FINANCIAL TECHNOLOGY

Financial Technology or "FinTech" careers intersect with information technology and the automated delivery of financial services. FinTech companies provide a wide range of financial services to clients worldwide. FinTech is used to help companies, business owners, and consumers better manage their financial operations, business processes, and lives. FinTech technology is used in all financial services to improve the management of new software, applications, processes, and business models.

FinTech has transformed the banking and finance industry, and jobs are predicted to grow almost 25% annually over the next decade. The FinTech minor prepares students for employment in this high-demand field in jobs that include blockchain developer, application developer, quantitative analyst, data scientist, financial analyst, business development manager, product manager, cybersecurity analyst, risk control manager, and compliance analyst. Students with questions about this online minor should contact Dr. Lorraine Gardiner at lgardiner@daltonstate.edu.

MINOR

A minor must contain 15-18 semester hours of coursework, including at least 9 hours of upper-division courses at the 3000-4000 level. Courses taken to satisfy Core IMPACTS may not be counted toward completion of the minor. Courses taken in the Field of Study may sometimes be used to fulfill minor requirements.

Required Courses*		
FTA 4001	Foundations of Fintech	3
Choose two courses from the following list:		6
FTA 4002	Financial Technologies	
FTA 4003	Commercial Banking in FinTech	
FTA 4005	Intro Financial Data Analytics	
FTA 4100	Inform. Security for FinTech	
Elective Courses*		**6**
Select two electives from the following list.		
BUSA 3532	Bus Analytics/Data Mining	
CAPS 1145	Introduction to Networks	
CAPS 1152	Linux	
ECON 4101	Applied Econometrics	
FTA 4002	Financial Technologies (If not used as a required course)	
FTA 4003	Commercial Banking in FinTech (If not used as a required course)	
FTA 4005	Intro Financial Data Analytics (If not used as a required course)	
FTA 4100	Inform. Security for FinTech (If not used as a required course)	
FINC 3101	Intermediate Corporate Finance	
ITEC 3251	Linux II	
ITEC 3390	Management of IS Security	
MGIS 3352	Management Application Prog I	
MGIS 3353	Management Applications Programming II	
MGIS 3356	Database Management Systems	
* Grade of C or higher required in 3000-4000 level courses.		
All FTA classes are online.		
Total Hours		**15**

Business Administration Courses

BUSA 2106. The Environment of Business. 3-0-3 Units.
Introduces the political, social, legal, ethical, environmental, and technological issues that affect or are affected by business decisions. Topics include stakeholder analysis, social responsibility, ethics, globalization, business-government relations, and fair trade. (F, S, and Mountain Campus (Fall))

BUSA 2201. Fundamentals of Computer Appli. 3-0-3 Units.
Assures a basic level of computer applications literacy to include spreadsheet, database, word processing, and presentation software. (F, S, M, and Mountain Campus (S))
Prerequisites: MATH 1101 or higher.

BUSA 2850. Business Statistics. 3-0-3 Units.
Emphasizes applications of statistics in business. Topics include methods of presenting data, numerical measures and correlation, probability theory and probability distributions, sampling distributions, estimation, hypothesis testing, and linear regression. Microsoft Excel is an integral part of the course and is used in all aforementioned topics. (F, S, M) Prerequisite: BUSA 2201

BUSA 3055. Quantitative Analysis Bus Prob. 3-0-3 Units.
Develops analytical skills for business decision making using Microsoft Excel. Topics include time-series forecasting, profit models, optimization, simulation and decision analysis. Excel is used in all of the aforementioned topics extensively.(S)
Prerequisites: ACCT 2102, BUSA 2201, BUSA 2850, and ECON 2106, all with a "C" or better.

BUSA 3060. Business Law. 3-0-3 Units.
Covers the source of law and courts, and introduces tort law along with the historical, economic, political and ethical considerations in business and the impact of regulatory and administrative law on business. Topics include property law, contracts, and environmental issues.(F, S)
Prerequisites: BUSA 2106, ECON 2105, ECON 2106, all with a "C" or better.

BUSA 3070. Business Ethics. 3-0-3 Units.
Defines ethics, explores models of personal ethics, and reviews ethics in a variety of professional fields. In addition the course examines the relationship between business ethics and corporate social responsibility. Topics include corporate governance, trust and honesty in business, the role of ethics in managerial decision-making and behavior, the ethical use of information, and international ethics.(F, S)
Prerequisites: BUSA 2106, ECON 2105, ECON 2106, all with a "C" or better.

