



BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI

COURSE STRUCTURE

B. Sc. (BUSINESS ANALYTICS)

as per NEP-2020

w.e.f. Academic Year 2025-26

Total Credit Requirement for B. Sc. (Business Analytics) = 123 (in 3 years/ 6 semesters)

Total Credit Requirement for B. Sc. Honours (Business Analytics) = 163 (in 4 years/ 8 semesters)

| Semester / Session of Study | Course Level | Category of Course | Course Code | Courses | Mode of delivery and credits | | | Total Credits C-Credits |
|-----------------------------|--------------|--------------------|--------------------------------------|--|------------------------------|------------------|------------------|-------------------------|
| | | | | | L-Lecture; | T-Tutorial; | P-Practical | |
| | | | | | L (Periods/week) | T (Periods/week) | P (Periods/week) | C |
| First/ Monsoon | FIRST | AECC | HS24131 | Communication Skills - I | 0 | 0 | 3 | 1.5 |
| | | MDC | MN25118 | Introduction to Computing | 3 | 0 | 0 | 3 |
| | | VAC | MN25102 | Human Values & Professional Ethics | 2 | 0 | 0 | 2 |
| | | VAC | VAC - 1 (One Course from VAC Group)* | | | | | 2 |
| | | SEC- SB | CA25110 | Office Automation Tools | 0 | 1 | 4 | 3 |
| | | DSC | BA25101 | Principles and Practices of Management | 3 | 0 | 0 | 3 |
| | | DSC | MN25119 | Statistics for Managers | 3 | 0 | 0 | 3 |
| | | DSC | MN25108 | Introduction to Business Accounting | 3 | 0 | 0 | 3 |
| | | Total Credits | | | | | | |

| Semester /Session of Study | Course Level | Category of Course | Course Code | Courses | Mode of delivery & credits | | | Total Credits C-Credits |
|----------------------------|--------------|--------------------|--------------------------------------|------------------------------------|----------------------------|-------------------|-------------------|-------------------------|
| | | | | | L-Lecture; | T-Tutorial. | P-Practical | |
| | | | | | L (Periods /week) | T (Periods /week) | P (Periods /week) | C |
| Second/ Spring | FIRST | AECC | MN25109 | Public Speaking & Creative Writing | 1 | 0 | 2 | 2 |
| | | MDC | BA25102 | Python Programming | 3 | 0 | 3 | 4.5 |
| | | VAC | VAC - 2 (One Course from VAC Group)* | | | | | 2 |
| | | SEC-SB | BA25103 | Advanced Microsoft Excel | 0 | 1 | 4 | 3 |
| | | DSC | BA25104 | Marketing Management | 3 | 1 | 0 | 4 |
| | | DSC | MN25115 | Business Economics | 3 | 0 | 0 | 3 |
| | | DSC | BA25105 | Fundamentals of Business Analytics | 3 | 0 | 0 | 3 |
| Total Credits | | | | | | | 21.5 | |

EXIT OPTION AFTER FIRST YEAR WITH CERTIFICATION

Students exercising exit option after first year have to pick up two courses of 3 credits each (total 6 credits) from the Vocational Course list (level-1). For others, the vocational courses are optional and non-credit.

| Semester/ Session of Study | Course Level | Category of Course | Course Code | Courses | Mode of delivery and credits L-Lecture; T-Tutorial. P-Practical | | | Total Credits C-Credits |
|----------------------------------|-----------------|--------------------------|-------------|---|---|-------------------------|-------------------------|-------------------------------|
| | | | | | L (Periods/ week) | T (Periods/ week) | P (Periods /week) | C |
| | | | | | L | T | P | |
| Third/ Monsoon | SECOND | AECC | MN25201 | Personality Development | 2 | 0 | 2 | 3 |
| | | MDC | MN25206 | Quantitative Techniques in Management | 3 | 0 | 0 | 3 |
| | | SEC-SB | MN25203 | Computerized Accounting | 2 | 0 | 2 | 3 |
| | | DSC | BA25201 | Introduction to Indian Financial System | 3 | 0 | 0 | 3 |
| | | DSC | BA25202 | Database Design Concepts | 3 | 0 | 2 | 4 |
| | | DSC | BA25203 | Business Research | 3 | 1 | 0 | 4 |
| | | MDC | HU24211 | Indian Knowledge System | | | | 0 |
| Total Credits | | | | | | | 20 | |

