Student Handbook

ICT Skills Programmes

2018

Higher Diploma in Science in Computing

(Software Development Stream)

Part-time

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Welcome to Dublin Business School

Introduction
This student handbook was compiled by the School of Business in Dublin Business School. The purpose of this handbook is to provide you with a summary of resources, regulation, policies, and procedures for this programme. Please note that the official sources for all rules, regulations and assessment relating to programmes are published and can be viewed on the DBS website. This handbook is not intended as a substitute for these, or other official documents, which take precedence in all cases. Some of the information outlined in this handbook may be subject to change.

Dear Student

Welcome to DBS. I hope you enjoy your time here and that you benefit both socially and educationally while studying with us. Our objective is to create graduates with the knowledge, skills and confidence to progress to employment and to meet the challenges of today’s rapidly changing workplace in Ireland and abroad.

Our undergraduate programmes cover a broad spectrum of subject areas such as Accounting and Finance, ICT, Marketing, Management, Psychology, Counselling and Psychotherapy, Film, Social Science and others. All programmes are designed to provide you with an appropriate grounding and understanding of core subjects. However, we know that you have your own career aspirations and that you may wish to specialise in your own preferred area of study and our programmes are designed to allow you that option.

DBS is committed to providing you with a learning environment that encourages you to meet your potential both personally and professionally. A wide range of support services is available through DBS to provide you with advice and guidance needed to identify, achieve and excel in your chosen career. Full information on our support services and relevant contact details are available in this Student Handbook.

Academic studies at this level will be thought provoking, challenging, interesting and exciting. Your studies should prove beneficial for both your personal and professional development and will prepare you for a life of continuous learning. We are confident that you will find this experience highly rewarding.

Should you have any questions or concerns, please do not hesitate to contact any member of staff in DBS. We look forward to talking with you and working with you in the year ahead

Darren Brien
Head of School
Dublin Business School Campus

DBS is a city centre campus with two main buildings where most classes are held and another building where some classes are held. Please refer to the map for the location of our other buildings.

The buildings are:

1. Castle House, 73/83 South Great Georges Street
2. 13/14 Aungier Street
3. Bow Lane (besides Aungier Street building)
4. 6/9 Balfe Street, Block A and B
5. Wicklow House, 84-88 South Great George’s Street

All buildings are within a 5 minutes’ walk of each other. Buses servicing Aungier Street /South Great Georges Street directly are: 16, 16A, 19, 19A, 65, 65B, 83 or 122. All Bus, DART, Luas and Rail routes service the city centre with stations close to the College.

Room Legend and Access Codes
You may need a code to get into some buildings and on your timetables the building names are abbreviated. The following table explains:

<table>
<thead>
<tr>
<th>Timetable abbreviation</th>
<th>Building</th>
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Map of Dublin Business School locations

1. Castle House
2. Aungier Street
3. Bow Lane
4. Balfe Street
5. Carmelites
6. Wicklow House
Course Overview

Dublin Business School (DBS) in conjunction with Microsoft Ireland, their Partner Network and other relevant industry partners have developed an intensive Full Time Level 8 conversion award for a Postgraduate Higher Diploma in Science in Computing (Software Development). This Programme is specifically designed to address the demand for graduates with ICT Skills in areas including Software Development and Software Engineering.

Programme Structure and Content

The programme involves teaching and laboratory activities timetabled between Tuesdays and Thursdays from 6.15 to 9.30 pm and Saturdays from 10.00 am to 5.00pm. The programme contains a deliberate mix of professional certification in relevant industry skills, personal development and

<table>
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academic content. **In Year 1** - Students will be provided with a significant grounding in core computing modules.

**Core modules for Year 1:**

- Principles of Programming
- Database Design and Development
- Information Systems Development & Management
- Web Design & Development
- Operating Systems & Networks

**In Year 2** - Students will pursue a specialisation stream in Infrastructure & Networking. This element is a focused set of modules designed to bring candidates quickly to the industry entry standard for graduates in their chosen field of specialisation.

**In Year 2, core modules are:**

- Object Oriented Programming
- Advanced Programming
- Web & Cloud Application Development
- Mobile Application Development

**In Year 2** - Students will engage in a 3 months’ project

**Job Readiness / Career Support**

To complement the academic programme, learners will gain the upskill and reskill tools from Careers support as part of the Job Readiness element encouraged by Springboard. The programme has been designed in collaboration with industry to ensure that graduates are able to demonstrate the personal skills and aptitudes employers have highlighted as requirements and to assist graduates of the programme to integrate effectively into the work place. The Job Readiness sessions will be present across all three semesters.

**Skillset**

According to the National Skills Bulletin (2016) and as outlined in the EGFSN/Forfas report (Nov 2013) ‘Addressing Future Demand for High-Level ICT Skills’, research findings indicate that the immediate skills recruitment difficulties being experienced relate primarily to positions requiring high level ICT Skills at Level 8 or above. The demand in terms of positions includes Software Engineers for the design and development of applications and systems. Specific skills include: Programming languages –Java, Javascript, C#, C++, Visual Basic, and Net. Objective-Oriented Programming (OOP). Web Development – Understanding of Web 2.0 development, XML, Microsoft ASP.Net, Personal Homepage Tools (PHP), Microsoft SharePoint family of software products and other web page development skills (HTML, CSS, XHHTML).
Following completion of the Higher Diploma in Science in Computing (Software Development), participants will be able to:

- Design, and build mobile applications using Android open-source platform
- Design, implement, test & document advanced Object-Oriented Programmes.
- Apply advanced data structures
- Construct event-driven Graphical User Interfaces
- Evaluate platforms in order to create, design and develop a server side web application with database integration
- Develop Web-based applications using .NET framework and specifically ASP.NET MVC
- Develop Databases using SQL and XML
Module Descriptors

1. Principles of Programming

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Allocation of Marks Within the Module

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School of Business

Author: Dr. Shazia A Afzal

Description:
This module teaches fundamentals of problem solving, algorithm design and basic computation to learners. They will be introduced to the basic programming constructs such as variables, constants, conditional statements and loops, etc. Learners will develop skills to design, develop, test and documents structured programs using an object-oriented programming language and a modern programming environment.

Aims:
1. To develop an understanding of basic programming concepts.
2. To learn elementary algorithms and problem solving techniques.
3. To introduce the development environment and the use of integrated tools.
4. To develop skills to design, implement, debug and execute programs.

Learning Outcomes:
On successful completion of this module, learners will be able to:
1. Appraise basic programming techniques, terminology and concepts.
2. Formulate and model algorithms as solutions to simple problems.
3. Integrate the syntax and semantics of an object-oriented programming language into a program.
4. Design, develop, debug and test elementary programs.

Assessment Strategy:
Participant learning will be assessed by the following:
- Continuous Assessment (50%):
  - Individual assignments
  - On-line tests – for immediate formative feedback
- Lab-based examination (50%):
  - One two hour, end of module examination.

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**Indicative Syllabus:**

1. Introduction: History of programming languages, procedural and object-oriented languages, programming environment, writing simple programs, etc.
2. Basic Computation: Data types, variables and constants, assignment statements, sequence, operators, parentheses and precedence operators, type casting, Boolean logic, comments, indentation.
4. Conditional Structures: The logic of decisions, constructing a guard, multiple-branch decisions, nested decisions, Common structures in programming (e.g. If, Select, Switch).
5. Iterative Structures: The logic of loops, constructing loop guards, nested loops, Common structures in programming (e.g. Do, While, For).
6. Arrays and Strings and Enumerations: Declaration of one and two-dimensional arrays, array initialisation, array manipulation, declaration and manipulation of strings, understanding user defined types such as enumeration.
7. Methods: Defining methods, methods headers and body, passing parameters, types of methods (value returning and void methods), invoking methods, benefits of using methods.
8. Object-Oriented Concepts: Introduction to basic object-oriented concepts such as class and object.
9. Basic principles of testing and debugging.

**Indicative Bibliography:**

<table>
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<tr>
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<th>Publisher</th>
<th>Published</th>
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<td>Core</td>
<td>Visual C# 2012 How to Program (5th Edition)</td>
<td>Dietel P. &amp; Dietel, H.</td>
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<td>Starting out with Visual C# 2012</td>
<td>Gaddis, Tony</td>
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<td>Java: an introduction to problem solving &amp; programming</td>
<td>Savitch, W</td>
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**Electronic Resources**

- DBS E-Learning Support: http://elearning.dbs.ie
- DBS Library Website: http://library.dbs.ie/
- Library Catalogue: http://koha.dbs.ie
- Institutional Repository (eSource): http://esource.dbs.ie/
2. Database Design & Development

Dublin Business School Module Descriptor

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Allocation of Marks Within the Module

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<tr>
<td></td>
<td>50%</td>
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<td>100%</td>
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</tbody>
</table>

School of Business

Author: Dr. Shazia A Afzal

Description:
This module develops skills to use appropriate tools and techniques for the design and development of databases according to the requirements. Learners will build strong technical skills for designing and implementing a robust database system from conceptual, logical and physical database design stages to implementation using a relational database management system (RDBMS). They will develop proficiency in Structured Query Language (SQL) to implement and manipulate database systems. Learners will also be introduced to non-relational databases and they will be able to evaluate the current and future trends in database technologies.

Aims:
1. To understand the role of databases for organised storage and retrieval.
2. To develop an in-depth understanding of relational data modelling.
3. To demonstrate skills for the design and implementation of relational databases using appropriate tools and techniques.
4. To introduce to non-relational databases.

Learning Outcomes:
On successful completion of this module, learners will be able to:
1. Evaluate the role of databases in business organisations.
2. Critique and design relational data models using appropriate tools and techniques.
3. Construct a database system for effective management and retrieval of data using SQL.
4. Appraise the use of non-relational data storage technologies.

Assessment Strategy:
Participant learning will be assessed by the following:
An individual project to design and develop a database according to the business requirements will be used to assess the skills developed during this module.
Final exam will be used to assess the theoretical concepts learned as part of this module.

Method of Assessment

<table>
<thead>
<tr>
<th>Percentage Weightings</th>
<th>Learning outcomes assessed</th>
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</thead>
</table>
Indicative Syllabus:

1. Introduction: Introduction to databases, history and types of databases, databases in the traditional context, the requirement for DBMS, Database life cycle model, the impact of WWW.

2. Database Planning: Gathering requirements, analysing requirements, finding basic entities, and developing business rules.

3. Relational Model: Basic concepts and terminology, requirements analysis, conceptual modelling using Entity Relationship diagrams, developing logical model.

4. Normalisation: definition, purpose and benefits, data redundancy, normal forms from 1st to 3rd and higher, denormalisation.

5. Implementation: Choosing appropriate data types and an appropriate software to build a database system. Referential integrity constraints, introduction to SQL, SQL DDL, DML and DCL, developing tables, inserting records and querying data.

6. Advanced SQL Features: Developing database objects such as stored procedures, Views, indexes, triggers, transactions, developing quality data.

7. Database Administration: Access control; user privileges, the use of roles.

8. Non-relational databases: Types of non-relational databases such as NoSQL, use of NoSQL database, introduction to XML, basic syntax of XML, XML data model.

Indicative Bibliography:

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Publisher</th>
<th>Published</th>
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<tr>
<td>Core</td>
<td>Modern Database Management</td>
<td>Hoffer, Topi, &amp; Venkataraman.</td>
<td>Prentice Hall</td>
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<td>Hands on Database</td>
<td>Conger, S.</td>
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Electronic Resources

- DBS E-Learning Support [http://elearning.dbs.ie](http://elearning.dbs.ie)
- DBS Library Website [http://library.dbs.ie/](http://library.dbs.ie/)
- Library Catalogue [http://koha.dbs.ie](http://koha.dbs.ie)
- Institutional Repository (eSource) [http://esource.dbs.ie](http://esource.dbs.ie)
3. Information Systems Development & Management

### Dublin Business School Module Descriptor

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### Allocation of Marks Within the Module

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<tr>
<td>50%</td>
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### School of Business

**Author:** Michael Gleeson, Patrick O’Callaghan

**Description:**

This module will provide an introduction to the development of Information Systems in a modern computing environment. It will provide a cornerstone for learners in the fundamental understanding and practical application of a range of concepts, tools and techniques related to Information Systems, systems development, software engineering and project management. The module focuses on the development context, i.e. the Software Development Life Cycles (SDLC), Agile Development and Unified Modelling Language (UML). It covers practical and theoretical elements related to system development methodologies, system modelling, diagramming techniques, testing practices and project management principles.

### Aims:

1. To enable the learner to understand Information Systems and their role in business today.
2. To develop a capability for the learner to utilise software engineering tools and techniques.
3. To enable learners to select and deploy appropriate modelling diagrams.
4. To equip learners with an understanding of the principles and themes of project management.

### Learning Outcomes:

On successful completion of this module, learners will be able to:

1. Appraise the role and significance of ICT and Information Systems in a modern context.
2. Evaluate and utilise different methodologies used within the SDLC.
3. Propose and model software systems using UML tools and techniques.
4. Articulate the principal tasks of project management when applied to an ICT environment.
Assessment Strategy:

Participant learning will be assessed by the following:

Learning will be assessed through formative assessment and group project work. The project will assess student ability to employ modelling techniques and use software tools in given situations. The group project assessment in this module can optionally be integrated with Database Design and Development module.

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Indicative Syllabus:

1. Introduction to Information Systems: Contextualisation of Information Systems, overview and evolution of information systems, organisational considerations, origins of TPS, MIS, DSS, ES, EIS.
3. Introduction to Software Engineering: Applying engineering principles to systems development. Introduce what software engineering is and why it is important. Software processes, explaining the concepts of software processes and models.
5. Requirements Engineering: Understand user and system requirements as well as functional and non-functional requirements. Methods of elicitation of requirements.
6. System Modelling: Introduce UML, model driven engineering, design and implementation, design using UML. Practical diagramming using UML.
7. Software Testing: Concepts of test driven development methods, unit testing, black/white box testing, and code coverage. Software maintenance and legacy systems.

Indicative Bibliography:

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## 4. Web Design & Development

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</tr>
<tr>
<td><strong>Continuous Assessment</strong></td>
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### School of Business

**Author:** Fiona Redmond

**Description:**

This module introduces the learner to current client-side technologies for designing and developing dynamic web sites. The module will provide learners with the skills and practical experience to build usable and accessible web sites.

**Aims:**

1. To provide learners with an introduction to the Internet and web technologies.
2. To develop the learners’ practical skills in key client-side technologies such as HTML and CSS to build web sites using appropriate UI design principles.
3. To provide learners with the skills necessary to dynamically generate or modify the content or appearance of a web site using a client side scripting language such as JavaScript.
4. To equip learners with knowledge on web site planning and deployment.

**Learning Outcomes:**

On successful completion of this module, learners will be able to:

2. Design and create web pages that adhere to current Web standards and UI principles.
3. Devise web pages with dynamic content that interacts with users using a scripting language.
4. Evaluate the planning and deployment of a Web Site.

**Assessment Strategy:**

**Participant learning will be assessed by the following:**

The applied nature of the module is reflected in the practical lab demonstration. Learners will be encouraged to develop their skills independently to build standard-compliant web sites. Methods of assessment to be used to measure the learning outcomes stated are: 1) Written final examination and 2) Continuous assessment to involve a project worth 50%. Example Project: Develop a brochure website for a specific business case, accompanied by a report that includes a reflection on that web development experience.
### Method of Assessment

<table>
<thead>
<tr>
<th>Method of Assessment</th>
<th>Percentage Weightings</th>
<th>Learning outcomes assessed</th>
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<tr>
<td>Final Exam</td>
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### Indicative Syllabus:

1. Overview of internet and world wide web, client-server model, the role of web browsers and web servers, HTTP protocol, Domain Name System, URL, Web standards and web design best practices.

2. Mark-up Languages and Content, Introduction to HTML, hypertext, tags and elements (titles, headings, paragraphs, links, lists, tables, forms, web graphics) Evaluating page layout options.


6. Search engine optimisation (SEO), accessibility, and web performance. SEO techniques, evaluating theories behind search engines, analytics, promoting and marketing. Accessibility standards and tools, WCAG, Section 508, WAI. Guidelines on improving web performances such as using CDN’s and compression.


8. Planning and publishing to the web, registering domain name, obtaining a web host, FTP, Site performance, copyright issues, tools and mark-up editors.