BUSA 3301. Business Communications. 3-0-3 Units.
This course is designed to prepare students to write and speak in a variety of business settings; to communicate effectively with business audiences by addressing strategic issues such as crisis communication, management of communication programs in a social media environment; communication skills with new technologies; and building key strategic and interpersonal relationships in business. The course also emphasizes basic skills in report writing and researching for sources, as well as writing effective business memos.(F, S, M)
Prerequisites: BUSA 2106, COMM 1110, and ENGL 1102, all with a "C" or better.

BUSA 3351. International Business. 3-0-3 Units.
This course provides a broad overview of international business and trade, and the impact of the international business environment on management decisions. Topics of the course include international business basics such as trade, barriers to trade, and the relationship between international business and international relations; effects of international business decisions of culture, political, legal, and economic forces; effects of government intervention and the role of social and economic aid organizations.(F, S, M)
Prerequisites: BUSA 2106, ECON 2105, ECON 2106, all with a "C" or better.

BUSA 3531. Data Cleaning & Visualization. 3-0-3 Units.
The course introduces skills for cleaning and restructuring data suitable for visualization using Excel functions and Power Query; for analyzing the data using Pivot Table and Power Pivot; and for visualizing the data using Power BI. A Windows PC is required.(F,S, M)
Prerequisites: ACCT 2102, BUSA 2850, and ECON 2106, all with a C or better.

BUSA 3532. Bus Analytics/Data Mining. 3-0-3 Units.
The course introduces students to business analytics and data mining. Topics include introduction to business analytics, data visualization, data transformation, cluster analysis, association analysis, decision trees, logistics regression, neural network and model performance evaluation. (F)
Prerequisites: BUSA 2850 and BUSA 3531, both with a "C" or better.

BUSA 3701. Prof Development Seminar. 1-0-1 Unit.
This class is designed to aid students in transitioning from the academic world to a professional business work environment. It will provide students with experience in applying for jobs, interviewing, networking, and business etiquette as well as expose them to other relevant and timely topics for advancing in the business world.(F, S)
Prerequisites: BUSA 3301 with a “C” or better.

BUSA 4900. Business Internships. 0-0-3 Units.
Provides students with on-site work experience in Business through a coordinated academic internship experience with a pre-approved employer. A portfolio chronicling the work experience, a project relating relevant academic literature to the Business internship experience, and a final presentation encompassing the entire internship experience are required to receive academic credit. By permission of the Internship Coordinator. (F, S) Prerequisite (s): 9 credit hours of upper division in ACCT, BUSA, MARK, MGIS, MNGT, or OPMT of which 3 credit hours must be in BUSA; and all with a "C" or better.

Economics Courses

ECON 2105. Principles of Macroeconomics. 3-0-3 Units.
Describes and analyzes macroeconomic principles. Topics covered include the scope and method of economics, national income/output analysis, employment/ unemployment, inflation, fiscal policy, monetary policy, and international finance.(F, S)
Prerequisites: MATH 1101 or 1111 with a grade of "C" or better.

ECON 2106. Principles of Microeconomics. 3-0-3 Units.
Describes and analyzes microeconomic principles. Topics covered include demand and supply theory, output and price determination, market structure, income distribution, government regulation of business, labor organizations, and international trade.(F, S)
Prerequisites: MATH 1101 or 1111 with a grade of "C" or better.

ECON 3109. Managerial Economics. 3-0-3 Units.
Economics is frequently described as the science of decision-making under scarcity (at any given time we want more things than we can obtain, given available resources) and this is a good description of the subject of this course. Students will apply economic tools and basic statistics to solve managerial problems faced by entrepreneurs, managers and government regulators. Typical topics include demand analysis and estimation, consumer theory, cost functions, market structures and other microeconomics subject. (S) Co-requisite: FINC 3056.
Prerequisites: ECON 2105, ECON 2106, both with a "C" or better.

ECON 3110. International Trade. 3-0-3 Units.
An introduction to international trade, with a focus on comparative advantage and gains from trade. Covers conventional trade models, trade policy with a focus on tariffs and quotas, measurement of a nation's balance of payments, foreign exchange rate determination, and operation of the international monetary system, and global organizations such as the World Trade Organization (WTO) and trade agreements such as the North American Free Trade Agreement (NAFTA).(M)
Prerequisites: ECON 2105 (concurrent), ECON 2106 with a "C" or better.

