

ECU COURSE CATALOG

GEOGRAPHIC INFO. SYS. COURSES

GIS-2253 Initial Concepts in GIS 3 Credits

AN INTRODUCTION TO THE CONCEPTS, PRINCIPLES, AND THEORIES OF GIS, WITH EMPHASIS ON THE NATURE AND COMMUNICATION OF GEOGRAPHIC INFORMATION. DATA COLLECTION, STORAGE, MANIPULATION AND BASIC SPATIAL ANALYSIS METHODS ARE COVERED.

GIS-3613 Digital Mapping 3 Credits

APPLICATION OF CARTOGRAPHIC PRINCIPLES FOR COMPLEX AND EFFICIENT MAPPING TASKS INCLUDING ATLAS PRODUCTION, CREATION OF ONLINE AND INTERACTIVE MAPS, ANIMATED MAPPING, TERRAIN MAPPING, AND PERSPECTIVE GRAPHICS. Required Previous: GIS-2253

GIS-3953 Spatial Analysis 3 Credits

METHODS TO SPATIAL PROBLEMS WITH AN EMPHASIS ON GEOSPATIAL DATASET MANAGEMENT AND CONTROL. EXPLORATION OF HOW TO IDENTIFY CHANGE, DISTANCE, DENSITY, AND DISTRIBUTION, OF GEOSPATIAL DATA. Required Previous: GIS-2253 or Departmental Approval

GIS-4753 Spatial Programming 3 Credits

AN INTRODUCTION TO COMMON PROGRAMMING AND DATABASE LANGUAGES. TOPICS INCLUDE DATA TYPES, CONTROL FLOW, OBJECT-ORIENTED PROGRAMMING, RELATIONAL DATABASES, THE DEFINITION, MANIPULATION, AND RETRIEVAL OF DATA, AND GRAPHICAL USER INTERFACE-DRIVEN APPLICATIONS. Required Previous or Concurrent: CMPSC-1113

GIS-4953 Automating GIS Workflows 3 Credits

PRESENTATION ON ADVANCED DIGITAL DATA STRUCTURES AND THE USE OF SOFTWARE APPLICATIONS FOR MAINTAINING AND UTILIZING GEOGRAPHIC INFORMATION. EACH STUDENT WILL DEVELOP AND IMPLEMENT A GIS ANALYSIS MODEL. Required Previous: GIS-4753