### Indicative Bibliography:

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<td>Web Development and Design Foundations with HTML5</td>
<td>Terry Felke-Morris</td>
<td>Addison-Wesley</td>
<td>2014</td>
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<td>The Modern Web: Multi-Device Web Development with HTML5, CSS3, and JavaScript</td>
<td>Peter Gasston</td>
<td>No Starch Press</td>
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5. Operating Systems & Networks

### Dublin Business School Module Descriptor

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### School of Business

**Author:** Michael Gleeson

**Description:**

This module will serve as an introduction to computer science, providing an overview of computer architecture, operating systems and networks. The essentials of computer architecture and organisation are explored. It will cover fundamental topics such as circuits, logic gates and CPUs. Operating systems will be examined from a practical perspective (process, memory, file and device management). The module will provide a key understanding of the fundamentals of computer networks. The module will generate skills based on the practical application of skills through hands-on tasks. The module will provide the foundation for other modules in computing that assume a general understanding of computer architecture, operating systems and networks.

**Aims:**

1. To introduce learners to the architecture and organization of a general purpose computer system.
2. To enable learners to gain knowledge of how operating systems function.
3. To equip learners with practical skills in manipulation of operating systems.
4. To provide learners with a fundamental understanding of data communications and networking.

**Learning Outcomes:**

On successful completion of this module, learners will be able to:

1. Critique the architecture and organization of various computer systems.
2. Evaluate core operating systems concepts such as process, memory, file and device management.
3. Integrate practical skills in Windows and Linux operating systems by formulating basic scripts.
4. Synthesize mechanisms of data communications and typical network architectures/topologies.

**Assessment Strategy:**

Participant learning will be assessed by the following:

Learning will be assessed by a mixture of formative and summative assessment, example breakdown:

1. Coursework (20%) in the form of practical lab based online assessment,
2. Coursework (30%) in the form of a practical Skills Based Assessment involving the manipulation of an operating system.
based on specified challenges and 3) a Final Exam (50%) to encompass all the module content.

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### Indicative Syllabus:


2. **Boolean Algebra**: Basic laws, application to switching circuits. Relationship to number systems in computing. Digital Logic: Logic gates AND, NAND, OR, NOR, XOR, NOT.

3. **Operating Systems**: Definition of an operating system, abstract views of an operating system, evolution of operating system designs, classes of operating systems, virtualising operating systems.


5. **Memory Management**: Memory hierarchy, swapping and relocation of processes, paging and segmentation. Virtual memory basics, demand paging, page faults and working sets.

6. **File System & Input/Output**: Files and file operations, directories, file sharing, links, disk structure, examples of UNIX, Linux and Windows file systems. Architecture of I/O and interaction with OS.

7. **Examination of Windows command line**, introduction to UNIX/Linux. Introduction to the bash shell, basic commands, process management, user/file permissions and basic shell scripting.

8. **Networking Fundamentals**: Data communications media and channels, wireless and mobile computing. Communications, hardware devices, software and protocols.

9. **Network Architectures**: The Internet, intranets and extranets. Enterprise communication and collaboration, network topologies (Logical and Physical).

10. **Network Models**: Layered approach, OSI and TCP/IP network protocols. Application, Presentation and Session layers of the OSI. Example protocols and implementations at each layer.

### Indicative Bibliography:

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<tr>
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<td><strong>Core</strong></td>
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<td>Understanding Operating Systems</td>
<td>Ida M. Flynn &amp; Anne McIver McHoes,</td>
<td>Cengage</td>
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| **Supplementary**                  |                               |                |           |         |

| **Electronic Resources** |                               |                |           |         |
| OS and CPU Simulator          | http://www.teach-sim.com/     |                |           |         |
| Tutorials Point                | http://tutorialspoint.com     |                |           |         |
| Graphical Network Simulator   | http://www.gns3.net/         |                |           |         |
| DBS E-Learning Support        | http://elearning.dbs.ie       |                |           |         |
| DBS Library Website           | http://library.dbs.ie         |                |           |         |
| Library Catalogue             | http://koha.dbs.ie            |                |           |         |
| E-Journals, E-Books and Databases | http://library.dbs.ie/Electronic-Resources/E-Library.htm |                             |           |         |
| Institutional Repository (eSource) | http://esource.dbs.ie/       |                |           |         |
6. Object Oriented Programming

Dublin Business School Module Descriptor

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School of Business

Author: Dr. Shazia A Afzal

Description:
This module develops learners' programming and problem solving skills using an Object-Oriented (OO) programming paradigm. They will extend their basic programming knowledge and skills learned in the previous block. Learners will also synthesise their knowledge of software engineering principles learned in Block 1 with the object oriented programming paradigm to develop well designed, efficient, maintainable Object-Oriented software. They will also enhance their skills to test their applications using several testing techniques.

Aims:
1. To exhibit an understanding of object oriented concepts.
2. To design and implement well designed software by using software engineering principles.
3. To demonstrate the skills for implementing basic data structures such as stack, queues and lists.
4. To test functions of developed software using several testing techniques.

Learning Outcomes:
On successful completion of this module, learners will be able to:
1. Appraise and integrate object oriented concepts and techniques in an intermediate program.
2. Implement basic data structures in intermediate programs.
3. Formulate, critique and modify well-structured object-oriented programs.
4. Synthesize several techniques to test a range of functions of Object Oriented application.

Assessment Strategy:
Participant learning will be assessed by the following:
- Continuous Assessment (50%):
  - Individual assignments
  - On-line tests – to provide timely formative feedback
- Lab-based examination (50%): One two hour, end of module examination.
Method of Assessment | Percentage Weightings | Learning outcomes assessed
---|---|---
Continuous Assessment | 50% | 3, 4
Exam | 50% | 1, 2, 3

Indicative Syllabus:

1. Introduction: Review of procedural programming, problems with procedural programming and the need for object-oriented programming.
2. Basic Concepts: Class, object, constructor, instance variables, class variables, use of static, this reference, passing objects to methods, array of objects, etc.
3. Abstraction and Encapsulation: abstract class, abstract members of a class, designing guidelines, access modifiers, etc.
4. Inheritance and Polymorphism: Super class and sub class, overriding and overloading, use of virtual, override and new keywords, function and operator overloading, etc.
5. Interfaces: Using interfaces in the library of OOP language, purpose and principles of writing interfaces, difference between abstract classes and interfaces, using of interface in the framework library such as IComparable, etc.
6. Basic data structures: Array lists, list, stacks, queues, etc.
7. Exception Handling: advantages, exception types, when to use exceptions, try-catch and finally blocks, rethrowing exceptions, etc.
8. Testing: Test cases, test plans, testing techniques, writing unit tests for several functions, etc.
9. Graphical User Interfaces: Introduction to events and basic Windows forms

Indicative Bibliography:

<table>
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<th>Author</th>
<th>Publisher</th>
<th>Published</th>
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<tr>
<td>Core</td>
<td>Visual C# 2012 How to Program (5th Edition)</td>
<td>Dietel P. &amp; Dietel, H.</td>
<td>Prentice Hall</td>
<td>2013</td>
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<td>Supplementary</td>
<td>Beginning C# Object-Oriented Programming</td>
<td>Clark, Dan.</td>
<td>Apress</td>
<td>2013</td>
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<tr>
<td>Beginning Object-Oriented Programming with C#</td>
<td>Purdum, Jack.</td>
<td>Wrox</td>
<td>2012</td>
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Journals


Electronic Resources

- DBS E-Learning Support: http://elearning.dbs.ie
- DBS Library Website: http://library.dbs.ie/
- Library Catalogue: http://koha.dbs.ie
- Institutional Repository: http://esource.dbs.ie/
- Programmer’s Heaven, C# School: http://ebooks.programmersheaven.com/csharp_ebook.pdf
7. Advanced Programming

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**School of Business**

**Author:** Dr. Shazia A Afzal

**Description:**

This module builds on learners’ Object Oriented knowledge and teaches them advanced programming skills. They will learn storage input/output, event handling and delegates, applications with GUI and backend relational databases, multi-threading and test-driven development of advanced object-oriented programs. They will develop an ability to design and develop complex real world’s problems using the techniques learned in this module.

**Aims:**

1. To learn advanced programming concepts required to develop software applications.
2. To develop understanding and skills for designing, implementing and testing advanced object-oriented programs.
3. To illustrate an in-depth understanding and skills to construct programs with backend relational data stores.
4. To develop understanding of concurrency and threading.

**Learning Outcomes:**

On successful completion of this module, learners will be able to:

1. Propose and implement advanced object oriented programs, incorporating data structures.
2. Construct appropriate event driven graphical user interfaces.
3. Formulate programs to maintain and query a backend database.
4. Devise and develop multi-threaded applications.

**Assessment Strategy:**

Participant learning will be assessed by the following:

- Continuous Assessment – 50%
  - Individual Assignments
  - Lab test to provide timely formative feedback

The assignment of this module can optionally be integrated with Web and Cloud Application.
development module by demonstrating the application of techniques learned in this module for Web and Cloud Application Development.
- Lab-based examination – 50%
  - Two hours final examination to test the concepts

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**Indicative Syllabus:**
1. Storage I/O: File Structure, creating files, memory Allocation, garbage collection, I/O Streams
2. Event Driven Programming: Understanding events, raising and handling events, creating custom events, understanding and implementing delegates.
3. GUI Development: Windows forms using controls such as labels, textboxes, list boxes, etc. Multiple document interfaces.
4. Databases: Connecting and querying a database using some front-end application using stored procedures, data binding, using Grid View, sending and updating data in databases.
5. Advanced Data Structures: Hash tables, trees, Priority Queues, etc.
6. Threading: Understanding threading and processes, developing applications using concurrent execution of threads (multitasking), user created threads, thread priorities, life cycles, debugging threaded applications.

**Indicative Bibliography:**

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<td>Core</td>
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<td>C# 2012 for Programmers</td>
<td>Dietel &amp; Dietel</td>
<td>Prentice Hall</td>
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| Supplementary          |                 |                |           |         |
| Visual C# 2012 How to Program. | Dietel       | Prentice Hall  | 2013      | 5th     |
| C# in Depth            | Skeet, Jon.     | Manning        | 2013      | 3rd     |

| Journals               |                 |                |           |         |

**Electronic Resources**

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8. Mobile Application Development

Dublin Business School Module Descriptor

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Allocation of Marks Within the Module

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School of Business

Author: Damien Kettle

Description:
This module will teach the required skills in the technologies required to design and build mobile applications using current platforms and IDE’s both open-source and proprietary.

Aims:
1. Be familiar with the features and capabilities of a range of common mobile devices and their operating systems.
2. Design and develop a range of mobile apps for current platforms.
3. Deploy finished applications to an actual mobile phone device.

Learning Outcomes:
On successful completion of this module, learners will be able to:

1. Appraise the capabilities of a range of mobile devices and operating systems.
2. Evaluate appropriate techniques and frameworks used in mobile application development.
3. Model and construct a native mobile application using a suitable development environment.
4. Assess a range of technologies that enable the further development of mobile applications.

Assessment Strategy:

Participant learning will be assessed by the following:

Learners will be assessed by lab examination and individual assignments.

<table>
<thead>
<tr>
<th>Method of Assessment</th>
<th>Percentage Weightings</th>
<th>Learning outcomes assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab examination</td>
<td>30%</td>
<td>2, 3</td>
</tr>
<tr>
<td>Individual Assignments</td>
<td>70%</td>
<td>1, 2, 4</td>
</tr>
</tbody>
</table>

Indicative Syllabus:

1. Downloading and setting up the IDE, SDK and Runtime environment.
2. Building a simple Application, using the emulator. Debugging the app.
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>SDK Overview and working with frameworks.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Building a mobile app, Activities, Services, Intents and Intent Filters, Content Providers.</td>
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<td></td>
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</tr>
<tr>
<td>7.</td>
<td>Database Connectivity, Data Binding, Content Provider.</td>
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<td></td>
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</tr>
<tr>
<td>8.</td>
<td>Using with locations and maps. Geo and movement APIs.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Service and its life cycle, creating and starting a service, Working multi-threading and AsyncTask, Broadcast receivers, Triggering receivers with intents, responding to system events using Broadcast receivers, using Alarm.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11.</td>
<td>Consuming Web Services, Resources and Best Practices.</td>
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**Indicative Bibliography:**

<table>
<thead>
<tr>
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<th>Author</th>
<th>Publisher</th>
<th>Published</th>
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<tr>
<td><strong>Core</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Busy Coder’s Guide to Android Development</td>
<td>Mark L. Murphy</td>
<td>CommonsWare</td>
<td>2011</td>
<td>1st</td>
</tr>
<tr>
<td>Developing an Advanced Windows Phone App</td>
<td>David Britch</td>
<td>Microsoft</td>
<td>2012</td>
<td>1st</td>
</tr>
<tr>
<td><strong>Supplementary</strong></td>
<td></td>
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</tr>
</tbody>
</table>

**Journals & Sites**

- www.codeproject.com
- www.geekchamp.com

**Electronic Resources**

- DBS E-Learning Support | http://elearning.dbs.ie
- DBS Library Website | http://library.dbs.ie/
- Library Catalogue | http://koha.dbs.ie
- Institutional Repository (eSource) | http://esource.dbs.ie/
9. Web & Cloud Application Development

Dublin Business School Module Descriptor

<table>
<thead>
<tr>
<th>Stage</th>
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<tr>
<td>Module Title</td>
<td>Web and Cloud Application Development</td>
<td>2</td>
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<td>Module Status</td>
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<table>
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<th>Module Code</th>
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<tr>
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<table>
<thead>
<tr>
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<tr>
<td>September 2015</td>
<td>2020/21</td>
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<table>
<thead>
<tr>
<th>Contact Hours</th>
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<tbody>
<tr>
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<td>Practical</td>
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Allocation of Marks Within the Module

<table>
<thead>
<tr>
<th>Continuous Assessment</th>
<th>Project</th>
<th>Practical</th>
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<tbody>
<tr>
<td>70%</td>
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<td></td>
<td>30%</td>
<td>100%</td>
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</tbody>
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School of Business

Author: Dr. Shazia A Afzal

Description:
This module will help learners to synthesise their existing knowledge learned in the previous semester and to acquire new skills for the development of software applications using Web and Cloud platforms. In this module they will learn advanced databases such as different types of XML databases, server-side scripting, state-management techniques, AJAX and social media integration to Web applications.

Aims:
1. To enable learners to understand and implement server-side technologies for Web application development incorporating a Web framework.
2. To enhance their understanding of relational and non-relational databases.
3. To equip them with the necessary technologies required to produce complex transactional web applications.
4. To prepare them to explore the Cloud platform for the development and deployment of server-side applications in Cloud environment.

Learning Outcomes:
On successful completion of this module, learners will be able to:
1. Critique Web application architectures and frameworks which incorporate server-side technologies.
2. Evaluate and implement relational and XML databases as data stores for Web applications.
3. Synthesize current and emerging technologies to enhance the functionality of Web applications.
4. Appraise cloud platforms to develop and deploy server-side applications with database integration.

Assessment Strategy:
Participant learning will be assessed by the following:
Continuous Assessment – 70%
• Group Project
• Lab test to provide timely formative feedback
Lab-based examination – 30%
• Two hours final examination to test the concepts

<table>
<thead>
<tr>
<th>Method of Assessment</th>
<th>Percentage Weightings</th>
<th>Learning outcomes assessed</th>
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</thead>
<tbody>
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<td>Continuous assessment</td>
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<tr>
<td>Exam</td>
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<td>1, 2, 4</td>
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**Indicative Syllabus:**

1. Server-side technologies: Introduction, concepts and techniques including state management techniques, syntax and semantics of the chosen language.
2. Web Application Development: Choosing a frame to develop dynamic Web applications, features offered by the framework.
3. Database Management Systems and integration with the Web: Database management systems and the Internet, Integration with the World Wide Web, Integration of Web servers with database systems, Servers: web, IIS/Apache; Database and web technologies, Standards.
4. XML Databases
   Data Modelling and XML. The XML Document Object Model, Native XML Databases.XML-enabled Databases. XML and style sheets (CSS), Introduction to XPath, Introduction to of XSL; Basic XSL Elements Syntax; Processing Instruction Elements; Transformation, Elements, Node Creation Elements, Data Retrieval Elements.
5. Relational Databases and XML
   Using SQL for Database Access; Queries; Changing Data in a Database; Generating XML Pages Using SQL. Hybrid XML databases with SQL.
7. Social Media and Analytics: Embedding social media using services such as: Twitter API’s, Facebook API’s, LinkedIn API, Google+, and YouTube. Social Graphs and Plugins, sharing of content and user engagement, embedding charts and graphs.
8. Cloud Platform: Exploring the Cloud platform to design, develop and deployment software/Web applications. Analysing several issues for data storage on Cloud, relevant tools and techniques to support the development and deployment of dynamic server-side applications.
9. Security and Privacy: Legislation, standards, norms and practices, utilising software tools to ensure user-confidence in a dynamic environment, protecting database data, including privacy in the development process such as configuration management, secure transmission, authentication, etc.

