



Hindi Vidya Prachar Samiti's
Ramniranjan Jhunjhunwala College
of Arts, Science & Commerce
(Empowered Autonomous College)

Affiliated to

UNIVERSITY OF MUMBAI

PROGRAM: BBA IN BUSINESS ANALYTICS AND MANAGEMENT

Program Code: RJCUBBAM

**(In alignment with the NEP2020 facilitating the inter-and multidisciplinary learning and multiple entry
and exit of the students)
(CBCS 2025-2026)**

THE PREAMBLE

Why BBA in Business Analytics and Management?

Studying management gives you all the skills you need to deal with employees in a professional and an organized manner. It will also give you the knowledge and confidence you need to direct teams successfully. Business Analytics will not only train the learners to improve the operational efficiency of the business but also helps the businesses to use data and offer projections for the future outcomes. This course will also develop the learners in decision making, measuring the performance and discover the hidden trends, generate the leads and scale the business in the right direction.

However, it's important to remember that before you can manage other people, you need to know how to manage yourself. Completing a BBA degree will help you to learn a range of essential skills such as self-discipline, and organization which you'll also be able to use when managing others in the future.

Why BBA in Business Analytics and Management at RJ College?

BBA in Business Analytics and Management is the first of its courses to be introduced at the undergraduate level as per the guidelines put forth by the National Education Policy 2020. The department has a vision to leave no stone unturned and position this course as one of the niche courses by undertaking innovative teaching methodologies and making the teaching learning process a joy for the learners as well as the trainers. The learners will be trained not only by academicians with rich academic background but also by industry experts with rich industry experience. We aim at providing quality knowledge at the classroom level and also providing industrial exposure through research based projects, internships and industrial visits. Developing industry networks for better job prospects and also grooming the students to be more employable and saleable in the job market.

Conducting bridge courses and value added certificate courses apart from conducting career guiding sessions, guest lectures, and counselling for preparation of competitive exams. Encouraging the students to organize and participate in various intra collegiate and intercollegiate competitions. Students will also be motivated to be a part of The Rotaract Club of RJ College which would contribute towards the Personality Development of the students. It would also give them a wide international exposure and extensive networking. The club is also instrumental in making the students more humanitarian, ethical and a good human being through community services

Our Curriculum, Your Strength

The curriculum is designed by considering the feedback received from the academicians, industry experts, students and alumni. Hence in BBA in Business Analytics and Management the curriculum is designed in such a way that the learner gains in-depth management and analytics knowledge as per the industry demand. The program would provide the students with a broad and a strong foundation in Business Analytics and Management. The program will prepare the learners for profession in analytics and to use the tools and techniques of Business Analytics and the application of the same in the areas of Finance, Marketing, Human resource Management, Operations and Supply Chain Management. The curriculum is designed in such a way that it helps the students to develop cognizance of the importance of management principles and an opportunity to explore entrepreneurial avenues.

PROGRAM OUTCOMES OF GENERAL UNDERGRADUATE DEGREE PROGRAMS

Program Objectives

1. Application of Management techniques and solve the business problems by applying the principles and skills of Marketing, Finance, Human Resource Management and Logistics in Business Analytics.
2. Gaining a multidisciplinary knowledge and enhancing Business Intelligence capabilities by adapting the appropriate technology.
3. Building a strong ability in learners to train themselves through simulated problems, case analysis, projects and industrial training
4. Enhancing the capabilities of data collection and critiquing the role of information and analytics in supporting the business process, operations and decision making.
5. Developing professionals with competent management and business analytics skills with strong ethical values who would also be good human beings with a good character, right attitude and moral values.

PROGRAM SPECIFIC OUTCOMES BBA IN BUSINESS ANALYTICS AND MANAGEMENT

The BBA in Business Analytics and Management prepares students to excel in the dynamic intersection of data analysis and strategic management. Graduates of this program will possess the expertise to harness data-driven insights for making informed business decisions, enhancing operational efficiencies, and crafting effective business strategies. With a strong foundation in business intelligence and analytical tools, students will be capable of translating complex data into actionable recommendations and communicating these findings clearly to stakeholders. The curriculum emphasizes ethical decision-making, fostering responsible business practices while nurturing entrepreneurial skills and innovation. Additionally, the focus on leadership, teamwork, and effective communication ensures that graduates are well-prepared to assume managerial roles and drive organizational success in a variety of settings.

