



## SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)

(Established under section 3 of the UGC Act 1956)

Re - accredited by NAAC with 'A' Grade

Founder: Prof. Dr. S. B. Mujumdar, MSc, Ph.D. (Awarded Padma Bhushan and Padma Shri by President of India)

### Sub Committee - Specialization for Curriculum Development

**Course Name :** AI Applications in Business  
**Course Code :** T3666  
**Faculty :** Computer Studies  
**Programme Type :** PG  
**Course Credit :** 3  
**Course Level :** 4  
**Sub-Committee (Specialization) :** IT Infrastructure Management  
**Batch :** 2021

#### Learning Objectives :

Using AI tools to obtain leadership insights required for Business  
Understand AI's fundamental concepts and methods  
Acquire knowledge of modern AI tools, including Deep Learning framework Tensorflow and Deep Learning capabilities of RapidMiner  
Learn how to apply AI-based methods to solving practical business problems  
Utilize software (both on premise and cloud based) to explore implications of AI for business strategies  
Examine where the AI technologies are heading within the next few years.

Books Recommended :	Book	Author	Publisher
	An Introduction to Deep Learning and Business Applications	2. Fan, J., Fan, Y. and Lv, J.	Apress
	Artificial Intelligence	P. H. Winston	Addison Wesley
	Artificial Intelligence	E. Rich and Knight	McGraw Hill
	Artificial Intelligence and Expert Systems,	4. D. W. Patterson	Prentice Hall
	Deep Learning	MIT Press	Goodfellow, I., Bengio, Y. and Courville, A.

Course Outline :	Sr. No.	Topic	Hours
	1	<b>Introduction: What AI is, and is not, and overview of its different areas. Examination of the state-of-the-art in AI; overview of the hard AI problems and various challenges facing the field. Discussion of where the field is heading within the next 5 ?</b>	6
	2	<b>Overview of AI technologies (With AI Lab): Neural Networks/Deep Learning, Reinforcement Learning, Transfer Learning, Natural Language Processing (NLP) and Chatbots, Computer Vision, Recommender Systems and Intelligent Assistants, Heuristic Searches, Logic</b>	6
	3	<b>Technologies enabling AI (With AI Lab Sessions): Overview of some of the popular AI platforms, such as AWS, Google Cloud AI, Microsoft Azure Learning Studio, and IBM Watson. Overview of the AI infrastructure and examination of what it takes to create a wo</b>	6

4	<b>Business-Oriented Insights (With AI Lab Sessions): The ?SAI-in-a-vacuum? and ?SAI-for-everything? traps and how to avoid them. Discussions of how AI solutions can be used in organizations to transform their current business practices. Discussion of which</b>	6
5	<b>Real Time Social Media &amp; Health Care Domain Projects on AI. From PoC (Proof-of-Concept) of AI systems to production: what it takes to build industrial strength AI systems at scale. The ethics of AI: how to build fair, unbiased and transparent AI solution</b>	6
6	<b>Real Time Education Domain Project 1. Case Studies: Evaluating the Cognitive Analytics Frontier, by A. Pah, A. Lazarowich and C. Snyder, Kellogg School Case KEI046, January 2018. Artificial Intelligence and the Machine Learning in Finance: Cogent Labs and</b>	6
7	<b>AI Lab using AWS, Google Cloud AI, Microsoft Azure Learning Studio, and IBM Watson. Case Study: Voice War: Hey Google vs. Alexa vs. Siri, by Yoffe, Wu, Sweitzer, Eden and Ahuja, Harvard Business School, June 2018. AI Project Work.</b>	9

**Pre Requisites :**

General knowledge of business Applications  
 Exposure to problem analysis, project planning or analytical methods is a plus  
 General Computer Appreciation including knowhow to install software on local machine as well as general usage on cloud based software  
 General knowhow in working on social media

**Evaluation :**

Assignment  
 case studies  
 Class test  
 Project  
 Presentation

**Pedagogy :**

Lecture & Class Participation  
  
 Case Study  
  
 Group Discussions  
  
 Presentations  
  
 AI Lab Work

**Expert :**

Mr. Omprakash Lalchandani,,IT