CBM003 ADD/CHANGE FORM

1. Department: MECE College: ENGR

2. Faculty Contact Person: Ralph Metcalfe Telephone: 34521 Email: metcalfe@uh.edu

3. Course Information on New/Revised course:
   - Instructional Area / Course Number / Long Course Title: MECE / 5312 / Computational Fluid Dynamics
   - Instructional Area / Course Number / Short Course Title (30 characters max.): MECE / 5312 / COMPUTATIONAL FLUID DYNAMICS
   - SCH: 3.00 Level: SR CIP Code: 141001006 Lect Hrs: 3 Lab Hrs: 0

4. Justification for adding/changing course: To more accurately reflect course content/level

5. Was the proposed/revised course previously offered as a special topics course? Yes No
   If Yes, please complete:
   - Instructional Area / Course Number / Long Course Title:

6. Authorized Degree Program(s): BS Mechanical Engineering
   - Does this course affect major/minor requirements in the College/Department? Yes No
   - Does this course affect major/minor requirements in other Colleges/Departments? Yes No
   - Can the course be repeated for credit? Yes No (if yes, include in course description)

7. Grade Option: Letter (A, B, C ...) Instruction Type: lecture ONLY (Note: Lect/Lab info. must match item 3, above.)

8. If this form involves a change to an existing course, please obtain the following information from the course inventory:
   - Instructional Area / Course Number / Long Course Title: MECE / 5312 / Computational Fluid Dynamics
   - Course ID: 31842 Effective Date (currently active row): 20073

9. Proposed Catalog Description: (If there are no prerequisites, type in "none".)
   Cr: 3. (3-0). Prerequisites: MECE 3363, 3371, MATH 3363 or equivalents or permission of instructor. Credit may not be received for more than one of BIOE 4312 and MECE 5312. Description (30 words max.): Introduction to finite-difference and finite-volume methods for solving fluid flow model PDEs. Concepts of consistency, stability, and convergence; solution of large-scale linear equation systems.

10. Dean's Signature: ____________________________ Date: ____________________________

Print/Type Name: David P. Shattuck