PS01: Graduates will be proficient in applying analytical tools and techniques to interpret complex data sets, enabling informed and strategic decision-making in various business contexts.

PS02: The program will equip learners with skills to analyze and improve business operations, enhancing overall efficiency through data analysis and process optimization techniques.

PS03: Learners will gain expertise in leveraging business intelligence software and methodologies to extract actionable insights from data, driving efficiency and innovation across organizational processes.

PS04: Learners will be prepared to address ethical considerations and social responsibilities in business analytics and management, ensuring responsible and sustainable business practices.

PS05: The program will enhance students' abilities to lead and collaborate effectively within teams, balancing managerial responsibilities with technical and analytical skills.

Hindi Vidya Prachar Samiti's Ramnirajan Jhunjhunwala College of Arts, Science & Commerce
TYBBA in Business Analytics and Management - Syllabus Framework as per NEP

CREDIT DISTRIBUTION

SEMESTER V

SR. NO	COURSE	SUBJECT CODE	SUBJECT	CREDITS
1	MAJOR (DSC)	RJDSCBBA351	Project Management	4
2	MAJOR (DSC)	RJDSCBBA352	International Business Management	4
3	MAJOR (DSE)	RJDSEBBA353	Option 1: Direct Tax Option 2 : Strategic Financial Management	4
4	MINOR	RJMINBBA351	Machine Learning and Artificial Intelligence	4
5	VSC	RJVSCBBA351	Project work	4
6	CEP	RJCEPBBA351	Community Engagement Program	2
		Total credits		22

SEMESTER VI

SR. NO	COURSE	SUBJECT CODE	SUBJECT	CREDITS
1	MAJOR (DSC)	RJDSCBBA361	Financial Technology	4
2	MAJOR (DSC)	RJDSCBBA362	E- Commerce & Digital Marketing	4
3	MAJOR (DSC)	RJDSCBBA363	Change Management & Organisation Development	2
4	MAJOR (DSE)	RJDSEBBA364	Option 1: Indirect Tax Option 2: Risk Management	4
5	MINOR	RJMINBBA361	Cyber Security	4
6	OJT	RJOJTBBA361	On Job Training	4
		Total credits		22

MINOR

SEMESTER - V

SR. NO	COURSE	SUBJECT CODE	SUBJECT	CREDITS
1	MINOR	RJMINBBA351	Machine Learning and Artificial Intelligence	4

MINOR

SEMESTER - VI

SR. NO	COURSE	SUBJECT CODE	SUBJECT	CREDITS
1	MINOR	RJMINBBA361	Cyber Security	4

CONTENT DISTRIBUTION UNDER EACH SUBJECT

SEMESTER – V

Sr. No	Course Code	Subject	Content Distribution	Credits
1	MINOR	Machine Learning and Artificial Intelligence	1. Introduction to Artificial Intelligence & Machine Learning 2. Data Handling and Pre-processing 3. AI in Business Decision-Making 4. Data Handling & Visualization for AI/ML	4

SEMESTER – VI

Sr. No	Course	Subject	Content Distribution	Credits
1	MINOR	Cyber Security	1. Introduction to cybercrime and cyber security 2. Cyber stalking and tools & methods used in cybercrime 3. Cybercrimes and cyber security: the legal perspectives: 4. Cyber security: organizational implications and cybercrime	4

MINOR
SEMESTER - V

MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE

SEMESTER	:	V
TITLE OF THE SUBJECT /COURSE	:	MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE
COURSE CODE	:	RJMINBBA351
CREDITS	:	4
DURATION (Hours)	:	60

TYBMS	SEMESTER V
MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE CODE: RJMINBBA351	Learning Objectives • Grasp the fundamental principles, differences, and evolution of Artificial Intelligence, Machine Learning, and Deep Learning, including their applications in business and industry. • Develop skills in data collection, cleaning, transformation, and visualization using Python libraries and tools like Tableau and Power BI. • Learn and implement supervised, unsupervised, and reinforcement learning techniques to solve real-world business problems. • Explore how AI can drive decision-making, optimize operations, and enhance customer relationships across various business functions. • Recognize ethical, legal, and governance challenges in AI development and deployment, and understand future trends like Industry 4.0 and responsible AI practices.

