### COURSE DETAILS

**Course Code:** F18XR  
**Full Course Title:** Mathematics 3  
**SCQF Level:** 8  
**SCAF Credits:** 15  
**Available as Elective:** No

### DELIVERY LEVEL

<table>
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<tr>
<th>Undergraduate:</th>
<th>Yes</th>
<th>Postgraduate Taught:</th>
<th>No</th>
<th>Postgraduate Research:</th>
<th>No</th>
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**Additional Information:**

### COURSE AIMS

Investigate the linear problems

### LEARNING OUTCOMES – SUBJECT MASTERY

- The basic definition and nature of determinant and matrix
- Calculate the value of the determinant
- The theory of linear equations
- Vector operation
- Basic concepts and theories of quadratic standard and positive definite quadratic forms
- Ability to perform determinant calculations, solve linear equations, etc. with the help of Matlab and other computer software

### LEARNING OUTCOMES – PERSONAL ABILITIES


### SYLLABUS

- Basic concepts, theories and methods of Linear Algebra
- Determinant
- Matrix

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Linear equations

Vector space and linear transformation

Diagonalization of eigenvalues and eigenvector matrices

Secondary type

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<thead>
<tr>
<th>COURSE RELATIONSHIPS</th>
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<tbody>
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<thead>
<tr>
<th>LOCATION AND ASSESSMENT METHODS</th>
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