

Module 5: Linear Algebra III

| Section | Topic | Link |
|---------|---|---|
| 1 | Definition of vector space and related examples | https://drive.google.com/file/d/1VuESxepaiZysSBOqRzk52OHQ58gFmOC/view?usp=sharing |
| 2 | Definition of subspace and examples | https://drive.google.com/file/d/1PJfhN3LZF3xZoMVzWdranFVV LhsneKe/view?usp=sharing |
| 3 | Linear combinations, Linear span | https://drive.google.com/file/d/1lr_YMuSektQstpGtbn688BmnntyJEEol/view?usp=sharing |
| 4 | Linearly independent and dependent sets | https://drive.google.com/file/d/1vAcrnvb_FtLoKMv1-KoaEe_fGkDi9PtN/view?usp=sharing |
| 5 | Basis and dimension | https://drive.google.com/file/d/15ooDRBEq8hfGOHeqTRk3h2fWjKF-5QV0/view?usp=sharing |
| 6 | Linear transformation – definition and related examples | https://drive.google.com/file/d/1RovHznHn44vK2a-DPxEjeta8R7-N9IM/view?usp=sharing |
| 7 | Matrix of a linear transformation | https://drive.google.com/file/d/1OsB-ZwfomME9EvBjfNUPhcTjPs6Y-l7U/view?usp=drive_link |
| 8 | Rank Nullity theorem and related examples | https://drive.google.com/file/d/15bYouMl1qAcoD0DWcs55NXZ-5fyjxikw/view?usp=sharing |
| 9 | Inner product space, orthogonal, and orthonormal sets | https://drive.google.com/file/d/1aIB309QNX-0UIw529sD_Psf6CJ3_ZCuG/view?usp=sharing |