PAMPLIN COLLEGE OF BUSINESS VIRGINIA TECH

Department of Finance, Insurance & Business Law
Bachelor of Science in Business in Finance
Major: **FinTech and Big Data Analytics (FBDA)**

For students entering under UG Catalog 2025 - 2026

YEAR ONE						
FALL SEMESTER	✦	**Credits**		**SPRING SEMESTER**	✦	**Credits**
CS 1064: Intro to Programming in Python	5f/M	3		ACIS 2115: Principles of Accounting [1, 2]	M	3
ECON 2005: Principles of Economics[1, 2]	3	3		#CS 1114: Introduction to Software Design	M	3
COMM 1015: Communication Skills[3]	1f	3		*STAT 3005: Statistical Methods[1, 2, 12]	5a/M	3
*MATH 1225: Calculus of a Single Variable [1, 2, 4]	5f	4		*MATH 1226: Calculus of a Single Variable[1, 2]	5f	4
Critique & Practice in the Arts	6a	3		*COMM 1016: Communication Skills[3]	1f	3
Total		**16**		**Total**		**16**
YEAR TWO						
FALL SEMESTER	✦	**Credits**		**SPRING SEMESTER**	✦	**Credits**
*ACIS 2116: Principles of Accounting[1, 2]	C	3		*MATH 2204: Multivariable Calculus[1, 2, 12]	M	3
*STAT 3006: Statistical Methods[1, 2, 12]	M	3		*#FIN 3054: Legal & Ethical Environment of Business[2, 6]	C	3
*ECON 2006: Principles of Economics[1, 2]	3	3		*#FIN 3104: Introduction to Finance[2]	C	3
*MATH 2114: Introduction to Linear Algebra	M	3		Reasoning in the Natural Sciences	4	3
*#CS 2114: Software Design & Data Structures	6d/M	3		*#STAT 3104: Probability & Distributions	M	3
SOC 1004: Introductory Sociology[5]	7	3				
Total		**18**		**Total**		**15**
YEAR THREE						
FALL SEMESTER	✦	**Credits**		**SPRING SEMESTER**	✦	**Credits**
*BIT 2406: Business Statistics, Analytics, & Modeling[1, 2]	5a	3		*#BIT 3424: Introduction to Bus Analytics & Modeling	M	3
*#FIN 3114: Python/SQL for Data Analytics & Finance	M	3		*#CMDA/CS/STAT 3654: Introductory Data Analytics & Visualization[13] or *BIT 3484: Advanced Business Analytics in Python	M	3
MGT or HTM 2314: Introduction to International Business[2]	C	3		*#FIN 3144: Investments: Debt, Equity, & Derivatives[7, 8]	C	3
*#MKTG 3104: Marketing Management[2]	C	3		*#FIN 3154: Corporate Financial Analytics and Strategy[7, 8]	C	3
*#FIN 3134: Financial Analytics[7]	C	3		*#MGT 3304: Mgt Theory & Leadership Practice[2] or *MGT 3404: Principles of Management[2]	M	3
Total		**15**		**Total**		**15**
YEAR FOUR						
FALL SEMESTER	✦	**Credits**		**SPRING SEMESTER**	✦	**Credits**
*#ACIS 3115: Intermediate Accounting[9] or *#ACIS 4194: Analysis of Financial Statements	M	3		*#FIN 4214: Financial Modeling in Excel[10]	M	3
*#BIT 3414: Operations & Supply Chain Management[2]	C	3		*#MGT 4394: Strategic Management[2]	C	3
*#FIN 4414: FinTech - Quantitative Finance Capstone[10, 11, 14]	M	3		Reasoning in the Natural Sciences	4	3
Critical Thinking in the Humanities	2	3		Critical Thinking in the Humanities	2	3
*#FBDA Elective[10, 12] (see page 2)	M	3		*#ENGL 3764: Technical Writing or ENGL 3774 Business Writing or ENGL 2844 Intro to Prof & Technical Writing	1a/M	3
Total		**15**		**Total**		**15**

✦	C = Degree Core Required Course	M = Major Required Course

All other designations identify Pathways General Education requirements https://www.pathways.prov.vt.edu/