**Indicative Bibliography:**

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Publisher</th>
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<th>Edition</th>
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<tr>
<td>Core</td>
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<td>Internet and World Wide Web: How To Program</td>
<td>Deitel &amp; Associates.</td>
<td>Prentice Hall</td>
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<tr>
<td>E-Journals, E-Books and Databases</td>
<td><a href="http://library.dbs.ie/Electronic-Resources/E-Library.htm">http://library.dbs.ie/Electronic-Resources/E-Library.htm</a></td>
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<td>Institutional Repository</td>
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<td>W3Schools.com</td>
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</table>
Assessment

Assessment Objectives

The broad objective of the assessment process is to establish the extent to which each student has achieved the learning outcomes of the modules and of the programme generally.

The range of knowledge and skills assessed varies from module to module and depends on the type and objectives of the assessment method. Generally the intention is to test each student’s capacity to:

- Manage tasks and projects
- Work individually or as a member of a team
- Identify and use appropriate academic and technical resources
- Use hands on skills developed during the period of study
- Conduct primary research
- Apply knowledge and skills to business contexts
- Present arguments and conclusions coherently and convincingly
- Critically analyse and evaluate scenarios and issues
- Synthesise and reach logical conclusions
- Solve simulated business problems
- Reflect on own learning and development
- Apply learned skills to different scenarios

Assessment Methods

A variety of assessment methods are used throughout the programme. These include:

- Problem solving exercises
- Practical projects incorporating a variety of competencies and skills for developing software
- Case studies
- Research based and technical projects
- Presentations
- Academic essays
- Closed book examinations
Continuous assessment varies in style and purpose from module to module, depending upon the nature of the subject material and the teaching and learning objectives. A blend of individual and group assessment is used to help you develop the skills of working individually and as part of a team.
Assessment Schedules

Assessment schedules are provided for all students for all modules at the beginning of the academic year. These schedules are designed to limit the number of assignments students have to submit at any one time. It is organised such that assignments are spread out across the academic term, where possible. This serves as a useful time management tool for students.

You will receive your Assessment Schedule in class it will also be published on the ICT April Intake 2017 Home Page as the course begins.

Moodle Information

Moodle Guide

General Overview

What is Moodle?
Moodle is the Dublin Business School eLearning system designed to provide you with a range of course material which will enhance and support your learning experience within DBS.

You will be using Moodle to submit assignments through. On Moodle you will have access to your lecture notes for all modules you are taking, and material regarding your programme and modules. You will also find information about events which are taking place within DBS, for example student services social events, and Library and Careers information events.

Where can I access Moodle?
You can access Moodle from any computer with Internet access. If you have a problem logging-in you should contact IT via the new student help form (which you will learn about at your IT induction), or call IT on 014177573

How do I log onto Moodle?
To access your Moodle account, please enter your student number and password which has been emailed to your personal email address. If you are unsure what these are please contact IT or fill out our help form.
When you log in to Moodle you will see the Home page of Moodle similar to below.

*These blocks can be hidden/unhidden by selecting dock/undock on the block
Your Module/Course page

The Module/Course page displays all your course material in the centre panel.

To Open Notes/Lectures

Go to the section that the notes are in and select the appropriate link and click to open. Save to your computer or storage media as required.

To Print Notes/lectures

To print your notes select the printer icon to the right of the notes that you want to print.

In order to print these notes for free you must click this printer icon. (Do not save to your computer and then print. Also it will not print for free if this is a link to an external website).
To upload your assignment

1. Go to the section that the upload link is on.
2. Click on the Submit link

Select Add submission

1. Select the checkbox to confirm that the assessment is your own work.
2. Fill out online text as required
3. Drag and drop your assessment into the File submission Area.
4. Save Changes

Note! If you are in an old browser the drag and drop function may not be available. If this is the case:

- Click on Add>Choose File
- Click on the file to upload>Choose File.
- Click Save changes.
Once the file or files are uploaded and you have clicked on **Save Changes** you can see your file and submission details.

To **Edit** your submitted assessment and upload again.

If you submit your file **before** the due date you can edit it and upload it again.

**To delete uploaded file and upload again**

1. Click on **Edit my submission**
2. Right-click on the file to delete>click on the **Delete** button.
3. Enter your changes and resubmit your file again.

**Note this can only be done if you have submitted before the due date.**

View grades and assessment status

You lecturer will inform you once they have completed the grading/feedback of the assignment. To see your file status and grade and feedback select the submit link on Moodle again.
Personal Timetable

Personalised Timetable on Student Email – MyDBS.ie (Office 365)
In your student email you have access to a calendar. This year DBS has set it up so that your personalized timetable will automatically synchronize with this calendar. Should you be unable to access the student intranet you can now alternatively check your email. Also if you have a smartphone you can put your email on it which will also pull in your calendar, making it easy to check your timetable on the go.

How to Access Your Personal Timetable on your Outlook Calendar
Go to http://mydbs.ie and input your student number @mydbs.ie for the username, and then press enter
You should be re-directed to the following page, where you just need to put in your password and click “Sign In” or press enter:

You should come to the below page where you can click on “Calendar” up the top:
From here you can view your calendar which should show you your upcoming classes:

How to Change Time Zone on Your Personal Timetable

When you are in the Calendar you can click on icon () for the Settings Menu up the top
Then click ‘Options’ in the drop-down menu

Once you are in Options, Click ‘Settings’ on the right hand side, then ‘Regional’

Ensure that the ‘Current time zone’ is set to (UTC) Dublin, Edinburgh, Lisbon, London.
Click ‘Save’
Staff Contact Details

Programme Coordinator: Mary Fenlon
Castle House

T. 01 417 0634
E: springboardsupport@dbs.ie or mary.fenlon@dbs.ie

Academic Programme Leader: Dr. Shazia A Afzal
T. 01-4170683
510 Castle House
E: shazia.afzal@dbs.ie

I.T Support: 1st Floor, Aungier Street and 4th Floor Castle House

T. 01 4177573 or Direct Dial Help phones Library
Print Room. Online Support: via intranet (www.dbs-
students.com) by clicking the ‘Computer Services’
tab.

Library: 2nd Floor, Aungier Street. T. 01 -417 7572

E: library@dbs.ie  W: http://library.dbs.ie
Study Hub, Bow Lane  T. 01 -4178745

Student Experience Team: Student Services incl. Education and Welfare,
International Student Support Officer and Career
Development Office:
Ground Floor, Aungier St.
Sports, Clubs and Societies Development Officer:
4th Floor Castle House
Facebook: Search for ‘DBS Student Experience’

Education and Welfare Officer: Aideen Blake
Student Services,
Ground Floor, Aungier St.

T. 01 417 8748  E: aideen.blake@dbs.ie
**Staff Contact Information**

**Sports, Clubs & Societies Officer:**  
Adam Crowther  
Student Services  
4th Floor, Castle House

**Career Development:**  
Careers and Placements Office,  
Ground Floor  
Aungier St

**Directing your Query**

Any difficulty in any aspect of a course should always be raised immediately with the relevant person so that the issue can be addressed at the earliest possible time. All DBS email addresses are of the form `firstname.surname@dbs.ie`. If you are unsure how to direct your query, email `springboardsupport@dbs.ie` with a brief summary so that we can support you.

**Class Representative**

Each stream is asked to appoint one Class Representative (CR). The function of class representatives is to liaise between students, faculty and student services. Class Representatives also coordinate student feedback. This opens and maintains a channel for student input to the course review process. Class Representatives are invited to attend two or more meetings with senior school management per academic year. Formal reports of the meeting will be recorded. Class representatives should also make contact with Student Services if necessary. Training on processes and procedures associated with being a Class Representative will be provided. The Class Representative structure is a channel for communicating with school management. For more information on Class Representative Training, email `aideen.blake@dbs.ie`.

**Lecturers**

Subject lecturers can be contacted via email. All DBS email addresses are of the form `firstname.surname@dbs.ie`. Please remember that lecturing staff will be lecturing during the day also, and thus may not reply immediately.