ECON 3112. Money and Banking. 3-0-3 Units.
Presents a comprehensive upper-level course in financial institutions, financial markets, bank management, and money and banking. This introduction to the operation of the US financial system describes the US financial institutions, instruments and markets; explains how the financial system interacts with the rest of the economy; and considers how the system changes through time.(F)
Prerequisites: FINC 3056 with a “C” or better.

ECON 4101. Applied Econometrics. 3-0-3 Units.
Standard econometric techniques are applied to various topics in economics. Techniques include models for cross-section data, such as limited dependent variable models, selectivity techniques, count data models, and models for panel data. Students will conduct statistical analyses and model evaluation.(S)
Prerequisites: Statistics (one of the following: BUSA 2050, BUSA 2850, BUSA 3050, MATH 1401, or MATH 2200, all with a "C" or better.

ECON 4700. Independent Study Economics. 0-0-3 Units.
Supervised, in-depth individual research and study of one or more current topics in economics in conjunction with an associated major project. Students will be required to prepare a formal report and presentation of the research topic and project. Only available with coordination with economic faculty.
Prerequisites: ECON 2105, ECON 2106, and FINC 3056, all with a "C" or better.

ECON 4800. Special Topics in Economics. 3-0-3 Units.
Examines current, relevant topics in field of Economics. Each special topics course will cover a new current topic. Co-requisite: FINC 3056

ECON 4900. Economics Internships. 0-0-3 Units.
Provides students with on-site work experience in economics through a coordinated academic internship experience with a pre-approved employer. A portfolio chronicling the work experience, a project relating relevant academic literature to the economic internship experience, and a final presentation encompassing the entire internship experience are required to receive academic credit. By permission of the Internship Coordinator.(F,S)
Prerequisites: FINC 3056 (Grade "B" or Better), plus an additional 3 credit hours of upper division FINC or ECON, and 3 credit hours of any upper division business course, all with a "C" or better.

FinTech Academy Courses

FTA 4001. Foundations of Fintech. 3-0-3 Units.
The financial services industries are changing rapidly with the emergence of financial technology (FinTech). The objective of the course is to provide students with an overview of FinTech and introductions to its applications in financial services, such as commercial and investment banking, digital investing, financial advising, and insurance. Students are expected to develop a broad understanding of the recent FinTech development and its impact on different parts of the financial world. Students will also have hands-on problem-solving experiences that can be useful in FinTech applications and innovation. Topics may include but are not limited to: blockchain and cryptocurrencies, smart contracting, payments, digital banking, P2P lending, crowdfunding, robo-advising, and InsurTech.
Prerequisites: WSOB or STM advisor approval.

FTA 4002. Financial Technologies. 3-0-3 Units.
This course examines the information and communications tools, technologies, and standards integral to consumer, merchant, and enterprise services in the payments and financial service sectors. Explores technology's role in reshaping FinTech businesses. Technologies span messaging, communication networks and gateways, core processing, mobile and online software, and application program interfaces (APIs). Includes the challenges, standards, and techniques associated with securing systems and data.
Prerequisites: WSOB or STM advisor approval.

FTA 4003. Commercial Banking in FinTech. 3-0-3 Units.
The FinTech revolution is creating significant disruption to the traditional processes of managing and regulating financial institutions, especially banks. Digital technology is increasingly altering basic financial intermediation functions such as payment processing, risk management, information dissemination, price discovery, capital raising, and consumer expectations concerning access to funds and the timing of loan decisions. Understanding, assessing and forecasting FinTech's impact on banking is particularly important because proper management and oversight of financial institutions is essential to the efficient operation of the national, as well as global, economy. In this course, students will learn about the principles and practices of commercial bank management, bank regulation, and the tradeoffs between risk and return. Challenges presented by the FinTech evolution, including traditional and emergent competitors as well as demographic, social, and technology forces driving change in the industry, will be integrated throughout the entire course.
Prerequisites: WSOB or STM advisor approval.

FTA 4005. Intro Financial Data Analytics. 3-0-3 Units.
This course provides the foundation for financial data analytics used in business and FinTech applications. The objective of this course is for students to gain experience in analyzing financial data using modern machine learning techniques, statistical methods, and prediction models. Students will develop computational skills to perform data analysis using a modern statistical programming environment, and apply these skills to address a range of problems encountered by business firms, including those in the FinTech industry. The topics discussed include an introduction to R language, visualization of financial data, cluster analysis, simple and multiple linear regression, classification models, high dimension data analysis using Lasso, and model assessment and selection using cross validation. Students will have hands-on experience in the development of data analytics applications to analyze real world financial problems.
Prerequisites: WSOB or STM advisor approval.