Course Outcome Number	On completing the course the student will be able to	PSO Addressed	Blooms Level
C01	Explain the concepts, evolution, and business applications of AI and ML, differentiating AI, ML, and Deep Learning	1,2,3,4	1,2,4
C02	Perform data handling and pre-processing tasks efficiently using Python libraries, and apply supervised learning techniques (like regression and classification)	1,2,3,4	2,3,4
C03	Use AI and ML to solve business problems by applying appropriate machine learning models (supervised and unsupervised), and interpret results to support business decision-making	1,2,3,4	3,4,5

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C04	Design and develop AI-driven business solutions, leverage visualization tools for data analysis, and incorporate ethical considerations into AI projects	1,2,3,4	4,5,6
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SEMESTER V (THEORY & PRACTICAL)		L	Cr
Subject: Machine Learning and Artificial Intelligence	CODE: RJMINBBA351	60	4
UNIT I		15	
Introduction to Artificial Intelligence & Machine Learning			
● Introduction to Artificial Intelligence & Machine Learning: Definition & Scope of AI and ML, Differences between AI, ML, and Deep Learning, Evolution of AI in Business Management, Real-world Applications in Business (Finance, Marketing, HR, Operations), Ethical & Legal Considerations in AI ● Machine Learning Concepts & Techniques: Types of Machine Learning: Supervised Learning (Regression, Classification), Unsupervised Learning (Clustering, Association), Reinforcement Learning. ● Future Trends & Challenges in AI: AI and Automation in Business, The Role of AI in Industry 4.0, Ethical AI & Responsible AI Development, AI Governance & Regulations			
UNIT II		15	
Data Handling and Pre-processing			
● Data Handling and Pre-processing: Data Collection Methods: Surveys, web scraping, and databases. Data Cleaning: Handling missing values, outliers, and inconsistencies. Data Transformation: Normalization, scaling, and encoding categorical variables. Tools: Introduction to Python libraries such as Pandas and NumPy. ● Supervised Learning Techniques: Regression Analysis: Linear and logistic regression models. Classification Methods: Decision trees, k-nearest neighbors (KNN), and support vector machines (SVM). ● Model Evaluation: Metrics like accuracy, precision, recall, F1-score, and confusion matrix. Practical Implementation: Building models using Python's scikit-learn library.			
UNIT III		15	

AI in Business Decision-Making		
● AI in Business Decision-Making: AI-driven Data Analytics for Business Strategy, AI in Customer Relationship Management (CRM), AI in Supply Chain & Inventory Optimization, AI-powered Chatbots & Virtual Assistants in Business, AI for Risk Management and Fraud Detection ● Unsupervised Learning Techniques: Clustering Algorithms: K-means, hierarchical clustering, and DBSCAN, Dimensionality Reduction: Principal Component Analysis (PCA) and t-SNE. Applications: Customer segmentation, market basket analysis, and anomaly detection.		
UNIT IV	15	
Data Handling & Visualization for AI/ML		
● Data Handling & Visualization for AI/ML: Data Pre-processing & Cleaning, Feature Engineering & Selection, Data Visualization using Tableau, Power BI, Python (Matplotlib, Seaborn), Importance of Data in AI & ML Models ● Advanced Topics in AI: Deep Learning Fundamentals: Neural networks, activation functions, and backpropagation. Natural Language Processing (NLP): Text processing, sentiment analysis, and chatbots. Reinforcement Learning: Basics and business applications. AI in Business Strategy: Leveraging AI for competitive advantage and decision-making. ● Practical Applications and Case Studies: AI in Marketing: Personalization, recommendation systems, and customer analytics. AI in Finance: Fraud detection, algorithmic trading, and risk assessment. AI in Operations: Supply chain optimization and predictive maintenance.		

REFERENCE BOOKS:

1. Ela Kumar – Artificial Intelligence
2. Vinod Chandra S.S. – AI and ML
3. Suresh K. Shanmugasundaram – Introduction to AI
4. T.V. Geetha – Machine Learning
5. Srinivas Valluru – Data Science & ML using Python
6. Aurélien Géron – Hands-On ML (for Python practice)

MINOR
SEMESTER - VI

CYBER SECURITY

SEMESTER	:	VI
TITLE OF THE SUBJECT /COURSE	:	CYBER SECURITY
COURSE CODE	:	RJMINBBA361
CREDITS	:	4
DURATION (Hours)	:	60

TYBMS	SEMESTER VI
CYBER SECURITY RJMINBBA361	Learning Objectives • Understand the fundamentals of cyber security. • Explore various categories of cybercrime and cyber-attacks. • Learn about tools and techniques used in cybercrimes. • Gain an overview of cyber laws and concepts of cyber forensics.