**Programme Coordinator**

Mary Fenlon is the Programme Coordinator for DBS Springboard. Mary can be contacted via email `springboardsupport@dbs.ie` or Tel: 01 417 0634.
The Academic Affairs Office ensures that the academic integrity of the College is maintained throughout all programmes offered, and that the objectives outlined above are strictly adhered to. The Academic Affairs Office is located on the 5th Floor in our Castle House building. Students should deal directly with Academic Affairs staff regarding induction, registration, graduation and all regulatory information, examination queries, for example:

- Academic Calendar and Term Dates
- Academic Impropriety
- Assessment Regulations
- Code of Conduct
- Complaints Procedures
- Graduation Info

Supporting Documents are on (or links available through) the DBS website for Current Students, follow the links to the Registrar’s Office.

www.dbs-students.com/Registrar

All general queries please email reg@dbs.ie

Student Feedback Questionnaire

Questionnaires are distributed via Moodle to students during the course to provide the opportunity for each individual to contribute directly to the course review process. Immediate issues are addressed as soon as possible and recommendations are reviewed for following academic years. Feedback is given to student on issues raised and solutions where necessary, within as short a time frame as possible.

The Academic Affairs Office also has responsibility for the examinations process. This includes organisation of staffing, centres and material for the examinations, provision of special facilities for candidates with personal mitigating circumstances, compilation and issuing of results and organising Examination Board meetings.


Exams Absence

Exams timetables are posted on the above link with date, time and location of the exams. All students should keep an eye on the exams timetable before an exam to be well prepared for the date.

If you cannot sit the exam for any reason you need to fill in a Personal Mitigating Circumstance (PMC) form. Students can download a PMC form from the intranet (www.dbs-students.com) under the Exams Office tab here: http://www.dbs-students.com/Exams/Default.aspx.
See example of a complete PMC form:

PMC FORM

This form should be completed if:
- A student is unable to take an exam
- There are circumstances which adversely affect a student’s performance during an examination

This form must be submitted to the Academic Affairs Office within 7 days of the examination day or the assignment submission deadline.

<table>
<thead>
<tr>
<th>Student No:</th>
<th>10345578</th>
<th>Student Name:</th>
<th>Chris Lindsay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Code:</td>
<td>BCE08PSM</td>
<td>Course Title:</td>
<td>Cert. in Programming</td>
</tr>
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<td>Module Code(s)</td>
<td>87AF108</td>
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</table>

Please choose the relevant option(s) below:
- [ ] Non Attendance at Exam
- [ ] Consideration of PMC at Exam Board

Detail of Mitigating Circumstances:
Please state below the reasons for seeking the deferral of the module(s) listed above. Supporting evidence (e.g. medical certificate, bereavement notice etc.) must be attached.

Stomach bug (find attached medical certificate)

Dates covered: ___22/08/2016___ to ___24/09/2016___

Student Signature: ___ Chris Lindsay ___ Date: ___22/09/2016___

---

FOR THE PMC COMMITTEE USE ONLY

Approved: [ ] Yes [ ] No

Signature: __________________________

---

PMC requests are subject to approval by the Registrar. Please note PMC forms are not considered unless the supporting evidence is attached and within the time frame given.
springboardsupport@dbs.ie or by post. **Failure to defer, exam results in the module/s will be capped at 40%**.

**Please also remember to bring your student card to the exam with you.**

Should you have any questions regarding the exams around the exam time please email exams on exams@dbs.ie

**DBS Library Services and Facilities**

**Introduction**

DBS Library ([http://library.dbs.ie](http://library.dbs.ie)) comprises a Library at Aungier Street and the Study Hub in Bow Lane (2nd and 3rd floors). A code is required to access the Study Hub in Bow Lane (9214).

The Aungier Street Library provides access to Library stock, the Library’s main Information/Support desk and Library seating for quiet study. The Study Hub is an informal library space on the 2nd floor of the Bow Lane Building where you can obtain additional assistance from the Information Skills Librarian and Research Librarian. The 3rd floor of Bow Lane contains some additional quiet seating for study. Maps indicating Library locations are located on the Library Website ([http://library.dbs.ie](http://library.dbs.ie)). The Library’s professional and experienced Staff is on hand to assist you with all of your Library enquiries.

**Library’s opening hours?**

**The following opening hours apply during term-time (including all reading weeks), Open on Sundays and bank holidays in the run up to exams**

<table>
<thead>
<tr>
<th>Term Time Opening Hours (Including Reading Weeks)</th>
<th>Aungier Street Library (2nd floor Aungier Street)</th>
<th>Collaborate@TheHub (2nd floor Bow Lane)</th>
<th>Study@TheHub (3rd floor Bow Lane)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday:</td>
<td>09:00 – 22:00</td>
<td>09:00 – 17:00</td>
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</tr>
<tr>
<td>Tuesday:</td>
<td>09:00 – 22:00</td>
<td>09:00 – 17:00</td>
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</tr>
<tr>
<td>Wednesday:</td>
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<td>Friday:</td>
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<tr>
<td>Saturday:</td>
<td>09:00 – 17:00</td>
<td>Closed</td>
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</tbody>
</table>

There will be additional opening hours in the run up to exams, (for example Sundays and Bank Holidays). Details will be posted to the Library Website.
What can I access from the Library?

The Library collection encompasses the arts, business and law. It comprises:

- 41,822 books listed and searchable on Koha, the Library’s online catalogue [http://koha.dbs.ie/](http://koha.dbs.ie/)
- 35 print journals
- 56,000 e-journals
- 1610 e-books via Dawsonera
- 205 ebook titles via Library Kindles
- an extensive portfolio of online databases
- 1,828 DVDs

Note that the Library Catalogue, the Library’s e-book collection and EBSCO databases can also be searched on handheld devices such as iPhones.

Becoming a member of the Library

As a registered student, you are automatically a member of the Library. Your DBS student card is also your Library card.

The Library has self-issue stations where you can borrow, renew and return books yourself with your student card.

Undergraduate students can borrow up to 6 items and can renew up to 12 times with the exception of 3-day loan books. Postgraduate students can borrow up to 10 items and can renew them up to 12 times with the exception of 3-day loan books.

Renewing Books Online

By accessing your online Library account via the Library’s online catalogue at: [http://koha.dbs.ie/](http://koha.dbs.ie/). Please note that if another student has reserved an item presently on your account, you cannot renew it.
Searching Library Databases/Electronic Journals/E-Books?

Databases, electronic journals and e-books can be searched simultaneously via the ‘search all resources’ search box on the Library Website (http://library.dbs.ie) or individually via the eLibrary tab of the Library website.

Library Databases include: Academic Search Complete, Business Source Complete, Computer and Applied Sciences Complete, Emerald, Credo Reference, Dawsonera, Greenfile, Firstlaw, Film and Television Literature Index with Full Text, Hospitality and Tourism Complete, JustCite, Justis, Lexis Nexis (Law), Lexis Nexis (News and Business), LISTA Full Text, Mintel, Passport, Pep Archive, PsycArticles, PsycInfo, Regional Business News, SOCIndex, WARC and Westlaw IE.

Underlined databases are particularly useful for psychology students. Final year student projects can be viewed on eSource at esource.dbs.ie For login details please see question 8.

Login onto IT equipment in the Library and to the Library’s online resources?
There are three logins used in DBS to access all resources and equipment.

1. Primary DBS login: the login details that you received via email to the address that you provided when applying to the college. Your student number is the username and the password is a randomised code. This login works for 5 College systems; 1. Library and College PCs / 2. Printing System (Papercut)/ 3. DBS email (your student number@mydbs.ie e.g. 1234567@mydbs.ie) / 4. Moodle (e-learning)/ 5. Online booking for PCs and Study rooms

2. Library Account Login. Go to http://koha.dbs.ie/ to access your online library account and to renew and reserve library resources. Your login is:

   Username: Student number  Password: Date of Birth: DD/MM/YYYY

3. Athens account Login: the login to access library resources off-campus. You will receive an email from IT requesting you to activate your account. This email will be send to your mydbs email account:
   
   Username: Contained in email  Password: What you choose when activating.

If you don’t receive the email from Edserv please contact the Library for your Athens account (david.hughes@dbs.ie).

