



BACHELOR OF SCIENCE IN BUSINESS INTELLIGENCE AND ANALYTICS (BIA)

What is BS in Business Intelligence and Analytics (BIA)?

The BS in Business Intelligence and Analytics (BIA) at Tiffin University prepares students to turn raw data into practical business insight. Students learn how to collect, clean, analyze and visualize data, then communicate their findings to help organizations make better decisions, improve performance and spot new opportunities. Graduates are ready to work across industries such as healthcare, manufacturing, technology, finance, retail and engineering.

The curriculum combines:

TU Core & Business foundation

Business core: Financial Accounting, Microeconomics, Business Finance, Business Law I, Introductory Marketing, Principles of Management, Supply Chain Management, Digital Marketing, Social Media Marketing and Organizational Strategy.

BIA Core – technical and analytics coursework:

- Math and statistics: College Algebra, Applied Statistics, Discrete Mathematics and Applied Business Statistics.
- Programming and information systems: Digital Literacy and AI Fluency, Intro to Programming, Advanced Programming Concepts, Information Systems for Managers and IT Project Management.
- Databases & data infrastructure: Database I, Database II and Data Warehousing Concepts.
- Analytics and AI: Introduction to Artificial Intelligence, Data Mining for Decision Making, Data Analysis and Business Modeling, Business Analytics, Machine Learning for Business Modeling, Big Data Analytics in Business and Data Visualization for BI.
- Integration and practice: BIA capstone project and internship.

Sub-disciplines / focus areas:

- Business intelligence and decision support
- Data analytics and statistical modeling
- Data mining and machine learning for business
- Big data and cloud-based analytics
- Data visualization and storytelling
- Database design, data warehousing and ETL
- Information systems and IT project management

Key competencies students gain:

- Use statistics, data mining and machine learning to analyze complex business data.
- Design and query relational databases and data warehouses for reporting and analytics.
- Build dashboards and data visualizations to communicate insights to non-technical stakeholders.
- Understand and apply big data technologies and cloud-based analytics solutions.
- Manage data quality, data governance and data security considerations.
- Translate business questions into analytic problems and solutions and present findings clearly to executives.
- Work effectively in teams, manage projects and behave professionally and ethically.

Why study BS in Business Intelligence and Analytics (BIA)?

High demand and strong salaries. BI and analytics roles are identified as high-growth, high-salary careers. The BIA proposal notes that BI/Data Analysts typically earn \$70,000-\$90,000+, with median wages around \$93,000 for business intelligence analysts and a projected 14% growth for business analyst-type roles over a decade.



Why TU's BIA stands out:

- Business + Tech integration: Students get a full business core (accounting, finance, marketing, management and supply chain) plus a deep technical stack in programming, databases, AI, machine learning, big data and visualization. This makes graduates fluent in both “business language” and “data language.”
- Hands-on, project-based curriculum: Courses like Data Mining, Business Analytics, Machine Learning for Business Modeling, Big Data Analytics and Data Visualization all include practical projects and software tools (SQL, Python, R, visualization tools, etc.), culminating in a capstone project and internship tied to real organizations.
- Multiple delivery options: The degree is designed for both seated and online students, broadening access and flexibility.
- Clear career alignment: The program directly targets roles like Business Intelligence Analyst, Data Analyst, BI Developer, Data Engineer and Analytics Manager, with explicit outcomes tied to data analytics, machine learning, visualization and decision-making.
- Certification preparation: BIA prepares students for key certifications such as Certified Analytics Professional (CAP), PMI Professional in Business Analytics (PBA) and IIBA's CBDA/CBAP/CCBA, which can further boost employability.

In short, TU's BIA program gives students market-ready data skills plus a solid business foundation, positioning them to add immediate value in data-driven organizations.

What can I do with a BS in Business Intelligence and Analytics (BIA) degree?

