Indian Institute of Technology Guwahati
Proposal for a New Course / Revision of a Course

Course Number & Title: DA626 & Recommendation System Design
L-T-P-C: 3-0-0-6
Type of Letter Grading (Regular Letter Grades / PP or NP Letter Grades): Regular
Kind of Proposal (New Course / Revision of Existing Course): New Course
Offered as (Compulsory / Elective): Elective
Offered to: Ph.D.and M.Tech., (Open to B.Tech.)
Offered in (Odd/ Even / Any): Any
Offered by (Name of Department/ Center): Mehta Family School of Data Science & Artificial Intelligence
Pre-Requisite: None
Preamble / Objectives (Optional):
Course Content/ Syllabus : History of Recommendation System, Matrix Factorization, Collaborative Filtering, Context-Based Filtering, Hybrids Methods, Nearest Neighbors, Graphical Neural Network, Evaluation methods of recommendation system (several families of metrics, including ones to measure prediction accuracy, rank accuracy, decision-support, and other factors such as diversity, product coverage, and serendipity). Linguistic and statistical techniques for text mining and content analysis, Semantic Web and ontologies, Semantic Recommendation systems. Ethical aspects of Recommendation systems.
References: (Format: Authors, *Book Title in Italics font,* Volume/Series, Edition Number, Publisher, Year.)

1.	Jannach D., Zanker M. and FelFering A., *Recommender Systems: An Introduction*, Cambridge University Press (2011), 1st ed
2.	Aggarwal, C. C. *Recommender Systems: The Textbook*. Springer 2016
3.	

Detailed Course Content (Optional)
It will not be included in the Courses of Study Booklet

Sl. No.	Broad Title / Topics	Number of Lectures
	Total Number of Lectures =	40

In case of revision of existing course, Please provide below the details of existing course.

EXISTING COURSE

Course Number, Title, L-T-P-C:
Pre-Requisite (if any)
Contents:
References: