cybersecurity platform usage/administration).

Finance has also rapidly changed the way companies function in the past few decades. As computers continue to double their computing power every two years, companies need oncoming employees who can handle more amounts of data efficiently. I've personally seen some packets of data at my company 5x its amount in the past 3 years & it hasn't slowed down. Fortunately, I was able to take an optional course BADM 571 which introduced me to live data feeds. This ultimately led me to the job I have today which is partially concerned with PowerBI (a live data platform).

Tristan Britton

Winthrop Alumni & Sales Operations Analyst @ WTG

Charlotte, NC

Winthrop College of Business & Technology

701 Oakland Ave, Rock Hill, SC 29733

I firmly believe that you will continue to see finance students take paths that introduce them to computer science or business courses centered around technology/applications. Furthermore, potential students looking to apply would certainly find interest in the FinTech path given the high need & general understanding/interest our younger generations already have with Technology.

Best Regards,

Tristan Britton

803543-9300

Tmbritton06@gmail.com

A handwritten signature in black ink, appearing to read 'TMB', positioned to the right of the typed name 'Tristan Britton'.

September 9, 2024

Dr. P.N. Saksena
Dean and Professor of Accounting
College of Business and Technology
Winthrop University
204 Thurmond Building
Rock Hill, SC 20733

Dear Dr. Saksena:

Comporium is proud to endorse Winthrop's new degree program, a Bachelor of Science in Financial Technology, offered through the Accounting, Finance, and Economics Department in the College of Business and Technology. Because Winthrop is near Charlotte, NC (the second largest financial center in the United States and one of the top ten FinTech ecosystems in the world) Winthrop is in a unique position to serve the local talent pipeline with its graduates.

The program will meet a regional talent need by equipping students with knowledge of data-driven financial modeling and FinTech tools such as artificial intelligence, machine learning, predictive analytics, blockchain, algorithmic trading, and robo-advising. Comporium looks forward to working with you and your team on this exciting endeavor. Please let me know how we can assist Winthrop in rolling out this new program.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Matt Dosch', with a stylized flourish at the end.

Matthew L. Dosch
Executive Vice President and Chief Operating Officer

FESSLER & BOWMAN, INC.

Frank Sugameli | FrankSugameli@gmail.com

08/29/2024

To Whom It May Concern:

As an alumna of Winthrop University and current Financial Professional it has come to my attention that there is new consideration for implementing a Financial Technology Bachelor program. In my first few years of working as an analyst I have seen firsthand the impact that Fintech is having on operations across many different sectors including construction where I currently work. I can attest that the construction industry is growing exponentially through current market conditions but also as an industry that has been working to modernize through their use of technology.

One of the most prominent trends in the industry has been the development of Enterprise Resource Planning Systems in which corporate financials are one of the most difficult transitions between systems. In this industry alone there is a severe lack of young talent with the educational base to understand both the financial concepts and the tech skills needed to assist in these massive undertakings. I have been fortunate enough to have prior tech experience, however I can greatly see a need for the next generation of Winthrop Graduates to be even more successful in their careers.


As these new systems take hold, they will certainly require further developments and advancements over time, where those with a bachelor's in financial technology would have a serious upper hand. Nothing would make me happier than to see those who graduate after me have even greater opportunities to thrive in their future careers by being equipped with the knowledge to succeed in these developing businesses conditions. I would strongly support the implementation of this degree track as it will be invaluable to future students entering the workforce.

Sincerely,

Frank Sugameli

10616 Westlake Dr. Charlotte, NC 28273

Office: (803) 389-8175



Amy Barrett
9621 St Barts Lane
Huntersville, NC 28078

August 28, 2024

Dear South Carolina Commission on Higher Education,

My alma mater, Winthrop University, has submitted a proposal to begin offering a Bachelor of Science in Financial Technology in the fall of 2025. Financial technology (fin tech) is a quickly growing field, and my own field of banking has seen fin tech companies grow from start-up to full blown competitor in the past few years. I support the Strategy, Digital, and Innovation group at Wells Fargo and we are always striving to improve the digital experience for our customers through advancements in financial technology.

Companies like Wells Fargo will continue to need graduates skilled in financial modeling and predictive analytics. Young professionals with these skills will be extremely competitive in the job market, especially in Charlotte, NC, the second largest financial center in the US located just north of Winthrop University. In my specific role as Lead Control Management Officer, I work with product managers, analysts, and auditors that are building teams that can keep up with the ever-changing banking industry.

Winthrop's proposed Bachelor of Science in Financial Technology will be an excellent addition to a strong offering of degrees at the university. The degree will position Winthrop as a place where young professionals emerge ready to succeed at innovative financial companies.

Warm Regards,

Amy Barrett

Lead Control Management Officer, Wells Fargo
410-610-2322
buckmastera2@gmail.com

To: Professor Shirley Shen
From: Sabrina Fonda '22
Date: August 28th, 2024
Subject: Winthrop University Bachelor of Science in Financial Technology

In today's everchanging corporate landscape, technology is a dominant force that drives decisions and results. Businesses, professionals, and universities alike must constantly evolve to maintain engagement, relevancy, and competitiveness. In recent years, financial technology companies have emerged as one of the largest industry disruptors. Businesses like Chime, Venmo, Affirm, and others have provided innovative solutions that have transformed the ease, speed, and security of financial services and processes.

Looking ahead, it is clear that fintech companies are here to stay. Access to internet and social media has made information much more readily available to teenagers and young adults who are interested in the world of finance. Because of this, there are more and more young people who are eager to pursue these nontraditional finance careers. By offering a fintech undergraduate program, Winthrop will meet the demand of the next generation of leaders. An education in fintech can open the door to various industry careers including AI and machine learning, data science, payments, cyber security, peer to peer lending, and more.

The global fintech market is projected to be worth \$1,152.06B in 2032 ([Fortune Business Insights](#)) with North America as the leading market for fintech innovation. While this figure varies among industry experts, the message is clear: fintech is on track to grow exponentially in the next 5 – 10 years. Opportunities afforded by an education in fintech are sure to grow as the industry expands along with demand. With the continual evolution of financial technologies and platforms, banks and other financial institutions are implementing these advancements in their products and operations. This means that advancements in fintech will result in continued job creation throughout the greater financial services industry. Winthrop has an exciting opportunity to train the next generation of leaders and equip them with the knowledge and skills needed to start a meaningful career in the financial technology industry.

September 9, 2024

YORK COUNTY
REGIONAL CHAMBER



York County Regional Chamber
116 East Main Street
Rock Hill, SC 29730

REF: **Bachelor of Science in Financial Technology:**

Dear South Carolina Commission on Higher Education

At Winthrop University, the Accounting, Finance, and Economics Department in the College of Business and Technology is proposing a new degree program, a Bachelor of Science in Financial Technology, that will capitalize on the opportunities arising from the rapidly growing Fintech industry. As Winthrop University has become a well-respected provider of talent in the financial services sector throughout our region and beyond, this new degree program will provide students skills to assist businesses to navigate the evolving modernization of this industry.

The York County Regional Chamber will support Winthrop University in this endeavor by continuing to serve as a partner in workforce and leadership development and assist with internship destination and/or graduate job placement.

Thank you for your consideration of the Accounting, Finance, and Economics Department in the College of Business and Technology's proposal for the new degree program, - Bachelor of Science in Financial Technology. Winthrop University is a trusted and established organization in York County that we know will continue to meet the growing demand for talented graduating students and future leaders in our community.

If you need additional information, please do not hesitate to contact me.

Sincerely,

L. Dean Faile

L. Dean Faile, IOM, CCec
President and CEO
York County Regional Chamber