Course Outcome Number	On completing the course the student will be able to	PSO Addressed	Bloom s Level
CO1	Develop a good understanding of cyber security and its tools.	1,2,3,4	1,2,3
CO2	Identify different types of cybercrimes.	1,2,3,4	3,4
CO3	Understand cyber laws and their implications.	1,2,3,4	4,5,6
CO4	Develop awareness of cyber forensics.	1,2,3,4	3,4,6
CO5	Identify attacks, security policies, and credit card frauds in mobile and wireless computing environments	1,2,3,4	4,5,6

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SEMESTER VI (THEORY & PRACTICAL)		L	Cr
Subject: Cyber Security	Course Code: RJMINBBA361	60	4
UNIT I		15	
INTRODUCTION TO CYBER CRIME AND CYBER SECURITY:			
Definition and origin of cybercrime, Cybercrime and information security, Classifications of cybercrimes: email spoofing, spamming, cyber defamation, internet time theft, salami attack, data diddling, forgery, web jacking, industrial espionage, hacking, online frauds, computer sabotage, email bombing, network intrusions, password sniffing, credit card frauds, identity theft, Cyber security: definition, vulnerability, threats, harmful acts, CIA Triad (Confidentiality, Integrity, Availability), Cyber security policy and domains. Cyber Offenses and Cyberstalking: Categories of cybercrime attacks: reconnaissance, passive and active attacks, scanning, gaining and maintaining system access, social engineering,			
UNIT II		15	
CYBERSTALKING AND TOOLS & METHODS USED IN CYBERCRIME			
Cyberstalking: types of stalkers, real-life incidents, working of stalking, Cybercafe and cybercrimes, Botnets: the fuel for cybercrime, attack vectors, Cybercrime in mobile and wireless devices: trends in mobility, security challenges, authentication services, attacks on mobile phones, Credit card frauds in mobile and wireless computing. Tools and Methods Used in Cybercrime: Proxy servers and anonymizers. Phishing, Password cracking, Key loggers and spywares, Viruses and worms, Trojan horses and backdoors, Steganography, Denial of Service (DoS) and Distributed Denial of Service (DDoS) attacks, SQL injection.			
UNIT III		15	
CYBERCRIMES AND CYBER SECURITY: THE LEGAL PERSPECTIVES:			

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Cybercrime and the legal landscape around the world, Need for cyber laws in the Indian context, The Indian IT Act, Challenges to Indian law and cybercrime scenarios, Consequences of not addressing weaknesses in the Information Technology Act, Digital signatures and the Indian IT Act, Amendments to the Indian IT Act, Cybercrime and punishment, Cyber law, technology, and students: Indian scenario. Cyber Forensics: Historical background of cyber forensics, Digital forensics science, Need for computer forensics, Cyber forensics and digital evidence, Forensic analysis of email, Digital forensics lifecycle, Challenges in computer forensics.		
UNIT IV	15	
CYBERSECURITY: ORGANIZATIONAL IMPLICATIONS AND CYBERCRIME		
Cybersecurity: Organizational Implications: Cost of cybercrimes and intellectual property rights issues, Web threats for organizations, Security and privacy implications from cloud computing, Social media marketing, Social computing and associated challenges for organizations, Protecting people's privacy in organizations, Organizational guidelines for internet usage and safe computing, Incident handling. Cybercrime: Illustrations, Examples, and Mini-Cases: Real-life examples, Mini-cases, Illustrations of financial frauds in the cyber domain, Digital signature-related crime scenarios, Digital forensics case illustrations, Online scams.		