Graduates can work in many roles where data and business strategy meet. Examples include:

1. Business Intelligence Analyst / Business Intelligence Data Analyst
2. Data Analyst / Data & Analytics Consultant
3. Business Intelligence Developer / BI Engineer
4. Data Scientist / Machine Learning for Business Specialist
5. Database Manager / Data Warehouse or ETL Developer
6. Analytics or BI Project Manager / Information Management Program Manager
7. Digital Marketing Analyst / E-commerce or Web Analytics Specialist
8. Business Analyst / Business Process Analyst
9. Accessibility or Usability Specialist using analytics
10. Data Governance / Data Quality Specialist

Potential graduate programs:

- MS in Artificial Intelligence (strong fit for BIA grads focused on advanced AI/ML).
- MS in Data Science or Data Analytics.
- MBA with a concentration in Business Analytics or Information Systems.
- MS in Information Systems / IT Management.

How much will I earn with this degree?

Titles vary (Business Intelligence Analyst, Data Analyst, Data Scientist, etc.), but BIA-related roles are generally well-paid. Below are recent median annual wages (U.S.) from the Bureau of Labor Statistics (BLS) for closely related occupations (May 2025 data where available):

- Data Scientist – \$112,590 median annual wage.
- Operations Research Analyst (optimization and modeling roles common in analytics) – \$91,290 median annual wage.
- Management Analyst (similar to business/BI analyst roles) – \$101,190 median annual wage.
- Database Administrators and Architects – \$104,620 median annual wage for database administrators; \$135,980 for database architects.
- Computer Systems Analyst (bridging business needs and IT systems) – \$103,790 median annual wage.
- Market Research Analyst (analytics applied to customers and marketing) – \$76,950 median annual wage.
- Software Developer (for graduates who lean into development/engineering roles) – \$133,080 median annual wage.

The BIA program documents also note typical salary ranges of \$70,000 – \$90,000+ for BI and data analytics roles, with mid-career professionals and managers earning well above that range.



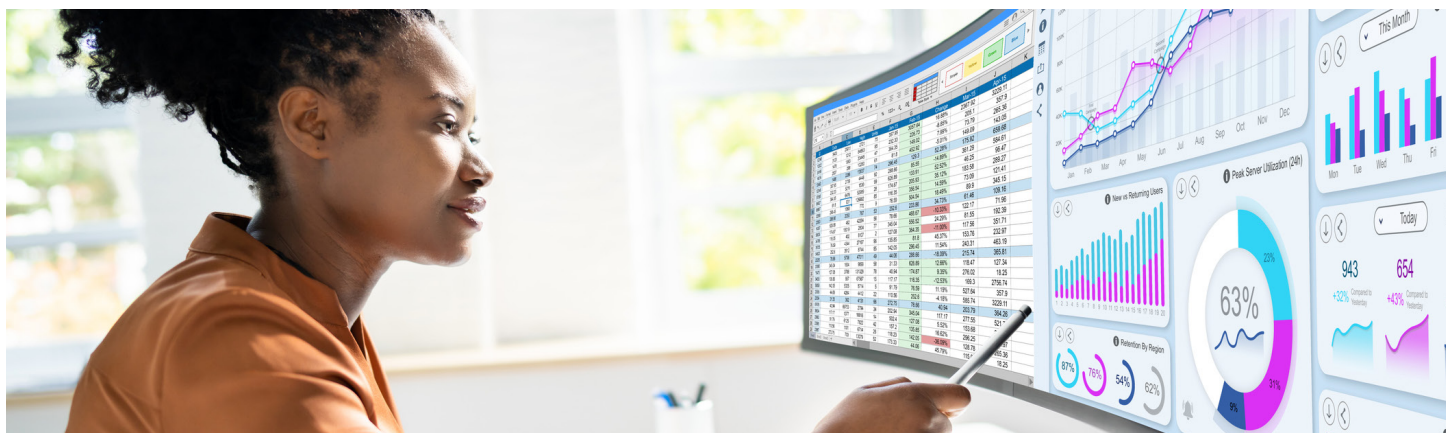
What is your pathway to graduation?

