MATH-ENG PROGRAM C MATRIX

C OBJECTIVES / OUTCOMES	1. Choose a career in mathematics-based professions or enroll in mathematics, information technologies, economics, business graduate programs.	2. Have a solid background in fundamental notions and principles of mathematics and mechanics, learn independently and develop abilities for analytical thinking and lifelong learning.	3. Demonstrate knowledge of basic mathematical techniques to define and solve problems in various areas such as mechanics, information technologies and gain experience in computer programming.	4. Have good communication skills, interact with other disciplines effectively both in scientific and oral-written formats.	5. Can work effectively as members of a team, and are aware of ethical and professional responsibilities.
1. Demonstrate the ability of solving problems by using techniques from calculus, linear algebra, differential equations, probability and statistics.		■	■		
2. Demonstrate knowledge of mathematics and mechanics to construct, analyze and interpret real world problems.	■	■			
3. Demonstrate the ability to apply mathematics to the solutions of problems.		■	■		
4. Have a basic knowledge of mechanics, information sciences and social sciences.	■		■		
5. Have an ability to write computer programs and use algorithms for solving problems.			■		
6. Have a basic knowledge of the main fields of mathematics and mechanics, including differential equations, elasticity theory, fluid mechanics.	■	■			
7. Have an ability to function both independently and as a member of a multidisciplinary team.			■	■	■
8. Communicate effectively both in written and oral formats				■	■
9. Attain a recognition of the need for, and an ability to engage in life-long learning					■
10. Have an ability to recognize the importance of ethics in professional life.					■