REFERENCE BOOKS:

- Nina Godbole, Sunit Belapure – *Cyber Security: Understanding Cyber Crimes, Computer Forensics and Legal Perspectives* (Wiley India)
- William Stallings – *Cryptography and Network Security: Principles and Practice* (Pearson India)
- Mark Stamp – *Information Security: Principles and Practice* (Wiley India)
- Eric Cole – *Network Security Bible* (Wiley India)
- Joseph Steinberg – *Cybersecurity For Dummies* (Wiley India)
- Nina Godbole – *Information Systems Security* (Wiley India)
- Thomas J. Mowbray – *Cybersecurity: Managing Systems, Conducting Testing, and Investigating Intrusions* (Wiley India)

EVALUATION AND ASSESSMENT

INTERNAL ASSESSMENT

1. Courses with 4 Credits

Internal Examination: 40 Marks

Internal examination consists of 2 types of assessments as follows:

Internal Assignment	Max Marks	Duration	Evaluation Particulars
I	20	30 minutes	Written Examination (Pattern mentioned below)
II	20	Based on set rules	Presentations/ Assignments/ Lab Practical/ Case Study

2. Courses with 2 Credits:

Internal Examination: 20 Marks

Internal Assignment	Max Marks	Duration	Evaluation Particulars
I	20	Based on set rules	Presentations/ Assignments/ Lab Practical/ Case Study

QUESTION PAPER PATTERN

INTERNAL ASSESSMENT

Marks: 20

Duration: 30 min

Q1)	Explain the following concepts.(1 marks each)	(05 Marks)
1.		
2.		
3.		
4.		
5.		
Q2)	Explain in one sentence (1 marks each)	(05 Marks)
1.		
2.		
3.		
4.		
5.		
Q3)	Answer the questions. (Any 2 out of 3)	(10 Marks)
1.		

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2.		
3.		

SEMESTER END EXAM

**Marks: 30
(2 Credits)**

Duration: 1 Hr

Q.1) Answer the question.	(10 Marks)
OR	
Q.1) Answer the question.	(10 Marks)
Q.2) Answer the question.	(10 Marks)
OR	
Q.2) Answer the question.	(10 Marks)
Q.3) Answer the question.	(10 Marks)
OR	
Q.3) Answer the question.	(10 Marks)

SEMESTER END EXAM

**Marks: 60
(4 Credits)**

Duration: 2 Hrs

Q.1) Answer the question.	(10 Marks)
OR	
Q.1) Answer the question.	(10 Marks)
Q.2) Answer the question.	(10 Marks)
OR	
Q.2) Answer the question.	(10 Marks)
Q.3) Answer the question.	(10 Marks)
OR	
Q.3) Answer the question.	(10 Marks)
Q.4) Answer the question.	(10 Marks)
OR	
Q.4) Answer the question.	(10 Marks)

Q.5) Answer the question.	(10 Marks)
OR	
Q.5) Answer the question.	(10 Marks)
Q.6) Case Study	(10 Marks)

RULES AND REGULATIONS REGARDING ASSESSMENT AND EVALUATION

FOR FY UNDER NEP FROM A.Y. 2023-2024 ONWARDS-

1. A learner appearing for first year examination under NEP will have **maximum of 22 credits** and examinations will be of **maximum 550 marks**.
2. Courses having **2 credits, 3 credits and 4 credits** will have examinations of **50, 75, 100 marks** respectively.
3. **With regard to Major Course, Minor Course and OEC:**
Continuous evaluation of 40-60 adopted under autonomy (2018) shall continue for all the courses; for the courses with 2 credits and 50 marks, Internal is of 20 marks (only one IA) and External 30 marks (SEE); while the courses with 3 credits and 75 marks, it is 25 marks (only one IA) and 50 marks (SEE). In case of courses of 100 marks, the break up of marks will be 40 marks (IA) and 60 marks (SEE).
4. **With regard to IKS, VSEC (VSC and SEC), AEC, VEC:**
 These will be of 2 Credits each and of 50 marks. Continuous evaluation of 40-60 wherein Internal is of 20 marks and SEE of 30 marks or Only one SEE of 50 marks or continuous evaluation of more than one test by the respective coordinating department or as directed by the EC.
5. **With regard to CC:**
 Vertical of CC shall also be more like a **continuous evaluation** where a student will be awarded marks on the basis of **his / her participation in the co-curricular activities of the department / other departments / associations / extension activities / intercollegiate events and JeevanKaushal**. A workbook will be provided to a student to keep a record of his / her participation and will be duly signed by the concerned teachers.
6. **Duration of examinations:**
 - . An IA exam of 20/25 marks shall be of duration of 30 minutes.
 - a. An SEE exam of 30 marks (offline) shall be of duration of 1 hour.
 - b. An SEE exam of 50 marks (offline) shall be of duration of 1 ½ hour.
 - c. An SEE exam of 50 marks (online MCQ) shall be of 60 minutes.
 - d. An SEE exam of 60 marks (offline) shall be of duration of 2 hours.