Library resources available for students with a disability

If you have a disability, you are welcome to contact the Deputy Librarian Jane Buggle (jane.buggle@dbs.ie) who will carry out a needs assessment with you to ensure that the appropriate supports are in place for you to access library information. For example visually impaired students can avail of magnification software and audio functionality on e-books. Colin O’ Keeffe the Information Skills Librarian also provides information skills support sessions for students with disabilities on Thursdays from 12-1pm.
Contacting the Library

Each Library site has a dedicated information point where staff can assist you with your enquiries. You can also contact Library staff by phone, email or via the Library’s instant messaging service called ‘DBS Ask a Librarian’ which is available on the Library website. ‘DBS Ask a Librarian’ enables you to chat live with Library staff via the Library Website. You can also follow Library developments via the Student Blog, Facebook and Twitter, links to which are provided on the Library Website.

**Key Contacts:** Information Desk, A.S T.01 -417 7572 Study Hub, B.L T. 01 -4178745 E: library@dbs.ie

W: [http://library.dbs.ie](http://library.dbs.ie)
Further help in using the Library

- **Library Classes**: DBS Library employs a dedicated Information Skills Librarian, Colin O’Keeffe, who provides students with Library tours and inductions. He also runs a variety of classes on how to evaluate and use information ethically; essay writing, avoiding plagiarism and referencing. Please consult the Library Website (Library Services tab) for further information.

- **Library Guides/Handbooks**: guides on how to use various Library resources as well as guides on essay writing, referencing, avoiding plagiarism, conducting a literature review, etc. are available on the Library website and in hardcopy in the Library. The Library also produces its own student handbook as well as a quick guide to Library Resources. These are also available on the Library Website.
This programme is specifically designed to address the demand for graduates with ICT skills in areas including Software Development and Software Engineering. Career opportunities in the field include; Software Applications Developer, Software Engineer, Network Engineers, System Administrators, Computer/Systems Support, Data Analyst and Database Developer.

Participants will gain relevant skills that employers respect and enable them to obtain employment in the ICT industry. A feature of the programme is the opportunity for the learner to engage in a work placement. The work placement provides learners with relevant work experience with an industry partner for a minimum period of 3 months. In addition to acquiring new skills, learners will have an opportunity to apply and reinforce the academic knowledge and practical, applied skills they have acquired during the taught element of the programme.

Upon successful completion of the programme, graduates of the Higher Diploma in Science in Computing will be eligible to apply for entry into specialist computing MSc programmes across the country. DBS offers its own MSc in Information Systems with Computing awarded by Quality & Qualifications Ireland (QQI).

DBS are also providing the participants on this programme with access to gain Professional Certification during and after completion of the programme. DBS have identified a number of suitable Microsoft Technology Associate (MTA) Certificates that directly relate to the areas of learning. This Professional Certification is intended to enhance the employability of the graduates of the programme.
Career Development

The Springboard funded programme is ultimately about preparing people for employment. During your time as a student in DBS, you will receive many supports, both in class and outside that will prepare you for employment. In addition we have broader Career supports available to all students of the college.

Like the ‘DBS Careers Service’ https://www.facebook.com/DBSCareersService

Keep us in your timeline. Follow ‘DBSCareers’ on Twitter

Join the ‘DBS Springboard’ LinkedIn group today!

Email careerdevelopment@dbs.ie for more information.

DBS Careers Support Services

A variety of career development support services are tailored specifically to Springboard students. For more information, email: careerdevelopment@dbs.ie

DBS ‘Job Readiness Support’ Programme

Part 1. Effective Applications (C.V/ Cover Letters that make the ‘Yes’ Pile)

Part 2. How to Manage your Online Job Search

Part 3. Tips for Interviews (incl. optional one to one Interview Coaching)
Flexible One to One Careers and Job Readiness Support Appointments

DBS Career Development offers both one to one and group careers support with a focus on Job-Readiness with Springboard. Appointment requests can be made via the website (http://careers.dbs.ie) under the 'Make an Appointment' tab. You can also request an appointment via the DBS Careers Service Facebook page https://www.facebook.com/DBSCareersService under the 'Book Now' tab at the top of the page. The One to One Appointment Request Form can also be accessed via the following link: <http://bit.ly/1oVFE8k> Case sensitive - click or type in to your browser.

Online Support via the ‘Springboard Careers Area’ on Moodle

Various career management and student services resources including videos, career exploration tools and templates can be accessed via the ‘Springboard Careers Area’ tab on Moodle. Simply look for the ‘Student Information’ tab on the left side of your Moodle homepage. Click ‘Springboard Careers Area to gain instant 24 hour access.
Weekly ‘Drop In’ C.V Clinic

The drop in C.V Clinic is designed to cater for students who would like to avail of a short consultation. Each attendee will be allocated approx. 10-15mins. The clinic operates on Mondays between 2-4pm (during term) in Aungier Street reception. Come with your printed supporting documents (e.g. printed draft CV, cover letter, printed LinkedIn Profile, sample Job Description etc.) to avail of a practical C.V review session. Please Note: There is no need to make an appointment. However, students must please remember to SIGN IN on the sign in sheet on the day.

DBS Springboard LinkedIn group

DBS manages a networking space for current and graduate DBS Springboard students on professional networking site, LinkedIn. We invite you to set up a profile and join the group. Connect with your classmates and network with graduates from the programme. Use the search box to find ‘DBS Springboard’ and click ‘Join’.

Jobs, Internships & Work Experience Opportunities

DBS Career Development is in contact with employers on a daily basis regarding work placements, work experience, internship and paid positions. To review current vacancies visit our Campus Vacancies Board on the ground floor in AS. Vacancy alerts are also posted via our Facebook page - DBS Careers Service https://www.facebook.com/DBSCareersService

Springboard Work Placement Options (WPO)

As part of the DBS Employer Network, DBS Springboard WPO’s have been sourced across a variety of sectors. Students are notified via email when new placements become available and are invited to apply for WPO’s directly as per advertisements. For more information, email: careerdevelopment@dbs.ie
At DBS we want each of our students to enjoy their time in college. Our Student Services Team will be working tirelessly to ensure that each of our students feel supported and encouraged from the moment you arrive through our doors, to beyond your graduation and into full-time employment.

**Student Welfare**

The Student Welfare and Education Officer provides the student body with information on a range of topics including (but not limited to); mental well-being, crisis pregnancy, sexual health awareness, suicide intervention and non-academic issues. Our dedicated officer can also provide our students with information about a number of additional support services both locally and nationally and help connect students to these organisations, should they need the support.

Education and Welfare Officer, Ground Floor, AS

Aideen Blake  T. 01 417 0748  E: aideen.blake@dbs.ie

**Please Talk**

Please Talk is a national mental health awareness campaign that promotes understanding and coping strategies related to mental health. If students experience problems while at college, there are support systems in place. At the centre of the campaign is the PLEASE TALK website, [www.pleasetalk.org](http://www.pleasetalk.org), which provides a list of support services that are available to students at their college or university. DBS has a page on the PLEASE TALK website, which lists the support services available to our students.

**Disabilities and Learning Support**

Dublin Business School’s Disabilities and Learning Support service aims to provide support for students to assist the achievement of educational goals. Students with disabilities may wish to activate a procedure to request reasonable accommodations such as - Assistive technology, Academic support, In-class support, Reasonable Accommodations for exams, Counselling, Assisted access to facilities.

**Facilities for Disabled Students**

The main buildings on Aungier Street and George’s Street are wheel-chair accessible and specific issues can be addressed to provide the same level of service and access as able-bodied students.

**How do I find out more?**
Students should contact the Education and Welfare Officer to make general enquiries relating to supports available. To request an appointment email Aideen Blake, email: aideen.blake@dbs.ie. The Education and Welfare Officer is located in the Student Services Office on the ground floor in the Aungier St. campus building and is available to meet with students. Further details on disabilities support can be obtained from the intranet (www.dbs-students.com) under the ‘Student Services’ tab.

If you have a disability, you are also welcome Jane Buggle. A needs assessment can be carried out with you to follow a process of reasonable accommodations. Contact Jane to find out more. E: jane.buggle@dbs.ie

**Student Grievance Procedure**

Student grievances should be directed to your Programme Leader in the first instance. Academic appeals should be directed to the Examinations Office. Further information can be obtained on DBS’s Examinations Office tab on the intranet (www.dbs-students.com) via the ‘Exams Office’ tab. Further details can be obtained on www.dbs-students.com

Where appropriate, grievances can also be lodged with the Education & Welfare Officer.
Sports, Clubs and Societies

We highly recommend our DBS Springboard utilise the Sports, Clubs and Societies network to maximise their college experience. Do not underestimate this part of college life. You might find a group in place of interest to you. Perhaps you have a skillset or special interest hobby of interest to us from a coaching or mentoring standpoint? You might even decide to set up a new club or society. Like the DBS Student Experience tab on Facebook to keep us in your timeline. Review our events tab for sporting and training events. Sign up for our trips and special interest events.

