# Module Descriptor 2016/17

## School of Computer Science and Statistics.

<table>
<thead>
<tr>
<th>Module Code</th>
<th>CS7014</th>
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<tbody>
<tr>
<td><strong>Module Name</strong></td>
<td>Introduction to Programming</td>
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<tr>
<td><strong>Module Short Title</strong></td>
<td>N/a</td>
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<tr>
<td><strong>ECTS weighting</strong></td>
<td>5</td>
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<tr>
<td><strong>Semester/term taught</strong></td>
<td>Semester 1</td>
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| **Contact Hours** | Lecture hours: 18  
Lab hours: 18  
Total hours: 36 |
| **Module Personnel** | Paula Roberts |
| **Learning Outcomes** | When students have successfully completed this module they should be able to:  
- articulate the software development process  
- define object oriented programming concepts  
- model simple object oriented applications  
- independently implement simple Java applications using correct syntax, basic programming constructs and basic OO techniques  
- use their programming experience to gain an insight into the challenges inherent in software development |
| **Module Learning Aims** | The role of this module within the course is to develop, amongst the students from a health sciences background, an understanding of the process and challenges of software development. The objective is to teach introductory programming concepts and skills. |
| **Module Content** | Syllabus  
Specific topics addressed in this module include:  
- Introduction to Programming  
- Programming Constructs  
- Algorithms  
- Introduction to Object Oriented Programming  
- Unified Modelling Language  
- Java Language Basics  
- Use of the Eclipse Java API |
| **Recommended Reading List** | Java for Everyone, Cay. S. Horstmann, Wiley  
How to Think Like a Programmer: Problem Solving for the Bewildered, Paul Vickers,Cengage  
The Mythical Man-Month: Essays on Software Engineering, Frederick P. Brooks, Addison-Wesley |
<p>| <strong>Module Pre Requisite</strong> | |
| <strong>Module Co Requisite</strong> | |
| <strong>Assessment Details</strong> | Assessment is based on two programming projects (50%), and an in lab test (50%). |
| <strong>Module approval date</strong> | N/a |
| <strong>Approved By</strong> | N/a |
| <strong>Academic</strong> | N/a |</p>
<table>
<thead>
<tr>
<th>Start Year</th>
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<tbody>
<tr>
<td>Academic Year of Data</td>
<td>1617</td>
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