AI:21AM401 LessonPlan1

- **Prerequisite(s):** Matrix operations
- **Topic :** Vector spaces - Sub spaces .
- **General Objective (GO):**Understand the concept of vector space and apply it in the vector graphics.
- **Specific Objectives (SO):** (Addresses the detail specification of contents to be taught for the session; Minimum three SOs to be given; CD/KD mapping should be specified in parentheses at the end of each SO)

  - SO1 Illustrate the addition property of vector space. (U-C)
  - SO2 Illustrate the multiplication property of vector space. (U-C)
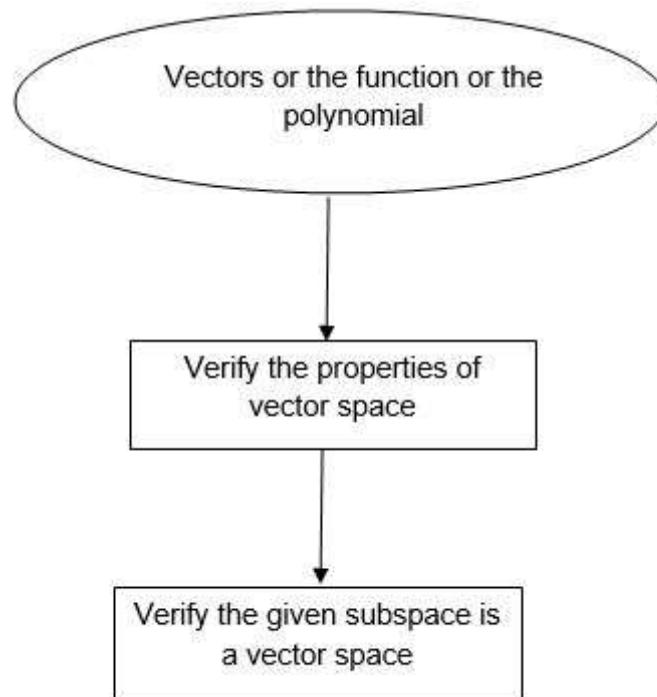 - SO3 Show the subspace of a vector space is also a vector space. (Ap-P)

Department	Artificial Intelligence And Machine Learning
Degree & Semester:	B.Tech & IV
Course code & Title:	21AM401 & MATHEMATICS FOR MACHINE LEARNING
Unit Title:	VECTOR SPACES
CO / Lesson No (GO):	1/1

- **Mapping Table**

  (Each SO should be mapped to the specific PO competency and indicators with relevance to the mapping done for the respective course outcome as shown in the table below)

SO	PO	PO/PSO Competency	PO/PSO Indicator
SO1	1, 2	1.1, 1.2	1.1.1,1.2.1
SO2	1,2	1.1,1.2, 2.1, 2.4	1.1.1,1.2.1, 2.1.3 2.1.3, 2.4.1, 2.4.3, 2.4.3
SO3	1,2	1.1,1.2, 2.1, 2.4	1.1.1,1.2.1, 2.1.3 2.1.3, 2.4.1, 2.4.3, 2.4.3

- **Mind map and Summary**

- **Summary**

  - An algebraic structure with two binary operations + and . which satisfies 10 axioms is vector space V.
  - A subset of V which itself is a vector space is a sub vector space.

- **References (Books/Videos/Journals/Web references)**

  - Kreyszig Erwin, Advanced Engineering Mathematics, 7th Edition, John Wiley, 1993.
  - B. S. Grewal, Higher Engineering Mathematics, Khanna Publication, 2017
  - Peter V. O Neil, Advanced Engineering Mathematics, Seventh Edition, Thomson Learning, 2011
  - Michael. D. Greenberg, Advanced Engineering Mathematics, Second Edition, Pearson , 2002.
  - Gilbert Strang, Introduction to linear algebra, Fifth Edition, ANE Books, 2016.
  - https://ximera.osu.edu/laode/linearAlgebra/vectorSpaces/vectorSpacesAndSubspaces

Retrieved from "https://wiki.bitsathy.ac.in/w/index.php?title=AI:21AM401_LessonPlan1&oldid=403129"

This page was last edited on 9 January 2023, at 10:59.