### COURSE DETAILS

**Course Code:** F70PE  
**Full Course Title:** Pensions  
**SCQF Level:** 10  
**SCAF Credits:** 15  
**Available as Elective:** No

### DELIVERY LEVEL

<table>
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<th>Undergraduate:</th>
<th>Yes</th>
<th>Postgraduate Taught:</th>
<th>Yes</th>
<th>Postgraduate Research:</th>
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**Additional Information:**

### COURSE AIMS

To introduce fundamental practical and technical issues in the actuarial management of UK defined benefit occupational pension schemes.

### LEARNING OUTCOMES – SUBJECT MASTERY

After completing this module, students should be able to:

- Describe the calculation of benefits under the following pension schemes: UK state pensions, personal pensions and occupational pension schemes (both defined benefit and defined contribution).
- Discuss the advantages and disadvantages of the following features of pension schemes: funding, pay-as-you-go, taxation, accounting requirements, trustees, integration with basic state pension, actuarial reduction and enhancement to pensions.
- Use pension fund mathematics to value a pension scheme and discuss the relative merits of different techniques.
- Calculate the standard fund and standard contribution for the most common funding methods.
- Describe how to deal with deficits and surpluses.
- Discuss how the recommended contribution rate and solvency level change for each funding method under differing scenarios.
- Describe the features of the asset classes that pension schemes invest in.
- Describe the different purposes of an actuarial investigation.
- Describe how to determine a valuation basis for economic and demographic assumptions.
- Perform an analysis of surplus.

### LEARNING OUTCOMES – PERSONAL ABILITIES

After completing this module, students will be able to:

- Demonstrate sound knowledge and awareness of the UK pensions industry.
- Develop better communication skills through project work and class presentations.
- Plan and organise own learning through effective self-management and time management.
- Work autonomously and within groups.
- Demonstrate use of Excel for solving actuarial problems.
- Demonstrate high levels of numeracy as required by the actuarial profession.
SYLLABUS

- UK Pension Providers: State, Employers and Individuals
- Occupational Pension Schemes
- Valuation of pension scheme benefits
- Actuarial funding methods
- Pension Scheme Assets
- Setting the actuarial basis
- Purpose of actuarial valuation
- Deficit/Surplus
- Analysis of Surplus

COURSE RELATIONSHIPS

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<th>Course Code</th>
<th>Level</th>
<th>Title</th>
<th>School</th>
<th>Type</th>
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<td>F70LA</td>
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<td>Life Insurance mathematics A</td>
<td>School of Math and Comp Sci.</td>
<td>Pre-Requisite</td>
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<td>F70LB</td>
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<td>Life Insurance Mathematics B</td>
<td>School of Math and Comp Sci.</td>
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<td>F70LP</td>
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<td>Life Office Practice</td>
<td>School of Math and Comp Sci.</td>
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LOCATION AND ASSESSMENT METHODS

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