| Semester/ Session of Study (Recommen ded) | Course Level | Category of Course | Course Code | Courses | Mode of delivery and credits L- Lecture; T-Tutorial. P-Practical | | | Total Credits C-Credits |
|---|-----------------|--------------------------|-------------|---|--|-------------------------|-------------------------|-------------------------------|
| | | | | | L (Periods /week) | T (Periods /week) | P (Periods /week) | C |
| | | | | | L | T | P | |
| Fourth/ Spring | SECOND | AECC | HS24133 | Communication Skills - II | 0 | 0 | 3 | 1.5 |
| | | DSC | BA25204 | Legal Aspects of Business | 3 | 1 | 0 | 4 |
| | | DSC | BA25205 | Human Resource Management | 3 | 0 | 0 | 3 |
| | | DSC | BA25206 | Financial Management | 3 | 0 | 0 | 3 |
| | | DSC | BA25207 | Artificial Intelligence for Managers | 3 | 0 | 3 | 4.5 |
| | | DSC | BA25208 | Data Analytics using R | 3 | 0 | 2 | 4 |
| Total Credit | | | | | | | 20 | |

EXIT OPTION AFTER SECOND YEAR WITH DIPLOMA

Students exercising exit option after second year have to pick up two courses of 3 credits each (total 6 credits) from the Vocational Course list (level-2). For others, the vocational courses are optional and non-credit.

| Semester/ Session of Study (Recommended) | Course Level | Category of Course | Course Code | Courses | Mode of delivery and credits L-Lecture; T-Tutorial. P-Practical | | | Total Credits C-Credits |
|---|-----------------|--------------------------|-------------|---|---|-------------------------|-------------------------|-------------------------------|
| | | | | | L (Periods /week) | T (Periods /week) | P (Periods /week) | C |
| | | | | | L | T | P | |
| Fifth/ Monsoon | Third | DSC | BA25301 | Small Business and Entrepreneurship | 2 | 0 | 0 | 2 |
| | | DSC | BA25302 | Data Mining and Applications | 3 | 0 | 2 | 4 |
| | | DSC | BA25303 | Summer Internship / Project | | | | 3 |
| | | DSE | | Elective -1 | | | | 3 |
| | | DSE | | Elective -2 | | | | 3 |
| | | DSE | | Elective -3 | | | | 3 |
| | | DSE | | Elective -4 | | | | 3 |
| Total Credits | | | | | | | 21 | |

| Semester/ Session of Study (Recommended) | Course Level | Category of Course | Course Code | Courses | Mode of delivery and credits L-Lecture; T-Tutorial. P-Practical | | | Total Credits C-Credits |
|---|-----------------|--------------------------|----------------|-------------------------------|---|-------------------------|-------------------------|-------------------------------|
| | | | | | L (Periods /week) | T (Periods /week) | P (Periods /week) | C |
| | | | | | L | T | P | |
| Sixth/ Spring | Third | DSC | BA25304 | E- Commerce | 3 | 1 | 0 | 4 |
| | | DSC | BA25305 | Basics of Machine Learning | 3 | 0 | 2 | 4 |
| | | DSE | | Elective -5 | | | | 3 |
| | | DSE | | Elective -6 | | | | 3 |
| | | DSE | | Elective -7 | | | | 3 |
| | | DSE | | Elective -8 | | | | 3 |
| Total Credit | | | | | | | 20 | |

Total credits at the end of third year- 123

Students have to select electives from the list of electives given.

EXIT OPTION AFTER THIRD YEAR WITH DEGREE

| Semester/ Session of Study | Course Level | Category of Course | Course Code | Courses | Mode of delivery and credits L- Lecture; T-Tutorial. P-Practical | | | Total Credits C-Credits |
|----------------------------------|-----------------|-----------------------|----------------|--------------------------------------|--|-------------------------|-------------------------|-------------------------------|
| | | | | | L (Periods /week) | T (Periods /week) | P (Periods /week) | C |
| | | | | | L | T | P | |
| Seventh/ Monsoon | Fourth | DSC | BA25401 | Advertising Management | 3 | 1 | 0 | 4 |
| | | DSC | BA25402 | Data Ethics | 3 | 1 | 0 | 4 |
| | | DSC | BA25403 | Operations Research | 3 | 0 | 0 | 3 |
| | | DSC | BA25404 | Strategic Planning and Management | 3 | 0 | 0 | 3 |
| | | DSE | | Elective -9 | | | | 3 |
| | | DSE | | Elective -10 | | | | 3 |
| Total Credit | | | | | | | | 20 |