7. There shall be **combined passing of Internals and SEE** in a given paper with a **minimum passing percentage of 40**.
8. **Appearing for SEE** for every paper is **compulsory** irrespective of the performance in the Internals examinations. A student absent in SEE will be thus declared failing in a given subject.
9. There shall be provision for supplementary examination for the benefit of students who miss their SEE on grounds of medical emergency or representing college at the national level event or any other equivalent event with a special permission granted by the Head of the institution.
10. There shall be no Additional Examinations for any of the Semesters except for the Semester V wherein one chance of credit improvement in Semester V shall be given before the Learner appears for the final Semester VI Examination.
11. A learner appearing for first year exam under NEP shall have examination of maximum **550 marks** to which effect **ATKT** is allowed for **maximum of 200 marks** corresponding to **failing in 3 / 4 courses** but must have passed in at least one Theory course of Major / Minor.

FOR SY AND TY-

12. For the SY (2023-2024) and TY (2023-2024 and 2024-2025) programs, 40 – 60 pattern of continuous evaluation continues. However, Internal 40% as 20 + 20 is revised from AY 2023-24 as 15 + 25 wherein, 15 marks of assignment and 25 marks of MCQs or any other mode of evaluation as decided by the respective department shall be implemented. Rest of the Rules and Regulations continues as earlier.
13. Ordinances **5042A, 5043A& 5044A, 5045A, 5046A, 5048A&B, 5049A, 5050A** and **0.229A** adopted under autonomy are to accepted as its under NEP. (Next Page)

ORDINANCES ADOPTED ON EXAMIANATIONS CONDUCTED UNDER AUTONOMY

ORDINANCE NUMBER	MATTER OF REFERENCE
5042A	Grace Marks for passing in each head of passing (Theory/ Practical/ Oral/ Sessional)
5043A, 5044A	Grace marks for getting higher Class/ Grade (Grade Jump)
5045A	Condonation
5046A	Moderation
5048A&B	Amendments of Results (Due to errors, Due to fraud, malpractices etc.)
5049A	Appointment of paper setters, Examiners, Senior supervisors and conduct of examination etc.
5050A	Ordinance regarding Unfairmeans resorted to by the Student
0.229A	Benefit of 10 marks under NSS/ NCC/ LLLS/ SPORTS

Explanation:

Ordinance 5042A: *the benefit of gracing of marks under the ordinance shall be applicable only if the candidate passes the entire examination of semester/year.*

Ordinance 5043A, 44A: *the benefit of gracing of marks under the ordinance shall be applicable only if the candidate passes in all the subjects and heads of the examination without the benefit of either gracing or condonation rules and shall be given for maximum of 1% of the aggregate marks of the examination or up to 10 marks, whichever is less.*

Ordinance 5045A: *the benefit of gracing of marks under the ordinance shall be applicable only if the candidate fails in only one head of passing and his/her deficiency of marks in such head of passing may be condoned by not more than 1% of the aggregate marks of the examination or 10% of the total number of marks of that head of passing in which he/she is failing, whichever is less.*

Condonation of deficiency of marks be shown in the statement of marks in the form of asterisk and Ordinance number.

Ordinance 5046A: *the ordinance shall be applicable as per the detailed scheme of moderation released by the University of Mumbai via its adaptation in totality.*

Where marks awarded by the moderator vary from those awarded by original examiner, the marks awarded by the moderators shall be taken as final.

Ordinance 5048A&B: *section (A) of the ordinance is applicable to the case where it is found that the result of an examination has been affected by errors, the Controller of Examination shall have power to amend such result provided the errors are reported/ detected within 6 months from the date of declaration.*

Error means –

- . Error in computer/ data entry, printing or programming and the like.*
- a. Clerical error, manual or machine in totalling or entering of marks on mark list/register.*
- b. Error due to negligence or oversight of examiner or any other person connected with evaluation, moderation and result preparation.*

Section (B) of the ordinance is applicable in any case where the result of an examination has been ascertained and published and it is found that such result has been affected by any malpractices, fraud or any other improper conduct whereby an examinee has benefited and that such examinee has been party of privy to or connived at such malpractice, fraud or improper conduct.

