Course Syllabus

Course Code and Name	**EE 26324 – Computer Programming**
Credit and contact hours	**3 (1, 2, 2) (Lecture, Tutorial, Lab)**
Required or Elective	**Required**
Level / Year	**Level (5) / Year (3)**
Course Prerequisite	**MATH26213 Differentiation and Integration – 2**
Textbook	Stephen J. Chapman, "MATLAB Programming with Applications for Engineers", 1st Ed., Cengage Learning, 2013.
Course Description	This course covers the following topics: Fundamental concepts of programming using structured programming language, specially "MATLAB" – Introduction to MATLAB – Basic programming tools – variables, data types, operators and operands – Problem Solving With MATLAB – Matrices in MATLAB – Basic operations on one/two dimensional arrays – function definitions – MATLAB Programming Loop Statements and Vectorizing Code – Plotting Techniques with MATLAB – two and three dimensions plots – Applications in Numerical Analysis conditional and iterations structures.
Brief List of Topics to be Covered	1- Algorithms and flowcharts – Introduction to PL – Basic program in PL – Introduction to MATLAB – MATLAB Windows. 2- Mathematical Operations with Arrays. 3- Operators and Operands. 4- Plotting in MATLAB 5- Iterations Statements 6- Applications in Numerical Analysis 7- Programming in MATLAB 8- File Manipulations
Course is prerequisite for	• EE26555 Computer applications in Power Systems