| Semester/ Session of Study (Recommended) | Course Level | Category of Course | Course Code | Courses | Mode of delivery and credits L-Lecture; T-Tutorial. P-Practical | | | Total Credits C- Credits |
|---|-----------------|--------------------|-------------|---|---|-------------------------|-------------------------|-----------------------------------|
| | | | | | L (Periods /week) | T (Periods /week) | P (Periods /week) | C |
| | | | | | L | T | P | |
| Eight/ Spring | Fourth | Project | BA25405 | *Capstone Project /Research Project/ Dissertation/ Internship with Viva- voce and seminar presentation | | | | 12 |
| | | DSC | BA25406 | Project Management | 4 | 0 | 0 | 4 |
| | | DSC | BA25407 | Qualitative Data Analysis | 4 | 0 | 0 | 4 |
| Total Credit | | | | | | | | 20 |

* Capstone Project/ Research project /Dissertation/ Internship with Viva-voce and seminar presentation

Total credits at the end of fourth year - 163

BACHELOR'S DEGREE WITH HONOURS

OR

| Semester/ Session of Study (Recommended) | Course Level | Category of Course | Course Code | Courses | Mode of delivery and credits L-Lecture; T-Tutorial; P-Practical | | | Total Credits C- Credits |
|---|-----------------|--------------------|-------------|--|---|-------------------------|-------------------------|-----------------------------------|
| | | | | | L (Periods /week) | T (Periods /week) | P (Periods /week) | C |
| | | | | | L | T | P | |
| Eight/ Spring | Fourth | Project | BA25405 | *Capstone Project /Research Project/ Dissertation / Internship with Viva- voce and seminar presentation | | | | 12 |
| | | | BA25408 | **Research Publications | | | | 8 |
| | Total Credit | | | | | | | 20 |

* Capstone Project/ Research project /Dissertation/ Internship with Viva-voce and seminar presentation

** 2 publication or submission in peer-reviewed journals/ presentation in conferences/ seminars/ patented.

Total credits at the end of fourth year - 163

BACHELOR'S DEGREE HONOURS WITH RESEARCH

Acronyms Expanded

- AECC : Ability Enhancement Compulsory Course
- DSC (C) : Discipline Specific Core (Course)
- SEC-SB : Skill Enhancement Course - Skill Based
- VAC : Value Added Course
- MDC : Multidisciplinary Course
- DSE : Discipline Specific Elective
- L+T+P : Lecture + Tutorial + Practical (s)

VALUE ADDED COURSE GROUP: VAC*

| Level | Course Code | Name of the Value-Added Course (VAC) | L | T | P | C |
|-------|-------------|--------------------------------------|---|---|---|---|
| 1 | MN25103 | Yoga | 1 | 0 | 2 | 2 |
| 1 | MN25104 | Physical Education | 1 | 0 | 2 | 2 |
| 1 | MN25111 | Digital Empowerment | 2 | 0 | 0 | 2 |
| 1 | MN25112 | Emotional Intelligence | 2 | 0 | 0 | 2 |

VOCATIONAL COURSE GROUP: VOC*

| Level | Course Code | Name of the Vocational Courses (VOC) | L | T | P | C |
|-------|-------------|---|---|---|---|---|
| 1 | MN25120 | Event Management | 3 | 0 | 0 | 3 |
| 1 | CA25133 | Fundamentals of Multimedia | 3 | 0 | 0 | 3 |
| 1 | MN25121 | Office Management and Secretarial Practice | 3 | 0 | 0 | 3 |
| 2 | MN25214 | Basics of Financial Markets and Equity Research | 3 | 0 | 0 | 3 |
| 2 | CA25225 | Business Intelligence | 3 | 0 | 0 | 3 |

MULTIDISCIPLINARY COURSE: MDC

| Course Code | Name of the Multidisciplinary Course (MDC) | L | T | P | C |
|-------------|--|---|---|---|-----|
| MN25118 | Introduction to Computing | 3 | 0 | 0 | 3 |
| BA25104 | Python Programming | 3 | 0 | 3 | 4.5 |
| MN25206 | Quantitative Techniques in Management | 3 | 0 | 0 | 3 |