Ordinance 5049A: *the ordinance shall be applicable as per the guidelines of University of Mumbai.*

Ordinance 5050A: *the convener of the Unfair means committee shall take appropriate disciplinary action against the student/s using, attempting to use, instigating or allowing to use unfair means at the examination applying the ordinance as per the guidelines of University of Mumbai.*

Ordinance 0.229A: *the ordinance shall be applicable to the candidate for his/her satisfactory completion of NSS/NCC/DLLE/SPORTS. Benefit of 10 marks be shown in the Statement of Marks in the form of hashtag and Ordinance number.*

Teaching Learning Process

The teaching learning process in the learning outcomes based curriculum framework in the subject of Management Studies is designed to develop the cognitive skills of every learner. The course offers the requisite skills for a professions and jobs in all areas of management. All courses have Case studies as an integral part which promotes the learner to acquire the requisite skills for employment by learning real life problem solving skill. An interesting combination of teaching learning processes is adopted in which the teacher and learners are actively involved.

Some of the salient teaching learning processes are

- Class lectures
- Presentations
- Group Discussion, workshops
- Case Study pedagogy
- Peer teaching and learning
- Project based learning, quiz, seminars, exhibitions, posters.
- Research Based Projects
- Technology enabled self-learning
- Internships
- LMS (Google Classroom)

The effective teaching strategies would address the requirements of learner to learn at their own pace. The teaching pedagogy adopted to ensure inculcate higher order skills in the learner. The entire program is also designed to foster human values, environmental consciousness for an equitable society. The teaching learning processes adopted would aim at participatory pedagogy.

**MAPPING OF CURRICULUM FOR EMPLOYABILITY/ENTREPRENEURSHIP
 /SKILL DEVELOPMENT**

SEMESTER-V

Sr. No	Course Code	Subject	Content Distribution	Credits	Mapping
1	MINOR	Machine Learning and Artificial Intelligence	1. Introduction to Artificial Intelligence & Machine Learning 2. Data Handling and Pre-processing 3. AI in Business Decision-Making 4. Data Handling & Visualization for AI/ML	4	Employability Skill Development

SEMESTER-VI

Sr. No	Course Code	Subject	Content Distribution	Credits	Mapping
1	MINOR	Cyber Security	1. Introduction to Cybercrime & Security 2. Cyber stalking & Tools Used in Cybercrime 3. Cybercrime Legal Perspective 4. Organisational Implications	4	Employability Skill Development

**MAPPING OF CURRICULUM WITH RELEVANCE TO LOCAL, REGIONAL,
 NATIONAL AND GLOBAL DEVELOPMENT NEEDS**

SEMESTER – V

Sr. No	Course Code	Subject	Content Distribution	Credits	Development Mapping
1	MINOR	Machine Learning and Artificial Intelligence	1. Introduction to Artificial Intelligence & Machine Learning 2. Data Handling and Pre-processing 3. AI in Business Decision-Making 4. Data Handling & Visualization for AI/ML	4	Local, Regional, National, Global

SEMESTER-VI

Sr. No	Course Code	Subject	Content Distribution	Credits	Development Mapping
1	MINOR	Cyber Security	1. Introduction to Cybercrime & Security 2. Cyber stalking & Tools Used in Cybercrime 3. Cybercrime Legal Perspective 4. Organisational Implications	4	Local, Regional, National, Global

MAPPING OF CURRICULUM WITH SDG

SEMESTER-V

Sr. No	Course Code	Subject	Content Distribution	Credits	SDG Mapping
1	MINOR	Machine Learning and Artificial Intelligence	1. Introduction to Artificial Intelligence & Machine Learning 2. Data Handling and Pre-processing 3. AI in Business Decision-Making 4. Data Handling & Visualization for AI/ML	4	4, 8, 9

SEMESTER-VI

Sr. No	Course Code	Subject	Content Distribution	Credits	SDG Mapping
1	MINOR	Cyber Security	1. Introduction to Cybercrime & Security 2. Cyber stalking & Tools Used in Cybercrime 3. Cybercrime Legal Perspective 4. Organisational Implications	4	8, 9, 16