FTA 4100. Inform. Security for FinTech. 3-0-3 Units.
The purpose of this course is to introduce the business student to the rapidly evolving and critical international arenas of privacy, information security, and critical infrastructure. This course is designed to develop knowledge and skills for security of information and information systems within organizations. It focuses on concepts and methods associated with security across several systems platforms, including internal and Internet-facing systems. The course utilizes a world view to examine critical infrastructure concepts as well as techniques for assessing risk associated with accidental and intentional breaches of security in a global network. It introduces the associated issues of ethical uses of information and of privacy considerations.
Prerequisites: WSOB or STM advisor approval.

Finance Courses

FINC 3056. Principles of Finance. 3-0-3 Units.
Introduces students to financial management. Topics include the structure and analysis of financial statements, cash flow, time value of money, investment valuation, capital budgeting, long and short term financial decision making. (F, S) Co-requisite: BUSA 2850.
Prerequisites: ACCT 2102, COMM 1110, ECON 2105, ECON 2106, ENGL 1102, all with a "C" or better.

FINC 3101. Intermediate Corporate Finance. 3-0-3 Units.
The course introduces students to financial management. Topics include the structure and analysis of financial statements, cash flow, financial forecasting, determination of the cost of capital and the profitability of proposed investments in fixed assets, portfolio theory, and risk return tradeoffs that must be considered in using financial leverage.(F)
Prerequisites: BUSA 2850 and FINC 3056, both with a "C" or better.

FINC 3201. Investments. 3-0-3 Units.
Introduces financial assets and markets. Topics include an overview of security types, the role of risk in asset pricing, the capital asset pricing model, the efficient markets hypothesis, portfolio theory, characteristics of mutual funds in retirement accounts, stock options, future contracts, and valuation models for stocks and fixed income securities.(F)
Prerequisites: BUSA 2850 and FINC 3056, both with a "C" or better.

FINC 4112. Real Estate Finance. 3-0-3 Units.
Application of theoretical aspects of financial economics to explain real estate financial institutions and markets. Financial and economic methods are applied to residential and commercial real estate. Special topics include real estate in a portfolio, agency problems, and the influence of the legal environment.(F)
Prerequisites: BUSA 2850 and FINC 3056, both with a "C" or better.

FINC 4301. Risk Management. 3-0-3 Units.
The types, payoff and pricing of derivative securities and contracts and their application in managing financial risks faced by corporations. Topics include options, forwards, futures and swaps; managing foreign currency risk, interest rate risk, stock price risk, and commodity price risk; and risk management techniques.(S)
Prerequisites: FINC 3201 with a "C" or better.

FINC 4700. Independent Study Finance. 0-0-3 Units.
Supervised, in-depth individual research and study of one or more current topics in finance in conjunction with an associated major project. Students will be required to prepare a formal report and presentation of the research topic and project. Only available with coordination with Finance faculty.(F, S)
Prerequisites: FINC 3056 with a "C" or better.

FINC 4701. Finance Case Studies. 3-0-3 Units.
Empirical case studies in corporate finance. The modern theories of capital structure, dividend policy, corporate control, investment banking, and capital budgeting, emerging areas of research such as market microstructures, venture capital financing, and comparative international corporate finance.(S)
Prerequisites: ECON 3112, FINC 3101 and FINC 3201, all with a "C" or better.

FINC 4800. Special Topics in Finance. 3-0-3 Units.
Examines current, relevant topics in field of Finance. Each special topics course will cover a new current topic.
Prerequisites: FINC 3056 with a "C" or better.

FINC 4900. Finance Internships. 0-0-3 Units.
Provides students with on-site work experience in finance through a coordinated academic internship experience with a pre-approved employer. A portfolio chronicling the work experience, a project relating relevant academic literature to the finance internship experience, and a final presentation encompassing the entire internship experience are required to receive academic credit. By permission of the Internship Coordinator.(F,S)
Prerequisites: FINC 3056 (Grade "B" or Better), plus an additional 3 credit hours of upper division FINC, and 3 credit hours of any upper division business course, all with a "C" or better.

