Personalized Learning Plan

Create Study Schedule

Study Plan for B.Tech. Artificial Intelligence & Data Science

Week 1-2:

Module I - Introduction to Artificial Intelligence & Data Science

Understanding the basics of artificial intelligence and data science. Exploring the key concepts, applications, and importance in various industries.

Week 3-4:

Module II - Programming Fundamentals

Diving into Python programming language and its applications in AI and data science. Learning about variables, data types, control structures, functions, and libraries like NumPy and Pandas.

Week 5-6:

Module III - Machine Learning Basics

Introduction to machine learning algorithms, supervised and unsupervised learning techniques. Implementing regression, classification, and clustering algorithms in Python using libraries like Scikit-learn.

Week 7-8:

Module IV - Deep Learning Fundamentals

Exploring neural networks, activation functions, backpropagation, and gradient descent algorithms. Implementing deep learning models using TensorFlow and PyTorch for image classification and natural language processing tasks.

Week 9-10:

Module V - Data Visualization & Analysis

Understanding data visualization techniques using libraries like Matplotlib and Seaborn. Performing exploratory data analysis on real-world datasets to derive insights and make data-driven decisions.

Week 11-12:

Module VI - Big Data & Cloud Computing

Introduction to big data concepts, Hadoop ecosystem, and cloud platforms like AWS and Google Cloud. Implementing data processing and analysis tasks on large datasets using tools like Spark.

Week 13-14:

Module VII - Capstone Project

Working on a hands-on project that integrates concepts learned throughout the curriculum. Applying AI and data science techniques to solve a real-world problem, showcasing skills and knowledge gained during the course.

Week 15:

Module VIII - Final Review & Assessment

Reviewing key topics, conducting practice assessments, and preparing for final exams or project presentations.

Ensure to allocate additional time for self-study, practice coding exercises, and explore advanced topics based on personal interests and career goals.

End of Plan

Thank you for using Aura's Learning Plan Generator!