**Software Design and Architecture** is an advanced course in software design that examines recent advances in the design of larger application systems. Topics include software architecture, object-oriented analysis and design, software patterns, and the Unified Modelling Language (UML).

Senior Systems Development Project is a fourth-year course that applies the principles and techniques of software project management. A project proposal, project plan, regular status reports, and a completion report are required. All work must conform to proper analysis, design, programming, and documentation standards. Each student team holds status reviews at appropriate life-cycle milestones. A final presentation and a formal demonstration of the system are required at the end.

## SAMPLE FIRST YEAR

ACS-1903(3) Programming Fundamentals I
ACS-1904(3) Programming Fundamentals II
MATH-xxxx(3) 3 credit hours from Mathematics
STAT- xxxx(3) 3 credit hours from Statistics
RHET-1103(3) Academic Writing: Science or any other section of Academic Writing (if required)
15 - 18 credit hours Electives

**NOTE:** This sample first year is representative of the courses you may take. For many of our programs, you may choose another set of courses and still be well on your way to a degree. Also, for most programs you do not have to take 30 credit hours (five full courses) in your first year.