

11 June 2007

Course # NAME 424: Computer Programming in Ship Design-II

1.5 Credit, 3:00 hrs/wk.

OBJECTIVE: To apply the knowledge of **FORTRAN** language learned in Course # NAME 324 (Computer Programming in Ship Design-I) for solving problems related to preliminary design of ship, e.g., hydrostatic calculation, stability, strength, power, maneuvering etc.

Distribution of Marks:

Attendance	:	10%
Class Test / Class Performance	:	50%
Assignment	:	10%
Quiz/viva	:	30%

Review of FORTRAN:

Try to understand following commands/statements very well:

REAL, INTEGER, LOGICAL, DOUBLE PRECISION, COMPLEX, IMPLICIT, CHARACTER, PARAMETER, USE, INCLUDE, COMMONE etc.

OPEN, READ, PRINT, WRITE, DATA, BLOCK DATA etc.

FORMAT: I-field, F-field, E-field, X-field, A-field, L-field, T-field, G-field, Literal-field, Slash, Repetition factor etc.

ARITHMETIC EXPRESSIONS, BUILT-IN MATHEMATICAL FUNCTIONS

ASSIGNMENT

Logical **IF**, Arithmetic **IF**, Computed **GOTO**, Relational Expressions (Less than **.LT.** etc.)

DO loop, Nested **DO** loop, Implied **DO** loop etc.

ARRAYS, SUBSCRIPTED Variables, FUNCTION Subprogram & SUBROUTINE Subprogram

LIBRARY FUNCTIONS, IMSL routine etc.

Reference Book: **PROGRAMMING WITH FORTRAN** (Schaum's Series)-S. Lipschutz & A. Poe

Course Teachers: Dr. Md. Mashud Karim & Dr. Mir Tareque Ali