

**DEPARTMENT OF DATA SCIENCE & CYBER SECURITY**

**IV CS Major Project Phase-I**

**A.Y. 2024-2025**

**Date: 22-08-2024**

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| **Domain / Areas** | DATA SCIENCE | |
| **Title of the Project** | BLOOD TRANSMUTATION USING MACHINE LEARNING TOOLS | |
| **Team Leader** | 1. CHILUKURI SAI PRIYA - 21R21A6714 | |
| **Team Members Name with Roll No** | 1. BUCHIREDDY PALLI HARI KIRAN - 21R21A6712 | |
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| **Guide Name & Signature** | MR.IRFAN BAGAWAN | |
| **ABSTRACT**:  This study investigates the feasibility of blood transmutation through the application of machine learning and data science methodologies. By analyzing extensive datasets on blood group antigens, genetic markers, and biochemical properties, the research aims to uncover patterns and mechanisms that could enable the safe alteration of blood types. Advanced computational models and simulations are employed to explore potential pathways for blood type conversion, ensuring compatibility and minimizing risks. The successful implementation of these techniques could significantly mitigate blood shortages, enhance transfusion safety, and provide a more reliable blood supply for patients in critical need. This research represents a pioneering step towards reshaping the future of blood transfusion and addressing urgent global healthcare challenges. | | |
| **Software/Hardware Needs** | | **Python and Machine Learning tools, computer or**  **laptop** |

**Signature of the Incharge**