Management Information Systems Courses

MGIS 3351. Principles Mgmt Info Systems. 3-0-3 Units.
Covers essential business aspects of information systems such as networks, databases, the Internet, management reporting, software development, computer hardware, and information ethics. The course also examines the use of information systems for managerial decision-making and for gaining strategic advantage. Students will experience hands-on system activities associated with course concepts.(F, S)
Prerequisites: BUSA 2201, COMM 1110, ENGL 1102, all with a "C" or better.

MGIS 3352. Management Application Prog I. 3-0-3 Units.
Develops a knowledge of language and file structures for computer-based business applications using a major business procedural-oriented programming language. Students will write computer programs on individual and/or team projects.(F)
Prerequisites: BUSA 2201 with a "C" or better.

MGIS 3353. Management Applications Programming II. 3-0-3 Units.
Emphasizes top-down design, structured techniques, testing and modularity. Emphasis placed on development of correct efficient programs that are easy to maintain. Includes problem analysis, problem design, documentation, testing and debugging. Introduces application development using an object-oriented language.(S)
Prerequisites: BUSA 2201 and MGIS 3352, both with a "C" or better.

MGIS 3356. Database Management Systems. 3-0-3 Units.
Focuses on the use of database systems in business to support information systems and decision-making. Topics include database concepts, data modeling, database design and development, administration of database systems, and database technologies. Students will have hands-on experience developing a database application.(F)
Corequisites: MGIS 3351 with a "C" or better.

MGIS 4358. Web-based MIS. 3-0-3 Units.
Examines the process of developing business information systems with a significant web component. Topics include organizational considerations involved in developing and maintaining a web-enhanced MIS, and system considerations such as usability and other human-computer-interaction (HCI) issues, general and database web-design principles, and programming of web-enhanced systems. Students will develop a web site for a real or hypothetical organization. (As needed) ;
Prerequisites: MGIS 3356 with a "C" or better.
Corequisites: MGIS 3353.

MGIS 4360. Databases: Big Data & Analyt. 3-0-3 Units.
Provides an overview of database management systems for big data and analytics. Topics include an overview of analytics and related data requirements, data modeling, data management and an introduction to prominent types of database systems designed to support big data and analytics. Students will have hands-on experience with various database technologies.(S)
Prerequisites: MGIS 3356 with a "C" or better.

MGIS 4580. Enterprise Management Systems. 3-0-3 Units.
Covers the major components of enterprise management systems that support core business and supply chain management functions such as accounting, planning, sourcing, production, material flow, inventory management, warehouse management, sales and transportation. Students will have hands-on experience with a commercial-grade enterprise management system.(F)
Prerequisites: LSCM 3251 and MGIS 3351, all with a "C" or better.

MGIS 4700. Independent Study MGIS. 0-0-3 Units.
Supervised, in-depth individual research and study of one or more current topics in MIS in conjunction with an associated major project. Students will be required to prepare a formal report and presentation of the topic research and project. Only available with coordination with MIS faculty.
Prerequisites: MGIS 3351 with a "C" or better.

MGIS 4701. Systems Analysis & Design. 3-0-3 Units.
Examines the process of developing business information systems. Topics include requirements analysis and specification, systems modeling, and systems design techniques. Structured and object-oriented tools and techniques are introduced. A major component of the course is the analysis, design and development of a business system as a term project.(S)
Prerequisites: MGIS 3352 and MGIS 3356 (formerly MGIS 4356), and all with a "C" or better.

MGIS 4800. Special Topics in MIS. 3-0-3 Units.
This special topics course for provides an overview of database management systems for big data and analytics. Topics include an overview of analytics and related data requirements, data modeling, data management and an introduction to prominent types of database systems designed to support big data and analytics. Students with have hands-on experience with various database technologies.
Prerequisites: MGIS 3351 with a "C" or better.

MGIS 4900. Mgmt Info System Internships. 0-0-3 Units.
Provides students with on-site work experience in Management Information Systems through a coordinated academic internship with a pre-approved employer. A portfolio chronicling the work experience, a project relating relevant academic literature to the Information Systems internship experience, and a final presentation encompassing the entire internship experience are required to receive academic credit. By permission of the Internship Coordinator.(F,S)
Prerequisites: MGIS 3351 (Grade of "B" or Better), plus an additional 3 credit hours of upper division MGIS, and 3 credit hours of any upper division business course, all with a "C" or better.