# (148-SCI-04-03) M.SC. (ARTIFICIAL INTELLIGENCE)

**Significance of the Program:**

Artificial Intelligence is the ability of machines to learn and make decisions based on data. A.I helps to improve the efficiencies and augment human capabilities in various domains. It can also provide insights and solutions that human may not be able to discover and handle. A.I. is intertwined in all that we do and is future of all complex decision making. It is an interdisciplinary field in computer Science Domain which focuses on extracting knowledge from typically large data sets and applying the knowledge and insights from that data to solve problems in a wide range of application domains. Artificial intelligence has been playing a significant role in managing financial transactions, handling numerous other bank activities and in all domain fields.

**Career Options:**

Pursuing this professional course, students can explore the following opportunities:

- AI Software Engineer
- Big Data Engineer
- Data Scientist
- AI Data Analyst
- Business Intelligence Developer
- AI Research Scientist
- AI Wrangler
- User Experience Specialist
- AI Product Manager
- System Engineer
- Application Developer
- Data Analytics

**Program Objectives**:

- To impart theoretical and practical knowledge in the specialized area of Artificial Intelligence.
- This is the branch of computer science and engineering that specializes in making computer machines able to perform tasks which normally require human

intelligence, such as visual perception, speech recognition, decision-making, and translation of languages.

- To expose students to the frontiers of AI-intensive computing and information systems, while providing a sufficiently strong foundation to encourage further research.

**Outcomes of the Program**:

A student who Perused M.Sc.(Artificial Intelligence) will

- To develop digital literacy, critical thinking skills, and prepare them for future academic and career success.

- Analyze data on student performance and provide tailored support to improve their grades.

- Provide instant feedback on students' work, allowing them to identify and correct mistakes quickly.

- Expand educational opportunities for untold millions of students, especially in places where human teachers are scarce.

**Major Course Outlines:**

7. Computational thinking through programming
8. Artificial Intelligence: Principles and Techniques
9. Mathematical Foundation For AI
10. AI & ML with Python
11. Fuzzy Logic and Nature Inspired Computing
12. Algorithms and Complexity
13. Data Science and Analytics
14. AI for IoT
15. Deep Learning
16. Data Wrangling with SQL
17. Image Processing and Computer Vision
18. Block chain Technology