

MANNAR THIRUMALAI NAICKER COLLEGE (AUTONOMOUS)**CERTIFICATE COURSE****FOR THOSE WHO JOINED IN 2024-2025 AND AFTER**

Course Name	Advanced AI					
Course Code	24PMSCP11			L	P	C
Core	Certificate Course			1	-	1
NATURE OF COURSE:		EMPLOYABILITY	SKILL ORIENTED	ENTREPRENURSHIP		
COURSE OBJECTIVES:						
<div><div>1.</div><div>To define necessary expertise and build a security plan.</div></div> <div><div>2.</div><div>To select data collection methods and assess quality.</div></div> <div><div>3.</div><div>To evaluate algorithm applicability and train models.</div></div> <div><div>4.</div><div>To design a production pipeline for seamless integration.</div></div> <div><div>5.</div><div>To evaluate business impacts using key performance indicators.</div></div>						
Unit: I	AI Problem Definition Identify the problem, Classify the problem, Identify the areas of expertise needed to, solve the problem, build a security plan, ensure that AI is used appropriately, choose transparency and validation activities.					
Unit: II	Data collection, Processing and Engineering Choose the way to collect data, assess data quality, ensure that data are representative, identify resource requirements, convert data into suitable formats, select features for the AI model, engage in feature engineering, identify training and test data sets, document data decisions.					
Unit: III	AI algorithms and models Consider Applicability of specific algorithms, Train a model using the selected algorithm, select specific model after experimentation, avoiding over engineering, tell data stories, evaluate model performance, look for potential sources of bias in the algorithm, evaluate model sensitivity, confirm adherence to regulatory requirements, if any, obtain stakeholder approval.					
Unit: IV	Application integration and deployment Train customers on how to use product and what to expect from it, plan to address potential challenges of models in production, design a production pipeline, including application integration, support the AI solution.					
Unit: V	Maintaining and Monitoring AI in Production Engage in oversight, assess business impact, measure impacts on individuals and communities, handle feedback from users, consider improvements or decommission on a regular basis.					