F70PE Pensions

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

DELIVERY LEVEL
Undergraduate: Yes | Postgraduate Taught: Yes | Postgraduate Research: No

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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Level</th>
<th>Title</th>
<th>School</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>F70LA</td>
<td>10</td>
<td>Life Insurance mathematics A</td>
<td>School of Math and Comp Sci.</td>
<td>Pre-Requisite</td>
</tr>
<tr>
<td>F70LB</td>
<td>10</td>
<td>Life Insurance Mathematics B</td>
<td>School of Math and Comp Sci.</td>
<td>Pre-Requisite</td>
</tr>
<tr>
<td>F70LP</td>
<td>10</td>
<td>Life Office Practice</td>
<td>School of Math and Comp Sci.</td>
<td>Assessed</td>
</tr>
</tbody>
</table>

**LOCATION AND ASSESSMENT METHODS**

<table>
<thead>
<tr>
<th></th>
<th>Edi</th>
<th>SBC</th>
<th>Ork</th>
<th>Dub</th>
<th>Malay</th>
<th>IDL</th>
<th>COLL</th>
<th>ALP</th>
<th>OTH</th>
<th>Method</th>
<th>Weight</th>
<th>Exam Mins</th>
<th>Type</th>
<th>Diet</th>
<th>Synoptic Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Examination</td>
<td>80</td>
<td>180</td>
<td>Assessment</td>
<td>Semester 1</td>
<td>F70LP</td>
</tr>
<tr>
<td>Y</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Coursework</td>
<td>20</td>
<td></td>
<td>Assessment</td>
<td>Semester 1</td>
<td></td>
</tr>
</tbody>
</table>