

Goa University
Goa Business School

Entrance test syllabus for Admission to MSc in Artificial Intelligence and MSc in Data Science

Part I: Mathematical Aptitude: (20 questions)

Algebraic equations and inequalities, Functions and graphs, Matrices and determinants, Differential and integral calculus, Probability and Statistics, Linear programming, Optimization techniques, Time series analysis, Statistical concepts and measures (mean, median, standard deviation, hypothesis testing, etc.)

Part II: Logical Reasoning and Analytical Thinking : (20 questions)

Verbal and non-verbal reasoning, Logical deduction, Pattern recognition, Analogies and relationships, Logical puzzles and games, Data interpretation and analysis, Data visualization, and pattern identification

Part III: General Knowledge and Current Affairs in Artificial Intelligence: (10 questions)

Basic science and technology concepts, Current affairs related to AI and technology, Major AI methodologies and techniques, Key AI researchers and innovators, Ethical Considerations in AI, Industry Trends and Developments in AI

Part IV: General Knowledge and Current Affairs in Data Science: (10 questions)

Basic science and technology concepts, Current affairs related to data science and analytics, Major data science breakthroughs and advancements, Key data science researchers and innovators, Ethical Considerations in data science, Industry trends and developments in data science.

Suggested reference books

Mathematics:

1. "Higher Engineering Mathematics" by B.S. Grewal
2. "Advanced Engineering Mathematics" by Erwin Kreyszig
3. "Engineering Mathematics" by Anthony Croft and Robert Davison

Aptitude and logical reasoning

1. "Quantitative Aptitude for Competitive Examinations" by R.S. Aggarwal
4. "A Modern Approach to Verbal & Non-Verbal Reasoning" by R.S. Aggarwal
5. "A Modern Approach to Verbal & Non-Verbal Reasoning" by R.S. Aggarwal

6. "Analytical Reasoning" by M.K. Pandey
7. "Logical and Analytical Reasoning" by A.K. Gupta
8. "How to Prepare for Logical Reasoning for CAT" by Arun Sharma

Awareness and general knowledge books for AI and data science.

1. The Big Nine: How the Tech Titans and Their Thinking Machines Could Warp Humanity" by Amy Webb
2. "Artificial Intelligence: A Guide to Intelligent Systems" by Michael Negnevitsky
3. "Data Science for Dummies" by Lillian Pierson
4. Towards Data Science: <https://towardsdatascience.com/>
5. KDnuggets: <https://www.kdnuggets.com/>

The above list is suggestive, and candidates are advised to refer to other materials as per the requirements of individual topics.

Instructions:

1. If candidates meet the eligibility criteria as specified in the notification, they can apply for both MSc in Artificial Intelligence and MSc in Data Science. However, such candidates shall have to pay a separate application fee for each programme as mentioned in the notification.
2. A separate entrance test shall be conducted for the admission to MSc in Artificial Intelligence and MSc in Data Science.
3. The question paper for the entrance test is 100 marks. Each question carries 2 marks for the correct answer and 0.5 negative marks for the wrong answer.
4. The duration of the entrance test shall be 90 minutes.
5. The entrance test for admission to MSc in Artificial Intelligence shall consist of questions on Mathematical aptitude, Logical reasoning and Analytical thinking, and General Knowledge and Current Affairs in Artificial Intelligence.
6. The entrance test for admission to MSc in Data Science shall consist of questions on Mathematical aptitude, Logical reasoning and Analytical thinking, and General Knowledge and Current Affairs in Data Science.
7. A separate merit list shall be prepared for each MSc in Artificial Intelligence and MSc in Data Science based on the score obtained in the entrance exam. Candidates shortlisted for both programmes shall be called for further counseling.

Important dates:

- Issue of Online Application: 9th June 2023
- Last date for submission of the Application: 23rd June 2023.
- Date of Entrance Test for MSc in Artificial Intelligence: 3rd July 2023 (10:30 am to 12:00 pm)
- Date of Entrance Test for MSc in Data Science: 3rd July 2023 (3:00 pm to 4:30 pm)
- Display of merit list (for both programmes): 7th July 2023.
- Last date for payment of the fee (for both programmes): 14th July 2023.
- Open round admission for waitlisted candidates if any vacancy is available (for both programmes): 17th July 2023.
- Classes shall commence on 18th July 2023.

For any admission-related queries, kindly contact:

Admission Coordinators -

M.Sc. Artificial Intelligence: Shri. S. Baskar

M.Sc. Data Science: Dr. Payaswini P

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MSc in data science: mscds.admission@unigoa.ac.in

If you face any technical issues while filling out the application form, kindly notify us using the link below:

https://docs.google.com/forms/d/e/1FAIpQLSd5R5s2DK_-5bRdZfg4hwRjTL2Kq9dwbm-2dloffL8qU5QUYw/viewform