Computer Game Focus
The computer game industry is booming and its revenue is expected to double from
2005's $32 billion to $65 billion in 2011. As a result, thousands of jobs will be created
every year in the US alone. To meet this demand, the Department of Computer Science
and Engineering offers a focus in computer game design and programming. As a first
step, we offered an elective course in Spring 2007, with more than 30 students enrolled.
In this class, students formed six groups to design, develop and test fully functional 3D
games using commercial or open source game engines. We will continue to extend our
education regarding computer games so that students will learn enough skills to pursue
careers related to computer games.

Course Requirements
We have a strong group of faculty who are experts in computer vision, graphics, multi-
media and algorithm design, and we will offer several courses related to game design and
implementation. The computer game focus will also encourage students to take several
key courses from other departments, including media arts and mathematics. The
recommended courses are:

Computer Science Electives:
CSCE 552 Computer Game Design and Implementation
CSCE 565 Computer Graphics
CSCE 580 Artificial Intelligence
CSCE 520 Database System Design

Mathematics:
Math 527 Numerical Analysis
Math 576 Combinatorial Game Theory

Media Arts:
MART 210 Digital Media Arts
MART 371 The Moving Image
MART 583 Animation

Static pictures from student game projects. Online examples will be posted soon.