## KING FAHD UNIVERSITY OF PETROLEUM AND MINERALS DEPARTMENT OF MATHEMATICS AND STATISTICS

Math 442 List of Projects Instructor: Dr. B. Chanane

Students were asked to prepare, present and submit a report for the following projects

- Dynamic Programming
- Pontryagin Maximum Principle
- Discrete Optimal Control
- Solving an infinite Horizon Linear Quadratic Regulator problem using Matlab
- The reduction from quantum Mechanics to Classical Mechanics
- Application of Euler-Lagrange Equation in Chemical Engineering