FBDA ELECTIVES (choose one – 3 credit hours)
*#FIN 4144: International Financial Management *#FIN 4224: Fixed Income Securities[10] *#FIN 4264: Managing Risk with Derivatives[10] *#FIN 4274: Equity Securities[10]
GENERAL INFORMATION
A total of **125 credit hours** is required for graduation. Any exceptions to this curriculum must be approved by the student's department head and Associate Dean for Pamplin Undergraduate Programs.
Foreign Language Requirement: Students who did not successfully complete at least two years of a single foreign, classical, or sign language during high school must successfully complete six credit hours of a single foreign, classical, or sign language at the college level. Courses taken to meet this requirement may not count towards the minimum credit hours required for graduation. Please refer to the Undergraduate Catalog for details.
Pre-requisites: Students are responsible for ensuring they have met necessary pre-requisites for all courses. Courses with pre-requisites are noted with * (e.g. *BIT 2405). Please refer to the Undergraduate Catalog or academic advisor.
Transferring Courses: Requirements and procedures for transferring courses are available http://pampl.in/transfercreditsteps
Overall and In-Major GPA: Students must have an overall GPA of 2.0 and an in-major GPA of 2.0 to graduate. Courses used to calculate the in-major GPA are noted with a # (e.g. #FIN 3104).
Policy 91: University policy requires a student to make satisfactory academic progress towards a degree in order to remain enrolled at the institution (see footnote 1). Students are responsible for reading and understanding Policy 91 in accordance with Pamplin policies http://pampl.in/policy91 **Three attempt rule:** In accordance with university policy, students are not allowed to take the same course more than three times. Please note that the Department of Finance will enforce this policy unless a special exception has been granted. If you are dropped from a course after you have taken it three times, please consult with your Pamplin academic advisor so that they can advise you of the next steps.

[1] Policy 91: Pamplin students in a business degree program must complete ten business courses (MATH 1225 + MATH 1226 + MATH 2204, ACIS 2115-2116, BIT 2406, STAT 3005-3006, and ECON 2005-2006) with a grade of C- or higher by 72 attempted credit hours (or 90 attempted credit hours for students with more than 18 transfer credits). Students who have not met the requirements will be notified upon reaching 72 (or 90) credit hours that they must complete the missing course(s) in the next term(s) of enrollment. Failure to do so may result in the student's dismissal from the business degree program. This policy is strictly enforced.

[2] Graduation requirement: Students must achieve a grade of C- or higher in select business courses (MATH 1225 + MATH 1226 + MATH2204, ACIS 2115-2116, STAT 3005-3006, BIT 2406, ECON 2005-2006, MGT or HTM 2314, MGT 3304 or MGT 3404, MKTG 3104, FIN 3054 or FIN 3074, FIN 3104, BIT 3414, and MGT 4394).

[3] ENGL 1105-1106: First-Year Writing can substitute for COMM 1015-1016: Communication Skills. However, students who make this substitution must also take COMM 2004: Public Speaking.

[4] Math readiness exam (ALEKS PPL), eligible AP credit, or MATH 1214 pre-requisite course required for enrollment.

[5] Students may use PSYC 1004: Introductory Psychology to satisfy the requirement if they meet the Pathway 7: Critical Analysis of Identity & Equity in the U.S. requirement with a different required course.

[6] FIN 3054: Legal & Ethical Environment of Business and FIN 3074: Legal, Ethical, & Financing Issues for Entrepreneurs are equivalent courses. Students may take either course to satisfy graduation requirements.

[7] Graduation requirement: Students must achieve a grade or C or higher in FIN 3134, FIN 3144, and FIN 3154.

[8] Students who receive a grade of C- in FIN 3134 may enroll concurrently in FIN 3144 and FIN 3154 while re-taking FIN 3134.

[9] ACIS 2504 pre-requisite is required for eligibility to enroll in ACIS 3115.

[10] Students who receive a grade of C- in FIN 3144 and FIN 3154 may enroll concurrently in FIN 42XX and FIN 4414 courses while re-taking FIN 3144 and FIN 3154. A grade of C or higher in FIN 3134 is required before enrolling in FIN 42XX and FIN 4414 courses.

[11] FIN 4414: FinTech Quantitative Finance Capstone will provide an FBDA-specific capstone course for students of major. FBDA capstone coursework will be available only in Fall semesters. Courses listed in Spring of Year Three must be completed for students to be eligible to attempt FBDA FIN 4414 coursework.

[12] Substitution of STAT 3005-3006, MATH 2204, and FDBA Elective (12 Credit hours) by CMDA 2005-2006 (also 12 credit hours) is acceptable provided CMDA is able to accommodate FBDA students. In that case, Policy 91 and Graduation Requirements (Footnotes 1, 2 above) will be modified accordingly.

[13] "Python" programming language is recommended.

[14] CMDA 4654 is the only substitution for FIN 4414.