SKILL ENHANCEMENT ELECTIVE COURSES: SEC

| Course Code | Name of the Skill Enhancement Elective Courses (SEC) | L | T | P | C |
|-------------|--|---|---|---|---|
| CA25110 | Office Automation Tools | 0 | 1 | 4 | 3 |
| BA25103 | Advanced Microsoft Excel | 0 | 1 | 4 | 3 |
| MN25203 | Computerized Accounting | 2 | 0 | 2 | 3 |

ABILITY ENHANCEMENT COMPULSORY COURSES: AECC

| Course Code | Name of the AECC Course | L | T | P | C |
|-------------|------------------------------------|---|---|---|-----|
| HS24131 | Communication Skills - I | 0 | 0 | 3 | 1.5 |
| MN25109 | Public Speaking & Creative Writing | 1 | 0 | 2 | 2 |
| MN25201 | Personality Development | 2 | 0 | 2 | 3 |
| HS24211 | Communication Skills - II | 0 | 0 | 3 | 1.5 |

DISCIPLINE SPECIFIC ELECTIVES: DSE

| Course Code | Name of the DSE Courses | L | T | P | C |
|-------------|--|---|---|---|---|
| BA25409 | Block Chain Technology | 3 | 0 | 0 | 3 |
| BA25410 | Introduction to Data Structures | 2 | 0 | 2 | 3 |
| BA25411 | Marketing Analytics | 2 | 0 | 2 | 3 |
| BA25412 | Digital Marketing and Social Media Analytics | 2 | 0 | 2 | 3 |
| BA25413 | Financial Analytics | 2 | 0 | 2 | 3 |
| BA25414 | Predictive Analytics | 2 | 0 | 2 | 3 |
| BA25415 | Human Resource Analytics | 2 | 0 | 2 | 3 |
| BA25416 | Retail Analytics | 2 | 0 | 2 | 3 |
| BA25417 | Security Analysis and Portfolio Management | 3 | 0 | 0 | 3 |
| BA25418 | Marketing Research | 3 | 0 | 0 | 3 |
| BA25419 | Financial Planning | 3 | 0 | 0 | 3 |
| BA25420 | Strategic Human Resource Management | 3 | 0 | 0 | 3 |
| BA25421 | Supply Chain Analytics | 2 | 0 | 2 | 3 |

DISCIPLINE SPECIFIC CORE (COURSE): DSC

| Course Code | Name of the DSC Courses | L | T | P | C |
|-------------|---|---|---|---|-----|
| BA25101 | Principles and Practices of Management | 3 | 0 | 0 | 3 |
| MN25119 | Statistics for Managers | 3 | 0 | 0 | 3 |
| MN25108 | Introduction to Business Accounting | 3 | 0 | 0 | 3 |
| BA25104 | Marketing Management | 3 | 1 | 0 | 4 |
| MN25115 | Business Economics | 3 | 0 | 0 | 3 |
| BA25105 | Fundamentals of Business Analytics | 3 | 0 | 0 | 3 |
| BA25201 | Introduction to Indian Financial System | 3 | 0 | 0 | 3 |
| BA25202 | Database Design Concepts | 3 | 0 | 2 | 4 |
| BA25203 | Business Research | 3 | 1 | 0 | 4 |
| BA25204 | Legal Aspects of Business | 3 | 1 | 0 | 4 |
| BA25205 | Human Resource Management | 3 | 0 | 0 | 3 |
| BA25206 | Financial Management | 3 | 0 | 0 | 3 |
| BA25207 | Artificial Intelligence for Managers | 3 | 0 | 3 | 4.5 |
| BA25208 | Data Analytics using R | 3 | 0 | 2 | 4 |
| BA25301 | Small Business and Entrepreneurship | 2 | 0 | 0 | 2 |
| BA25302 | Data Mining and Applications | 3 | 0 | 2 | 4 |
| BA25303 | Summer Internship / Project | | | | 3 |
| BA25304 | E- Commerce | 3 | 1 | 0 | 4 |
| BA25305 | Basics of Machine Learning | 3 | 0 | 2 | 4 |
| BA25401 | Advertising Management | 3 | 1 | 0 | 4 |
| BA25402 | Data Ethics | 3 | 1 | 0 | 4 |
| BA25403 | Operations Research | 3 | 0 | 0 | 3 |
| BA25404 | Strategic Planning and Management | 3 | 0 | 0 | 3 |
| BA25406 | Project Management | 4 | 0 | 0 | 4 |
| BA25407 | Qualitative Data Analysis | 4 | 0 | 0 | 4 |