| YEAR 1 | |
|---|--|
| FIRST YEAR FALL | FIRST YEAR SPRING |
| DLA 101 – Digital Literacy and AI Fluency | MAT 273 – Applied Statistics |
| MAT 181 – College Algebra | CST 285 – Spreadsheet Applications & Data Analysis for Decision Making |
| MKT 151 – Introductory Marketing | LAW 211 – Business Law I |
| ENG 141 – Introduction to Rhetoric and Academic Writing | ENG 142 – Rhetoric and Academic Writing |
| DEC 100 – Engage | MAT 287 – Discrete Mathematics |

| YEAR 2 | |
|--|---|
| SECOND YEAR FALL | SECOND YEAR SPRING |
| CST 201 – Introduction to Programming | CST 251 – Advanced Programming Concepts |
| ACC 210 – Financial Accounting | NAT 130 – Foundations for Healthy Living |
| MGT 201 – Principles of Management | BIA 280 – Introduction to Artificial Intelligence |
| DEC 200 – Explore | ECO 222 – Principles of Microeconomics |
| COM 130 – Introduction to Speech Communication | MGT 221 – Supply Chain Management |

| YEAR 3 | |
|--|--|
| THIRD YEAR FALL | THIRD YEAR SPRING |
| BIA 300 – Data Analysis and Business Modeling | CST 312 – Information Systems for Managers |
| BIA 299 – Data Mining for Decision Making | FIN 301 – Business Finance |
| CST 280 – Database I | CST 380 – Database II |
| BIA 273 – Applied Business Statistics | MKT 253 – Marketing Communications |
| BIA 400 – Machine Learning for Business Modeling | DEC 300 – Connect |

| YEAR 4 | |
|-------------------------------------|--|
| FOURTH YEAR FALL | FOURTH YEAR SPRING |
| DEC 400 – Impact | CST 412 – IT Project Management |
| BIA 410 – Data Visualization for BI | BIA 460 – Capstone Project |
| BIA 305 – Business Analytics | BIA 470 – Internship |
| MKT 370 – Digital Marketing | Pick List Credit (Art/Cul/Eng/His/Phi) |
| BIA 420 – Big Data Analytics | MGT 495 – Organizational Strategy |



Stay on track!

YEAR 1

BUILD YOUR FOUNDATION

- Complete foundational courses in digital literacy, math, writing and business, including DLA 101, MAT 181, MAT 273, MAT 287, MKT 151, LAW 211, ENG 141 and ENG 142.
- Complete CST 285 to begin building spreadsheet, data and decision-making skills.
- Meet with your academic advisor at least once per semester to confirm your four-year plan.
- Begin exploring careers in business intelligence, analytics, marketing and related business fields.

YEAR 2

BUILD CORE BUSINESS AND PROGRAMMING SKILLS

- Complete core coursework in programming, management, economics, accounting and analytics foundations, including CST 201, CST 251, ACC 210, MGT 201, MGT 221, ECO 222, BIA 280 and COM 130.
- Strengthen your technical and business problem-solving skills through class projects and applied assignments.
- Continue meeting with Career Services to build your resume, LinkedIn and internship goals.
- Start identifying areas of interest such as analytics, AI for business, operations or digital strategy.

YEAR 3

DEEPEN ANALYTICS AND DATA SKILLS

- Complete advanced coursework in business analytics, data mining, applied business statistics, database systems, business modeling, information systems, finance and marketing communications, including BIA 273, BIA 299, BIA 300, BIA 400, CST 280, CST 380, CST 312, FIN 301 and MKT 253.
- Build a strong portfolio through projects involving data analysis, dashboards, databases and business decision-making.
- Apply for internships or other practical experiences related to BI, analytics, data or business operations.
- Continue developing communication, teamwork, and presentation skills through applied coursework and project work.

YEAR 4

LAUNCH YOUR CAREER OR GRADUATE STUDIES

- Complete upper-level coursework in analytics strategy and application, including BIA 305, BIA 410, BIA 420, MKT 370, CST 412, BIA 460 and BIA 470, along with remaining elective and core requirements.
- Use your internship and capstone project to demonstrate readiness for business intelligence and analytics roles.
- Work closely with faculty and Career Services to secure full-time employment or prepare for graduate study.
- Finalize your portfolio and present your strongest work in analytics, BI and business problem-solving.