



Bachelor of Science in Information Technology (Honours) (Computing and Business)

Course overview:

The Computing and Business Degree programme actually provides the ideal skill-set if you would like to orientate your IT knowledge towards understanding and supporting business structures and processes. It should be stressed that this is not a business or management degree. Neither is it simply a collage of some ICT and some business topics, and shares nothing in common with any previous, possibly similar-sounding, degree programmes. This Degree programme is a computing degree first and foremost, witnessed by the fact that it shares a sub-set of common topics with the Software Development course. However, it allows you to orientate and hone your accrued scientific knowledge towards one of three possible traditionally commercial non-ICT areas:

- Computing for Business,
- Computing for Finance
- Computing for Marketing.

The emphasis here is on the word "for". The main thrust of this Degree programme is the teaching of computing, and secondly, the application of such teaching to business in general or specifically to finance and marketing.

The first focus area provides you with an insight into fundamental business procedure and techniques that would help one better tailor IT solutions to demonstrably good business practice. The type of software solutions that such graduates would be able to provide would closer match the needs of specific, already existing, business processes and structures. Such graduate would also be more sensitive to standard business practice and realities, making their technological support more valuable to specific business players.

The second focus area provides more emphasis on business within the financial sector. For example, in banking, insurance, financial audit, investment operations, financial brokerage, consulting firms. These are all areas of endeavour that are becoming very ICT enabled and even dependent, and are locally and internationally in vigorous growth. The demand for ICT graduates capable of understanding and supporting activity in the financial sector is on the rise.

The third focus area provides you with trends and practices in marketing, including digital marketing and using social media for marketing, and how computer information systems is an integral part of a marketing drive. The focus for our students is to follow solid ICT units and a selection of marketing.

In general, this Degree programme provides a measured and well-balanced combination of topics fundamental to professional software development and topics indispensable to basic economics, management, marketing and accountancy state-of-the-art practice, therefore providing you with more targeted appreciation of the intricacies involved in creating IT support for the modern business environment. In view of the fact that many manufacturing and service provision companies are now adopting a few-to-many (technology-to-IT-aware-business) staff complement ratio, graduates from this type of Degree programme are becoming a sought-after commodity. By introducing candidates to aspects of Business, Marketing and Finance, graduates are more likely to integrate better and quicker into business, marketing and finance projects after graduation.

Learning outcomes:

The degree gives a foundation necessary for you to be able to handle modern professional software development both from a technical aspect as well as from a project management one in a way similar to the Software Development degree programme. However, certain topics that offer more insight into the technical aspects of software development are replaced by topics not traditionally thought in a computing course. Therefore, you would be exposed to such essential and traditional business topics as basic management, marketing, economics, law, and finance, but would also be exposed to such innovative, exclusive, and excitingly new cross-disciplinary topics as computational finance, computational intelligence in finance, algorithmic trading, banking and investment analysis, decision modelling, and marketing and social media.

The nature of modern business software is sometimes so intricately related to the nature of the business activity itself, that it becomes a non-trivial task to obtain the degree quality and, increasingly more notably, certification that is widely expected from local and international business software providers.

This degree will therefore give you:

- the necessary skills to be able to analyse both the technological and business aspects of a solution to be able to deliver a product that would support overall operational requirements and satisfy any process certification constraints.
- essential skills noticeably required by industry from both a conceptual and practical perspective that would enable the graduate to tackle a wide range of business scenarios. As ICT development strategy and environment changes, graduates from this Degree programme will be able to re-orientate accordingly.
- a solid understanding of business concepts and technical know-how regarding the availability and application of relevant technologies required to support the competitiveness of established businesses, start-ups and their customers. Emphasis on business application and enterprise deployment includes: customer relationship management (CRM); enterprise resource planning (ERP); management communication skills; social media-based solutions; knowledge management and crowd sourcing; data mining, business intelligence; emerging technologies, and others.

If you are opting for a financial business option, you will be able to:

- incorporate financial theory, banking and financial services practice into ICT solutions;
- use automated trading methods and algorithms in your technical solutions,
- analyse market micro structure, and trading models.

If you are from the specialisation part of this Degree programme, you will also receive skills required to allow insight into computational finance subsequently applicable to areas of investment, portfolio management, stock analysts, and fund administration.

If you are opting for a marketing option, you will be able to:

- incorporate automate data collection and consolidation;
- design and implement web and mobile apps for marketing;
- enhance user experience;
- build responsive systems;

- improve directly and indirectly user and brand interaction and allegiance.

This Degree programme will also impart practical transferable skills required to conduct research and critical analysis, relevant to practitioner and industry requirements rooted in contemporary business realities.