Course Name	*Advanced Information Systems*			
Course Information	**Course Code**	**Course No.**	**Credit Hour**	**Prerequisite(s)**
	0912610	IS 610	3 (3-0-6)	
Course Track	☒Program Core ☐Electives			

Course Description

The course introduces managerial and engineering design concepts related to advanced information systems including information retrieval, knowledge-based systems, and intelligent systems such as case-based reasoning, machine learning, genetic algorithms, fuzzy logic, and autonomous decision-making. The learners are introduced to the internal architecture, design trade-offs, and basic techniques of design and working of such systems. In addition, learners develop appreciation of legal, ethical, and social implications regarding privacy, security, and safety of information systems for informed decision-making. Due to the inherently dynamic nature of the knowledge domain, learners are also put on the path of self-learning about contemporary, emerging, and futuristic information and computing technologies.

Course Outcomes

After the completion of this course, the student will be able to:

1. Understand business and managerial implications of information systems.
2. Develop an understanding of internal working of advanced information systems including information retrieval, knowledge-based systems, and intelligent systems.
3. Compare and evaluate various design tradeoffs by understanding internal working of information systems.
4. Use legal, ethical, and social implications regarding privacy, security, and safety of information systems in their decision-making.
5. Discover emerging and future information systems concepts and technologies via self-learning and life-long learning skills.

Assessment Policy	**Assignments**	5%	**Quiz**	10%	**Project**	15%
	Midterm	30%	**Final**	40%	**Others**	-
Textbook	R. Sharda, D. Delen, & F. Turban, “Analytics, Data Science, & Artificial Intelligence – Systems for Decision Support”, Pearson (2020).					
References	1. D. Kroenke & R. Boyle, “Experiencing MIS”, Global Ed., Pearson (2020).					