

# NAG Library Chapter Contents

## E01 – Interpolation

E01 Chapter Introduction

| <b>Routine Name</b> | <b>Mark of Introduction</b> | <b>Purpose</b>  |
|---------------------|-----------------------------|---|
| E01AAF              | 1                           | Interpolated values, Aitken's technique, unequally spaced data, one variable                                  |
| E01ABF              | 1                           | Interpolated values, Everett's formula, equally spaced data, one variable                                     |
| E01AEF              | 8                           | Interpolating functions, polynomial interpolant, data may include derivative values, one variable             |
| E01BAF              | 8                           | Interpolating functions, cubic spline interpolant, one variable   |
| E01BEF              | 13                          | Interpolating functions, monotonicity-preserving, piecewise cubic Hermite, one variable                       |
| E01BFF              | 13                          | Interpolated values, interpolant computed by E01BEF, function only, one variable                              |
| E01BGF              | 13                          | Interpolated values, interpolant computed by E01BEF, function and first derivative, one variable              |
| E01BHF              | 13                          | Interpolated values, interpolant computed by E01BEF, definite integral, one variable                          |
| E01DAF              | 14                          | Interpolating functions, fitting bicubic spline, data on rectangular grid                                     |
| E01RAF              | 9                           | Interpolating functions, rational interpolant, one variable   |
| E01RBF              | 9                           | Interpolated values, evaluate rational interpolant computed by E01RAF, one variable                           |
| E01SAF              | 13                          | Interpolating functions, method of Renka and Cline, two variables   |
| E01SBF              | 13                          | Interpolated values, evaluate interpolant computed by E01SAF, two variables                                   |
| E01SGF              | 18                          | Interpolating functions, modified Shepard's method, two variables   |
| E01SHF              | 18                          | Interpolated values, evaluate interpolant computed by E01SGF, function and first derivatives, two variables   |
| E01TGF              | 18                          | Interpolating functions, modified Shepard's method, three variables   |
| E01THF              | 18                          | Interpolated values, evaluate interpolant computed by E01TGF, function and first derivatives, three variables |

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