COMSC-122    Programming Concepts & Methodologies I
54 total hours lecture            3 Units
ADVISORY: Eligibility for ENGL-090
This course introduces the discipline of computer science with
practical hands-on problem solving using a “high-level” computer
programming language. The course will include basic syntax and
semantics of a “high-level” language, variables, types, expressions,
assignment, basic computation, simple I/O, conditional and
iterative control structures, functions and parameter passing,
structured decomposition, program design, programming style,
algorithms and problem solving strategies, overview of
programming languages, binding, visibility, scoping, and lifetime
management. May not be repeated.  SC
LMC: DA
TRANSFER: CSU

COMSC-132    Programming Concepts & Methodologies II
54 total hours lecture            3 Units
PREREQUISITE: COMSC-122 or equivalent
ADVISORY: Eligibility for ENGL-090
This course covers techniques relevant to program design and
selection of data structures for larger programs. Topics covered
include design techniques, effective use of recursion, algorithmic
efficiency and O-notation, linked-lists, stacks, queues, trees, hash
tables, heaps, graphs and sorting and searching techniques.
Extensive programming of a variety of data structures is required.
May not be repeated.  SC
LMC: DA
TRANSFER: CSU

COMSC-142    Computer Architecture and Organization
54 total hours lecture            3 Units
ADVISORY: Eligibility for ENGL-090
The organization and behavior of real computer systems at the
assembly-language level. The mapping of statements and
constructs in a “high-level” language into sequences of machine
instructions is studied, as well as the internal representation of
simple data types and structures. Numerical computation is
examined, noting the various data representation errors and
potential procedural errors. May not be repeated.  SC
LMC: DA
TRANSFER: CSU