

## **Chapter 04.10**

### **Eigenvalues and Eigenvectors**

#### **OBJECTIVES**

1. Define eigenvalues and eigenvectors of a square matrix,
2. Find eigenvalues and eigenvectors of a square matrix,
3. Relate eigenvalues to the singularity of a square matrix, and
4. Use the power method to numerically find the largest eigenvalue in magnitude of a square matrix and the corresponding eigenvector.