“There are no limits to what you and your group can do and achieve, so be ambitious and aim high! Being active within club and/or society gives you an opportunity to meet people with similar minds and interests. Connect with me to find out more!”

Adam Crowther, DBS Sports, Clubs and Societies Development Officer
adam.crowther@dbs.ie (4th Floor Castle House, 8:45am-5:15pm)

Sports and Clubs @ DBS:

- Rugby (Men’s)
- Basketball (Men’s & Women’s)
- Badminton
- Athletics
- Cricket
- Soccer (Men’s & Women’s)
- Futsal (Men’s & Women’s)
- Hockey
- Golf
- Volleyball (Men’s & Women’s)
- Lacrosse
- Equestrian
- Surfing and Water Sports
- Cycling
- Go-Karting
- Hillwalking
- Orienteering
- Swimming
- Rock Climbing
- Table Tennis
- Pool & Snooker
- Tennis
- 5-a-side Soccer
- Ultimate Frisbee
- Archery
- Dodgeball
Societies @ DBS

- Activity Related Societies - Dance, Pilates, Yoga, Martial Arts & Self-Defence
- Music Societies – Radio, Music & DJ
- Course related Societies – Psychology, Photography, Film, Law, Business & Computing
- Religious Societies - Christian, Islamic & Muslim
- Just for fun - FIFA Society, Poker, NFL Appreciation and Banter Societies
- Volunteering Societies – SVP, Simon Community and Charity Society
- Other - LGBT, Drama, Alumni Society, Surf Society
- Various Clubs – Book Club, Coffee Club and the Language Exchange Club

Fresher’s Week

‘Clubs and Societies Sign-Up Day’ will take place during Fresher’s Week in late Sept./ early Oct. Throughout this week you will have the opportunity to meet our hard working students from each of our Sports Clubs and Societies. You will get the chance to find out what they do, share ideas and better yet, you will be able to join them! Keep an eye on the ‘DBS Student Experience’ Events tab on Facebook and take note of the Moodle homepage for more information on events.

DBS Formal Ball

Our Annual Formal Ball takes place in the spring of each year. Acknowledgement is given to students who have gone above and beyond for their Club or Society and have contributed positively to the college throughout the year. Our award list includes -

- Sports Club of the year
- Sports Person of the year
- Sports Coach of the year
- Most Improved Club of the year
- Society of the Year
- Committee of the year
- Most Improved Society of the year
- Student Lecturer of the year
- Class Rep of the year
- DBS Event of the Year
• DBS International Life and Culture Award
• DBS Student Project of the year
• Outstanding Achievement Award

Events and Entertainment @ DBS

During the year you will find many fun and exciting events organised by the Student Services Team. These events are aimed at helping students settle into college life and make new connections. Our events usually include Social Gatherings, Group Activities, Cultural Retreats, Information Events and various Sports and Recreation Activities. Keep an eye on the ‘DBS Student Experience’ Events tab on Facebook and take note of the Moodle homepage for more information on events.

DBS Student Union

The DBS Student Union is essential to the running of our College, as it brings our students closer to the workings of our union and the College. Our Union is used by the Student Services Team to inform our student community about what is happening within the College and more importantly to get feedback from our students regarding any problems, suggestions or various issues that have recently developed within our College. Our Class Reps usually meet with the Student Union to discuss various class or individual faculty issues, which the Student Union will then try to resolve as best they can.

The council will manage and hold meetings with the class representatives throughout the year. It is in these meetings where students will have the opportunity to voice their concerns about the student body. The Union will also attend management meetings on behalf of the students of DBS and ensure that their views and opinions are heard and better yet, resolved! Our Student Union meet on a weekly basis and it is the highest level of student representation within the college, so it therefore carries a great degree of responsibility. If you enjoy the challenge of making improvements within your environment and want to make DBS a better place for you are your classmates, then the DBS Student Union might be for you!

➢ For more info please check out the DBS website
**Common Rooms**

Common rooms include but are not limited to the following –

- Student break out areas (including but not limited to AS Reception)
- Student canteen (UG Level, Aungier Street)
- Coffee Dock (4th Floor Castle House)

For more information on common room spaces and break out areas, ask at reception in Aungier Street (ground floor) or Castle House (2nd floor).
Protection of Enrolled Learners (PEL)

For all DBS courses covered by the provisions of Section 65 (4) of the Qualifications and Quality Assurance (Education and Training) Act 2012, (Protection of Enrolled Learners, or PEL), DBS has arrangements in place with Kaplan Inc (the Guarantor) such that on the occurrence of a Trigger Event, the Guarantor will refund the moneys most recently paid to the relevant payers.

**Trigger Event: means:**

(i) where DBS does not provide the Programme for any reason including by reason of insolvency or winding-up of DBS, and/or

(ii) where Enrolled Learners have begun a Programme but not completed that Programme and DBS ceases to provide the said Programme before the said Programme is completed for any reason, including by reason of insolvency or winding up of DBS, and/or

where the Authority (QQI) withdraws validation of a Programme under section 36(7), section 47, or section 59(7) of the Act.

**Moneys Most Recently Paid:** the moneys most recently paid to DBS by, or on behalf of, an Enrolled Learner in respect of a Programme for

(i) tuition fees,

(ii) registration fees,

(iii) examination fees,

(iv) library fees,

(v) student services fees, and

(vi) any other fees which relate to the provision of education, training and related services.

**Payer:** the person who paid the Moneys Most Recently Paid.

In the event that the Programme(s) cease prior to completion, the Senior Counsel - International for Kaplan International Colleges will be responsible for initiating the drawing down of the guaranteed amounts and ensuring that such amounts are distributed to learners or payers, in accordance with Section 65 (4) (b) of the Act. Contact details for the Senior Counsel - International are as follows:

**Name:** Rachael Convery

**Address:** Kaplan – Legal Department

2nd Floor, Warwick Building, Kensington Village

Avonmore Road, London W14 8HQ

**Tel:** 0044 208 727 3500

**Email:** rachael.convery@kaplan.com
You can visit the Springboard website and consult your queries there. [www.springboardcourses.ie](http://www.springboardcourses.ie)

Please note that registration with HEA is not related to your registration in Dublin Business School.

First registration

As most courses will run the length of an academic year, students will be expected to register twice, once in each semester (or equivalent points).

Re-Registration

As per previous years, students will need to re-register in the second semester.

Process

Twice during your programme you will be asked by your Programme Coordinator to go to [www.springboardcourses.ie](http://www.springboardcourses.ie), log in and register by clicking on the REGISTER (First registration) or the RE-REGISTER (Second registration) tab. See capture below:

As this is not a DBS requirement, if you encounter difficulties you will have to contact the Springboard support at support@springboardcourses.ie

You can register using a desktop, laptop, tablet or even your smartphone. It takes less than 2 minutes to do the whole process.

Students who fail to register or re-register are automatically withdrawn from their course at DBS, losing access to their moodle notes.

You will receive notifications via email and text messages when both registrations are taking place.

Springboard Status

- Complete Successful: This is the status used when the student has successfully gained the outcome/award for the course.
- Outcome Pending should be used when the student has completed the required course work or exams but is awaiting the final results.
- Complete Unsuccessful: This is the status to be used when a student has not gained the target course outcome, either due to leaving (after having registered) or not attained the required academic standard to gain the course award.

**Unlocking Springboard accounts**

After the last final exams, students will have to wait a minimum of three weeks for their final exam results to be released. Final transcripts will be issued and only then, Springboard accounts will be unlocked allowing students to apply for other courses within the Springboard scheme. Under no circumstances students’ Springboard accounts will be unlocked before this stage.

**Important information**

A person who withdraws from a Springboard+ course before completion is, in general, not eligible to take up a place through Springboard+. However your application will be considered if your withdrawal from the course you were on was for a valid personal or medical reason. The decision to offer you a place is made by the college you are applying to and is subject to the college’s admissions policy and entry requirements. Where there is a high demand for courses priority will be given to those who have not previously benefited from a Springboard+ course. The Guideline for providers regarding former Springboard+ participants who wish to take up a Springboard+ place can be found here: Guidelines on applications from previous Springboard+ participants 2016.pdf

You can consult the FAQ following this link: https://www.springboardcourses.ie/faq